

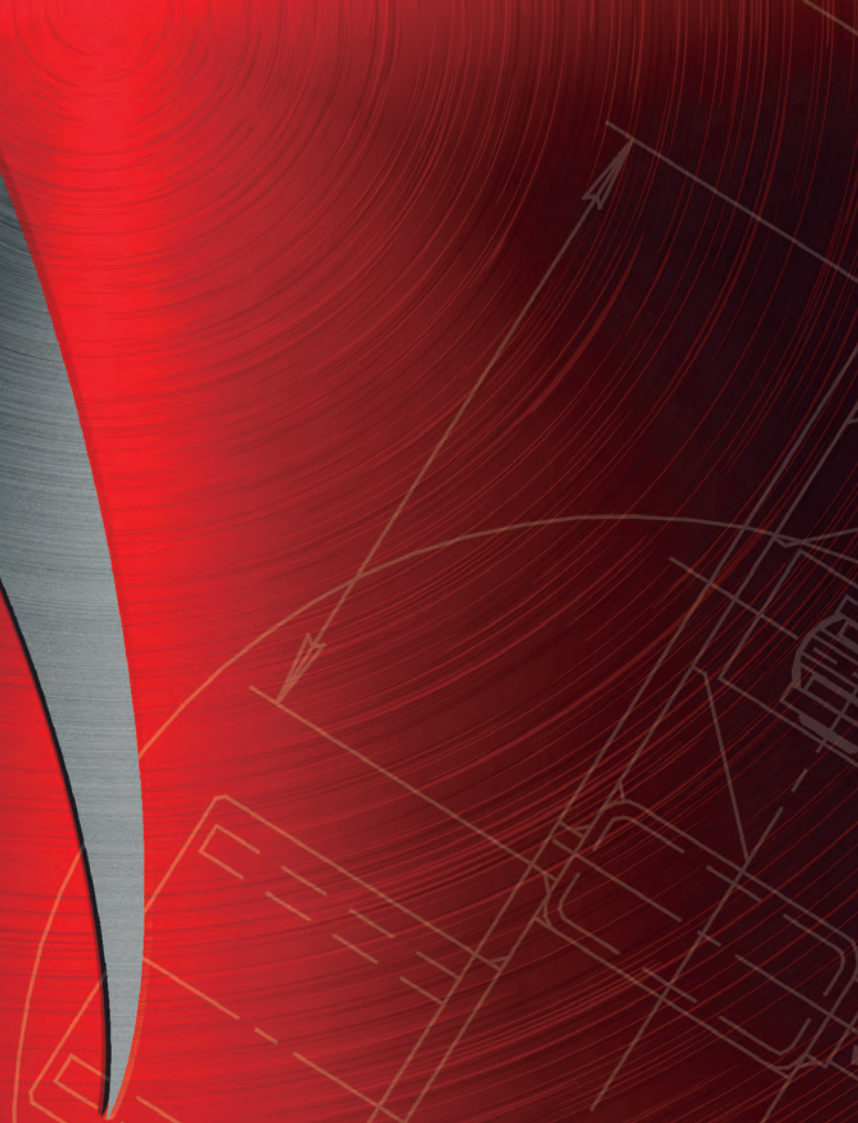


SESA TOOLS



2018 -19

CATÁLOGO - TARIFA
CATALOGUE - PRICE LIST
CATALOGUE - TARIF



RESPONSABILIDAD - FUERZA

SERVICIO

HONESTIDAD

COMPROMISO

SOLIDARIDAD - PROFESIONALIDAD



Estimados clientes, amigos y colaboradores,

Con el lanzamiento de nuestro nuevo **CATALOGO TARIFA SESA TOOLS 2018-2019**, volvemos a saludarles y aprovechamos esta ocasión para agradecerles la **confianza** mostrada en el transcurso de estos años de colaboración en el **desarrollo** de nuestros negocios y que nos anima a continuar con nuestra vocación de facilitarles una alta **calidad**, **innovación** continua y un elevado nivel de **servicio**, aportando una gran **diferenciación** y una alta **competitividad**.

En **SESA TOOLS** hemos incorporado a nuestra gama de productos, que se plasman en este nuevo catálogo, importantes innovaciones **tecnológicas** dirigidas al sector **industrial**, con nuevos diseños de nuestras herramientas de **fresado** y **roscado**, y nuevos **recubrimientos**, que aseguran que nuestras herramientas y servicios ofrezcan al usuario un **alto rendimiento**, una **mayor duración** y una alta **rentabilidad**, respondiendo de esta forma a lo que Uds. esperan de nosotros. Estas incorporaciones han contribuido al nacimiento de una nueva familia en el **CATALOGO TARIFA SESA TOOLS 2018-2019**. Una nueva pestaña, el capítulo de **FRESADO** que amplía nuestras posibilidades de colaboración con Uds.

Lo que Uds. perciben y reciben de **SESA TOOLS** sólo es posible con la participación de un gran **equipo humano** que, muchas veces en contacto directo con Uds. y otras muchas desde los departamentos con menos visibilidad, está comprometido con la apuesta con nuestros valores de **calidad**, **innovación** y **servicio**, y siempre dispuesto a ofrecer la respuesta más **profesional e inmediata** a sus necesidades.

La **red de ventas de SESA TOOLS** y sus **colaboradores**, entre los que les contamos a Uds., contribuyen a nuestra evolución, trasladándonos sus inquietudes y propuestas. Estamos atentos a ellas, **aprendiendo y esforzándonos e invirtiendo** nuestros **recursos** en mejorar y adaptar **nuestra forma de hacer** para satisfacerles. Nuestra mayor satisfacción es la aprobación que Uds. demuestran con su **fidelidad** y la **confianza** que diariamente depositan en nosotros.

SESATOOLS 2018-2019 asegurando al máximo el rendimiento.
Especialistas en herramientas de corte y roscado desde 1994

Caros clientes, amigos e colaboradores,

*Com o lançamento do nosso novo **CATÁLOGO TARIFA SESA TOOLS 2018-2019**, voltamos a saudá-los e aproveitamos esta oportunidade para lhes agradecermos a **confiança demonstrada** no decurso destes anos de **colaboração** no **desenvolvimento** dos nossos negócios e que nos anima a continuar com a nossa vocação de lhes facultarmos uma alta **qualidade**, **inovação** contínua e um alto nível de serviço, proporcionando uma grande **diferenciação** e uma alta **competitividade**.*

*Na **SESA TOOLS** incorporámos na nossa gama de produtos, que se plasmam neste novo catálogo, importantes inovações **tecnológicas** dirigidas ao setor **industrial**, com novas conceções das nossas ferramentas de **fresagem** e **roscagem**, e novos **revestimentos**, que garantem que as nossas ferramentas e serviços oferecem ao utilizador um **alto rendimento**, uma maior **duração** e uma alta **rentabilidade**, respondendo desta forma ao que V. Exas. esperam de nós. Estas incorporações contribuíram para o nascimento de uma nova família no **CATÁLOGO TARIFA SESA TOOLS 2018-2019**. Um novo separador, o capítulo da **FRESAGEM** que aumenta as nossas possibilidades de colaboração com V. Exas.*

*O que V. Exas. notam e recebem da **SESA TOOLS** só é possível com a participação de uma grande **equipa humana** que, muitas vezes em contacto direto com V. Exas. e muitas outras dos departamentos com menos visibilidade, está empenhada na aposta dos nossos valores de **qualidade**, **inovação** e **serviço**, e sempre disposta a oferecer a resposta mais **profissional e imediata** às vossas necessidades.*

*A **rede de vendas da SESA TOOLS** e os seus **colaboradores**, entre os quais contamos com V. Exas., contribuem para a nossa evolução, transmitindo-nos as suas inquietações e propostas. Estamos atentos às mesmas, **aprendendo e esforçando-nos e investindo** os nossos **recursos** no melhoramento e na adaptação da **nossa forma de fazer** para os satisfazermos. A nossa maior satisfação é a aprovação que V. Exas. demonstram com a vossa **fidelidade** e a **confiança** que diariamente depositam em nós.*

A SESATOOLS 2018-2019 garantindo ao máximo o rendimento.
Especialistas em ferramentas de corte e roscagem desde 1994



Dear customers, friends and partners,

With the launch of our new **SESA TOOLS CATALOGUE 2018-2019**, we greet you again and take this opportunity to thank you for the **confidence** shown during these years of **partnership** in the **development** of our businesses, which is something that encourages us to continue with our vocation to provide high **quality**, continuous **innovation** and a high level of **service**, providing clear **differentiation** and high **competitiveness**.

At **SESA TOOLS**, we have incorporated significant **technological** innovations aimed at the **industrial** sector into our range of products, which are reflected in this new catalogue, with new designs for our **milling** and **threading** tools and new **coatings**, which ensure that our tools and services offer the user **high performance**, **longer life** and excellent **profitability**, thus meeting the expectations you have of us. These additions have contributed to the creation of a new family in the **SESA TOOLS CATALOGUE 2018-2019**. A new area, the **MILLING** section, which expands the number of ways that we can work with you.

What you appreciate and receive from **SESA TOOLS** is only possible with the participation of a fantastic **human team** that, many times in direct contact with you and many others from departments with less visibility, is committed to our values of **quality**, **innovation** and **service**, and is always ready to offer the most **professional** and **immediate** response to your needs.

The **sales network of SESA TOOLS** and its **partners**, which includes you, contribute to our progress, as you communicate your concerns and ideas to us. We are delighted to receive them, **learning and working and investing** our resources in improving and adapting our **way of doing things** to address them. Your approval, shown by your **loyalty** and the **trust** you place in us on a daily basis, is our greatest satisfaction.

SESATOOLS 2018-2019, ensuring maximum performance.
Specialists in cutting and threading tools since 1994

Chers clients, amis et collaborateurs,

Nous profitons du lancement de notre nouveau **CATALOGUE DE TARIFS SESA TOOLS 2018-2019** pour vous saluer de nouveau et pour vous remercier de la confiance dont vous avez fait preuve au cours de ces années de **collaboration** qui ont permis le **développement** de nos activités, ce qui nous encourage à maintenir notre engagement de qualité, par la fourniture de produits de grande **qualité** toujours **innovants** et d'un niveau de **service** très élevé, faisant ainsi la **différence** et contribuant à une grande **compétitivité**.

SESA TOOLS a incorporé à sa gamme de produits, présentée dans ce nouveau catalogue, d'importantes innovations **technologiques** dirigées au secteur industriel, avec de nouveaux modèles d'outils de **fraisage** et de **taroudage** ainsi que de nouveaux **revêtements**, qui garantissent que nos outils et nos services offrent à l'utilisateur un haut rendement, une **plus grande durée d'utilisation** et une **grande rentabilité**, répondant ainsi à vos attentes à notre égard. Ces nouveautés ont contribué à la naissance d'une nouvelle famille présentée dans le **CATALOGUE DE TARIFS SESA TOOLS 2018-2019**.

Tout ce que vous offre **SESA TOOLS** n'est possible que grâce à la participation d'une grande **équipe humaine** qui, soit en contact direct avec vous, ou plus discrètement depuis nos installations, s'engage à faire réalité les valeurs de **qualité**, **d'innovation** et de **service** sur lesquelles nous misons, et reste toujours disposée à offrir la réponse la plus **professionnelle** et la plus **immédiate** à vos besoins.

Le **réseau de distribution de SESA TOOLS** et ses **collaborateurs**, dont vous faites partie, contribuent à notre développement, en nous faisant part de préoccupations et de propositions. Nous y sommes attentifs, nous en tirons des **enseignements**, et nous nous **efforçons et investissons** nos **ressources** afin d'améliorer et d'adapter notre mode opératoire pour vous satisfaire. Notre plus grande satisfaction est l'approbation que vous démontrez par la **fidélité** et la **confiance** que vous déposez en nous chaque jour.

SESA TOOLS 2018-2019, la garantie du meilleur rendement.
Spécialistes en outils de coupe et de taroudage depuis 1994.

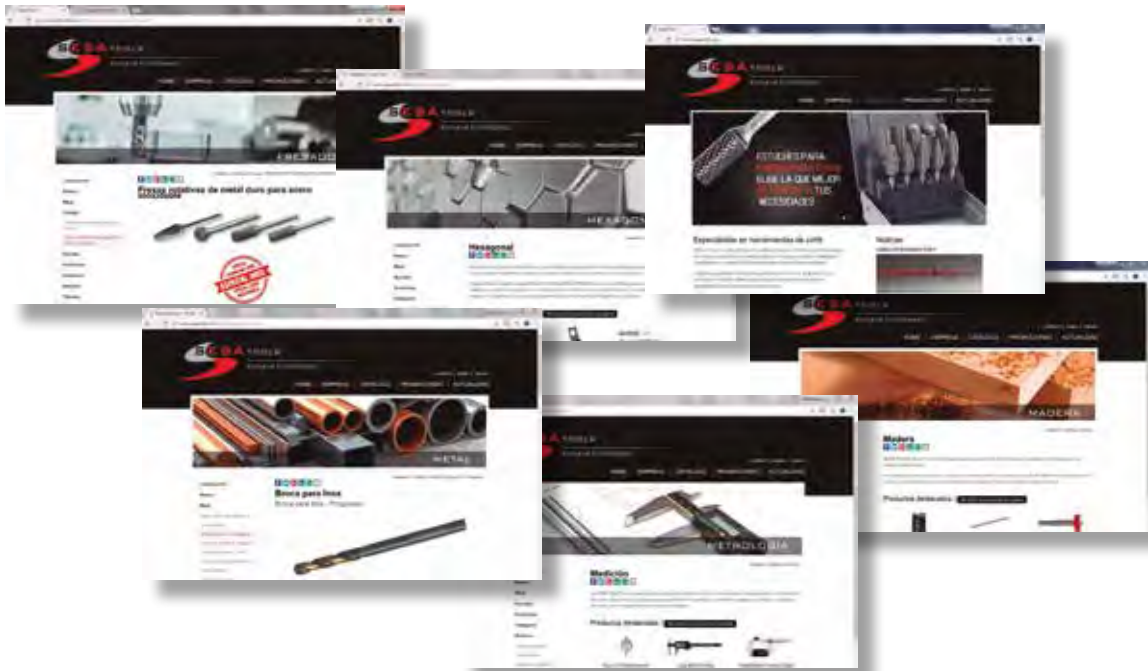
www.sesatools.com

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SERVICE
SERVICE



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INNOVACIÓN
CALIDAD - GAMAS

ADDED VALUE
INNOVATION
QUALITY - RANGES

VALEUR AJOUTÉE
INNOVATION
QUALITÉ - GAMMES

PRODUCTO
PRODUCT
PRODUIT

EQUIPO
TEAM
ÉQUIPE

COMPROMISO - VALORES
PROFESIONALIDAD
ASESORAMIENTO

COMMITMENT - VALUES
PROFESSIONALISM
ASSISTANCE

ACCORD - VALEURS
PROFESSIONNALISME
ADVICE

MARCA
BRAND
MARQUE

IMAGEN - SEGURIDAD
GARANTÍA
EXCELENCIA

IMAGE - SAFETY
GUARANTIE
EXCELLENCE

IMAGE - SECURITÉ
GARANTIE
EXCELLENCE





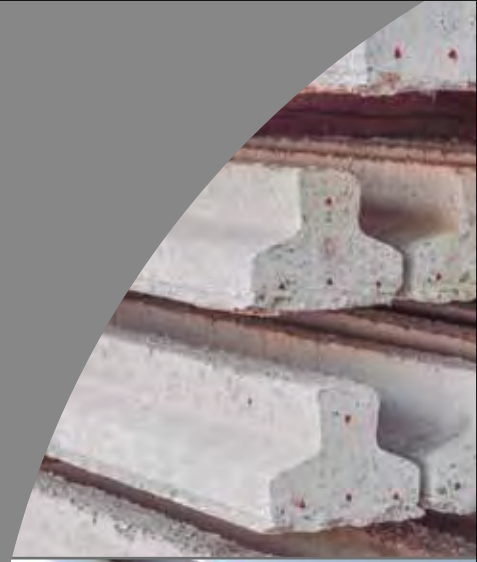
CLIENTE
CUSTOMER
CLIENT

CONFIANZA
CONFIDENCE
CONFIANCE

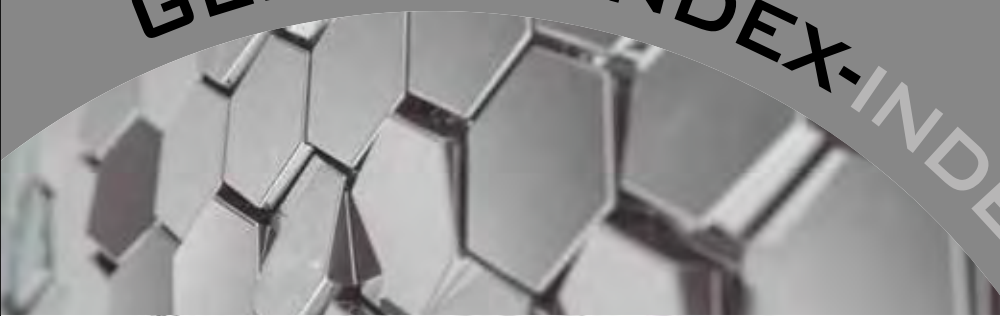
COMPROMISO
COMMITMENT
CONFIANCE

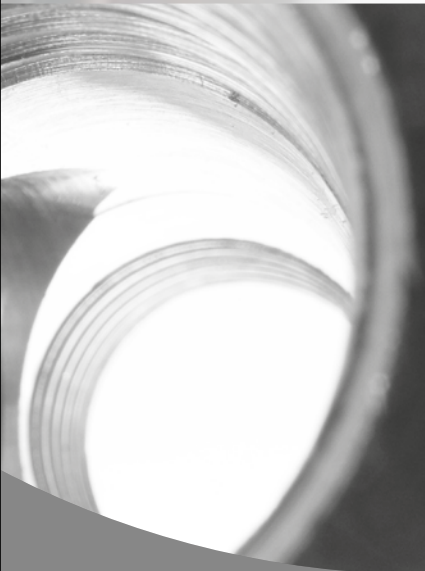
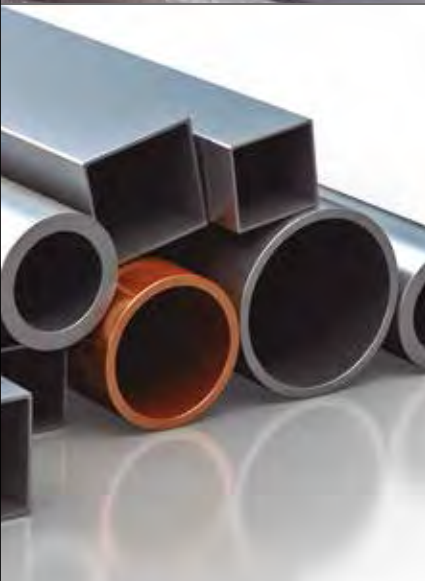
COLABORACIÓN
COOPERATION
ENGAGEMENT

FIDELIDAD
FIDELITY
FIDELITÉ



GENERAL INDEX-INDEX GENERAL





ÍNDICE GENERAL

CONSTRUCCIÓN CONSTRUCTION • CONSTRUCTION

BROCAS MANGO CILÍNDRICO / STRAIGHT SHANK DRILL BITS / FORETS QUEUE CYLINDRIQUE 036

NEW JR PARA PORCELANATO JR FOR PORCELANIC JR POUR CÉRAMIQUE							036	
ACCESORIOS PORCELANATO PORCELANIC ACCESSORIES ACCESSOIRES CÉRAMIQUE							037	
CORONA DIAMANTADA DIAMOND CORE BIT TRÉPAN DIAMANTÉ							037	
NEW CORONA DIAMANTADA PARA AMOLADORA DIAMOND CORE BIT FOR GRINDER TRÉPAN DIAMANTÉ POUR BROYEUR							038	
TORNADO / TORNADO / TORNADO								039
GRANITO PLUS GRANITE PLUS / GRANITE PLUS								040
GRANITO / GRANITE / GRANITE								040
BASIC / BASIC / BASIC								042
MULTI-USO MULTI-PURPOSE / MULTIFUNCTION								043
VIDRIO / GLASS / VERRE								043

BROCAS PARA MARTILLO / HAMMER DRILL BITS / FORETS MARTEAUX 044

CYCLONE / CYCLONE / CYCLONE							044
MULTI-USO MULTI-PURPOSE / MULTIFUNCTION							044
ST-2 / ST-2 / ST-2							045
HURRICANE HURRICANE / HURRICANE							046
STORM SDS-MAX STORM SDS-MAX STORM SDS-MAX							048
ROMPEDORA CORE CUTTER / FORET TRÉPAN							049
CONVERSION DE ANCLAJE SDS-MAX A SDS-PLUS CONVERSION FROM SDS-MAX SHANK TO SDS-PLUS CONVERTEUR DE SDS-MAX A SDS-PLUS							049
SDS-TOP / SDS-TOP / SDS-TOP							049
ESTRIADO / SPLINED / CANNELE							050
BROCAS ENCOFRAR SHUTTERING DRILL BIT FORET POUR COFFRAGE							051

ÍNDICE GENERAL

GENERAL INDEX • INDEX GÉNÉRAL

PUNTEROS Y CINCELES / CHISELS AND POINTERS / TRÉPANS ET ACCESOIRES 053

PUNTEROS Y CINCELES CHISELS AND POINTERS BURINS ET PIGS					053
---	--	--	--	--	-----

CORONAS Y ADAPTADORES / CORE BITS / TRÉPANS 061

MULTIFUNCIÓN UNIVERSAL HOLE SAW MULTIFUNCTION					061
---	--	--	--	--	-----

SISTEMA M16 HOLLOW CORE M16 ASSEMBLY BÉTON M16					063
--	--	--	--	--	-----

SISTEMA 1:8 1:8 SYSTEM INTENSIVE USE HOLE SAW TRÉPAN SYSTÈME 1:8					067
--	--	--	--	--	-----

SISTEMA RL AIRE ACONDICIONADO RL SYSTEME AIR CONDITIONING SYSTÈME RL CLIMATISATION					069
--	--	--	--	--	-----

UNIVERSAL UNIVERSAL HOLE SAW COR UNIVERSEL						070
--	--	--	--	--	--	-----

SISTEMA S94 S94 SYSTEM SYSTÈME S94					071
--	--	--	--	--	-----

DIAMANTE / DIAMOND / DIAMANT 075

DISCOS DIAMANTE DIAMOND DISCS DISQUES DIAMANTÉS					075
---	--	--	--	--	-----

PLATOS DIAMANTADOS GRINDING WHEEL MEULES POUR DÉGROSSISSEMENT					077
---	--	--	--	--	-----

CORONAS PERFORADORAS DIAMANTE DIAMOND DEEP DRILLING HOLE SAW TRÉPAN POUR CARROTAGE					078
--	--	--	--	--	-----

MADERA WOOD • BOIS

BROCAS MADERA / WOOD DRILL BITS / FORETS À BOIS 082

3 PUNTAS BRAD POINT DRILL BIT FORET 3 POINTES					082
---	--	--	--	--	-----

3 PUNTAS SERIE LARGA BRAD POINT DRILL BIT LONG SERIE FORET 3 POINTES SERIE LONGUE					083
---	--	--	--	--	-----

3 PUNTAS METAL DURO HARD METAL POINT DRILL BIT FORET 3 POINTES AU CARBURE					083
---	--	--	--	--	-----

TOPES DE PROFUNDIDAD DEPTH ADJUSTING COLLAR BUTÉES DE PERÇAGE					084
---	--	--	--	--	-----

PALA B FLAT DRILL BIT TYPE B MÈCHE PLATE TYPE B					084
---	--	--	--	--	-----

PALA C FLAT DRILL BIT TYPE C MÈCHE PLATE TYPE C					085
---	--	--	--	--	-----

PALA EXTENSIBLE ADJUSTABLE FLAT DRILL BIT MÈCHE PLATE EXTENSIBLE					086
--	--	--	--	--	-----

ALARGADOR EXTENSION RALLONGE					086
------------------------------------	--	--	--	--	-----

MADERA WOOD • BOIS

BROCAS MADERA / WOOD DRILL BITS / FORETS À BOIS 087

ENCAJE DE BISAGRAS MD FORSTNER TYPE WITH HM TIPS MÈCHE À FAÇONNER AU CARBURE					087
FORSTNER FORSTNER MÈCHE A FAÇONNER					087
LEWIS / LEWIS / LEWIS					088
BROCAS ENCOFRAR SHUTTERING DRILL BIT FORET POUR COFFRAGE					089
AVELLANADOR COUNTERSINK FRAISE À CHANFREINER					090
BROCA ENSAMBLAJE ASSEMBLING DRILLS MÈCHE POUR VIS D'ASSEMBLAGE					090
BARRENA / GIMLET / VRILLE					090
FRESA PARA TAPONES PLUG CUTTER MÈCHE À BOUCHONNER					090

DISCOS MADERA / CIRCULAR SAWBLADES / LAMES DE SCIES CIRCULAIRES 091

DISCOS PARA MADERA CIRCULAR SAWBLADES LAMES DE SCIES CIRCULAIRES					091
ANILLOS REDUCTORES REDUCTIONS RINGS BAGUES DE RÉDUCTION					091

METAL METAL • MÉTAL

INFORMACIÓN TÉCNICA / TECHNICAL INFORMATION / INFORMATION TECHNIQUE 094

BROCAS PARA METAL MANGO CILÍNDRICO / STRAIGHT SHANK METAL DRILL BITS / FORETS METAL QUEUE CYLINDRIQUE 095

DIN 338N										095
M/DURO INTEGRAL DIN 338 N / DIN 338 N HM / DIN 338 N HM										
DIN 6537K										096
M/DURO INTEGRAL DIN 6537 3XD SIN REFRIGERACIÓN INTERNA DIN 6537 3XD HM WITHOUT COOLANT FEED / DIN 6537 3XD HM SANS TROUS D'HUILE										
DIN 6537L										097
M/DURO INTEGRAL DIN 6537 5XD SIN REFRIGERACIÓN INTERNA DIN 6537 5XD HM WITHOUT COOLANT FEED / DIN 6537 5XD HM SANS TROUS D'HUILE										

INFORMACIÓN TÉCNICA / TECHNICAL INFORMATION / INFORMATION TECHNIQUE 098

BROCAS SERIE CORTA CILÍNDRICAS / STRAIGHT SHANK SHORT SERIES / FORETS CYLINDRIQUES COURTES 102

DIN 338N								102
ALTO RENDIMIENTO / HIGH PERFORMANCE / GRAND RENDEMENT								
DIN 338N								108
ALTO RENDIMIENTO IZQ. / HIGH PERFORMANCE LEFT HAND / GRAND RENDEMENT A GAUCHE								

ÍNDICE GENERAL
GENERAL INDEX • INDEX GÉNÉRAL

BROCAS SERIE CORTA CILÍNDRICAS / STRAIGHT SHANK SHORT SERIES / FORETS CYLINDRIQUES COURTES 109

DIN 338N		HSS	 	ACERO 400-800 N/mm ²	109
----------	---	-----	--	---------------------------------	-----

WHITE / WHITE / WHITE

DIN 338N		HSS-CO 5%	 	ACERO 800-1100 N/mm ²	110
----------	---	-----------	--	----------------------------------	-----

COBALTO / COBALT / COBALT

DIN 338N		HSS-G	 	INOX	114
----------	---	-------	--	------	-----

INOX PROGRESIVA / INOX PROGRESSIVE
NOX PROGRESSIVE

SPECIAL STAINLESS STEEL
ESPECIAL INOX
SPECIAL ACER INOXIDABLE

DIN 338W		HSS-CO 5%	 	INOX	115
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INOX COBALTO / INOX COBALT / INOX COBALT

SPECIAL STAINLESS STEEL
ESPECIAL INOX
SPECIAL ACER INOXIDABLE

advance

DIN 338N		HSS-G	TIN	 	ACERO 800-1400 N/mm ²	116
----------	---	-------	-----	--	----------------------------------	-----

TIN / TIN / TIN

DIN 338S		HSS-G		 	AL	117
----------	---	-------	--	--	----	-----

ALU / ALU / ALU

DIN 338N		HSS-CO 5%	TIALN	 	ACERO 1100-1400 N/mm ²	118
----------	--	-----------	-------	--	-----------------------------------	-----

TIALN / TIALN / TIALN

advance

DIN 338N		HSS-G	MD	 	ACERO 1100-1400 N/mm ²	119
----------	---	-------	----	--	-----------------------------------	-----

K20 / K20 / K20

DIN 338N		HSS-G		  	ACERO 400-800 N/mm ²	120
----------	---	-------	--	--	---------------------------------	-----

DIN 338N		HSS-CO 5%		  	ACERO 800-1100 N/mm ²	121
----------	---	-----------	--	--	----------------------------------	-----

BROCAS SERIE LARGA CILÍNDRICAS / STRAIGHT SHANK LONG SERIES / FORETS CYLINDRIQUES LONGUES 122

DIN 340N		HSS-G		 	ACERO 400-800 N/mm ²	122
----------	---	-------	--	--	---------------------------------	-----

DIN 340N		HSS-CO 5%		 	ACERO 800-1100 N/mm ²	123
----------	---	-----------	--	--	----------------------------------	-----

BROCAS SERIE EXTRALARGA CILÍNDRICAS / STRAIGHT SHANK EXTRALONG SERIES / FORETS CYLINDRIQUES EXTRALONGUES 124

DIN 1869N		HSS-G		 	ACERO 400-800 N/mm ²	124
-----------	---	-------	--	--	---------------------------------	-----

DIN 1869S		HSS-CO 5%		 	ACERO 800-1100 N/mm ²	125
-----------	---	-----------	--	--	----------------------------------	-----

BROCAS MANGO CÓNICO / TAPPER SHANK DRILL BITS / FORETS QUEUE CONIQUE 126

DIN 345N		HSS-G		 	ACERO 400-800 N/mm ²	126
----------	---	-------	--	--	---------------------------------	-----

DIN 345N		HSS-CO 5%		 	ACERO 800-1100 N/mm ²	128
----------	---	-----------	--	--	----------------------------------	-----

DIN 345N		HSS-G	TIN	 	ACERO 400-800 N/mm ²	129
----------	---	-------	-----	--	---------------------------------	-----

METAL METAL • MÉTAL

BROCAS MANGO CÓNICO / TAPPER SHANK DRILL BITS / FORETS QUEUE CONIQUE 130

DIN 341N		HSS-G			130
DIN 1870N		HSS-G			131

BROCAS SERIE EXTRACORTA CILÍNDRICAS / STRAIGHT SHANK EXTRASHORT SERIES / FORETS CYLINDRIQUES EXTRACOURTES 132

DIN 1897N		HSS-G			132
DIN 1897N		HSS-CO 5%			132
DIN 1897N		HSS-G			133

BROCAS PARA PUNTOS DE SOLDADURA / WELD POINT DRILLS / FORET DEPOINTEUR 134

CILÍNDRICA STRAIGHT SHANK CYLINDRIQUE		HSS-CO 5%			134
CILÍNDRICA STRAIGHT SHANK CYLINDRIQUE		HSS-CO 5% TIN			134
CILÍNDRICA STRAIGHT SHANK CYLINDRIQUE		HSS-CO 5% TIALN			134
DOBLE PUNTA DOUBLE POINT DOUBLE POINT		HSS-CO 5%			134
MÁQUINA NEUMÁTICA PNEUMATIC TOOLS MACHINES NEUMATIQUES		HSS-CO 5%			135
MÁQUINA NEUMÁTICA PNEUMATIC TOOLS MACHINES NEUMATIQUES		HSS-CO 5% TIN			135
MÁQUINA NEUMÁTICA PNEUMATIC TOOLS MACHINES NEUMATIQUES		HSS-CO 5% TIALN			135

ESTUCHES / SETS / COFFRETS 136

ESTUCHES SESABOX SESABOX SETS COFFRETS SESABOX					136
ESTUCHES Y MALETINES DRILL BIT SETS COFFRETS DE FORETS					138

BROCAS BIDIAMETRALES / SUBLAND DRILL BITS / FORETS ÉTAGÉS A VIS 144

DIN 8376 DIN 8374		HSS-G			144
DIN 8377 DIN 8375		HSS-G			145

BROCAS ESCALONADAS Y CÓNICAS / STEP DRILL BITS / FORETS ETAGÉES 146

ESCALONADA RECTA STEP DRILL-BITS FRAISES ÉTAGÉES			HSS-G			146
ESCALONADA HELICOIDAL STEP DRILL-BITS FRAISES ÉTAGÉES SPIRAL			HSS-G			146
BROCA CÓNICA SHEET METAL BITS FORETS CONIQUES			HSS-G			147

ÍNDICE GENERAL
GENERAL INDEX • INDEX GÉNÉRAL

AVELLANADORES / COUNTERSINKS / FRAISES CONIQUES										148
DIN 335C			HSS-G		90°	3Z				148
DIN 335C			HSS-CO 5%		90°	3Z				148
DIN 335D			HSS-G		90°	3Z				149
DIN 334C			HSS-G		60°	3Z				149
AVELLANADOR 1/4" 1/4" COUNTERSINK RAISE À CHANFREINER 1/4"			HSS-G		90°	3Z				150
MANGO SILICONA UNIVERSAL HOLE SAW COR UNIVERSEL										150
AVELLANADOR CON AGUGERO COUNTERSINK WITH HOLE FRAISE À CHANFREINER AVEC TROU			HSS-G		90°					150
DIN 373			HSS-G							151
DIN 375			HSS-G							151
BROCAS FRESA / CUTTING DRILL BITS / FORETS FRAISEUR										152
BROCA FRESA CUTTING DRILL - BIT FORET FRAISEUR			HSS-G	TIN						152
BROCAS DE CENTRAR / CENTER DRILLS / FORETS À CENTRER										152
DIN 333A			HSS-G		60°					152
NEW BROCA DE PUNTEAR 90° 90° NC SPOTTING DRILLS FORETS À CENTRER 90°			HSS-CO 5%		90°					153
NEW BROCA DE PUNTEAR 120° 120° NC SPOTTING DRILLS FORETS À CENTRER 120°			HSS-CO 5%		120°					153
ESCARIADORES / REAMERS / ALÉSOIRS										154
DIN 206B			HSS-G		8°	TOL 7H				154
DIN 9B			HSS-G		8°					155
DIN 212D			HSS-G		8°	TOL 7H				156
DIN 212E			HSS-CO 5%		8°	TOL 7H				157
DIN 208B			HSS-CO 5%		8°	TOL 7H				158
DIN 208C			HSS-CO 5%		8°	TOL 7H				159


METAL METAL • MÉTAL

ESCARIADORES / REAMERS / ALÉSOIRS 160

ESCARIADOR EXTENSIBLE
EXTENDABLE REAMERS
ALÉSOIR EXTENSIBLE   HSS-G  160

ESCARIADOR EXT. REFORZADO
REINFORCED
FORETS CONIQUES   HSS-G  161

CORONAS / HOLE SAWS / SCIES TRÉPANS 162

CORONA BIMETAL
BIMETAL HOLE SAWS M42
SCIES TRÉPAN BIMETAL M42  HSS-CO 8%    162

HUSILLOS / ARBORS / ARBRES   165

CONJUNTOS / SETS / COFFRETS   166

PERFORADORES DE CHAPA
CIRCULAR PUNCHES
EMPORTE PIÈCES     168

METAL DURO SERIE CORTA
TUNGSTEN CARBIDE SHORT SERIES
CARBURE SERIE COURTE  MD    170

METAL DURO SERIE LARGA
TUNGSTEN CARBIDE LONG SERIES
CARBURE SERIE LONGUE  MD    171

PARA MÁQUINA ELECTROMAGNÉTICA
ELECTROMAGNETIC CORE BITS
SCIES ÉLECTROMAGNÉTIQUES   HSS-CO 5%    172

PARA MÁQUINA ELECTROMAGNÉTICA
ELECTROMAGNETIC CORE BITS
SCIES ÉLECTROMAGNÉTIQUES   MD    174

SIERRAS / SAW BLADES / LAMES DE SCIES 176

SIERRAS DE CINTA
BANDSAW BLADES
LAMES DE SCIES À RUBAN  HSS-CO 8% 176

DISCO PARA ALUMINIO
CIRCULAR BLADES FOR ALU
LAMES DE SCIES POUR ALU  MD  182

HOJAS DE SIERRA
HAND HACKSAW BLADE
LAMES DE SCIES  HSS-G 182

DESBARBADOR / DEBURRING TOOLS / EBASUREURS 183

DESBARBADORES Y ACCESORIO
DEBURRING TOOLS
EBASUREURS ET ACCESSOIRES   183

GRANETES / POUNCHES / POINTEAUX 183

GRANETES
POUNCHES
POINTEAUX  183

FRESADO MILLING • FRAISAGE


































FRESAS ROTATIVAS DE METAL DURO / HARD METAL ROTARY BURRS / FRAISES ROTATIVES MÉTAL DUR 186

A CILÍNDRICA
CYLINDER
CYLINDRIQUE  MD   186

B CILÍNDRICA CORTE FRONTAL
EXTENDABLE REAMERS
CYLINDRIQUE COUP FRONTALE   MD   186

ÍNDICE GENERAL
GENERAL INDEX • INDEX GÉNÉRAL

FRESAS ROTATIVAS DE METAL DURO / HARD METAL ROTARY BURRS / FRAISES ROTATIVES MÉTAL DUR 186











C	CILÍNDRICA CON RADIO BULL NOSE CYLINDRIQUE A RAYON		MD			186
D	ESFÉRICA BALL SPHERIQUE		MD			187
E	OVAL OVAL OVALE		MD			187
F	ÁRBOL CON RADIO ROUND TREE OGIVE A RAYON		MD			187
G	ÁRBOL CON PUNTA POINTED TREE ARBRE		MD			188
H	LLAMA FLAME FLAMME		MD			188
K	CÓNICA 90° COUNTER SINK 90° CONIQUE 90°		MD			188
L	CÓNICA CON RADIO BALL NOSE CONE CONIQUE A RAYON		MD			189
M	CÓNICA CON PUNTA CONE CONIQUE TRONQUEE		MD			189
N	CONO INVERTIDO INVERTED CONE CONIQUE RENVERSEE		MD			189
P	PASTILLA RIM SHAPE DISQUE		MD			189

FRESAS ROTATIVAS DE METAL DURO PARA INOX / HARD METAL ROTARY BURRS FOR STAINLESS STEEL / FRAISES ROTATIVES MÉTAL DUR POUR INOX 190

NEW A	CILÍNDRICA CYLINDER CYLINDRIQUE		MD				190
NEW C	CILÍNDRICA CON RADIO BULL NOSE CYLINDRIQUE A RAYON		MD				190
NEW D	ESFÉRICA BALL SPHERIQUE		MD				190
NEW F	ÁRBOL CON RADIO ROUND TREE OGIVE A RAYON		MD				190

ESTUCHES Y EXPOSITOR SETS AND DISPLAYS COFFRETS ET DISPLAY			MD			191
---	---	---	----	---	---	-----

FRESAS FRONTALES DE UN DIENTE / 1Z FINISHING END MILLS / FRAISES 1Z FINITION 192

FRESA CORTA END MILL FRAISE FINITION		HSS-CO 5%				192
FRESA LARGA LONG END MILL FRAISE FINITION LONGUE		HSS-CO 5%				192
FRESA PVC LONG END MILL FOR PVC FRAISE FINITION LONGUE POUR PVC		HSS-CO 5%				192

FRESADO MILLING • FRAISAGE

FRESAS CON MANGO CILINDRICO / STRAIGHT SHANK END MILLS / FRAISES QUEUE CYLINDRIQUE

193

NEW	DIN 844W	DIN 1835B		HSS-CO 8%			2Z	AL	193	
NEW	DIN 844W	DIN 1835B		HSS-CO 8%			2Z	AL	194	
	DIN 327N	DIN 1835B		HSS-CO 8%			2Z	ACERO INOX F	195	
NEW	DIN 327N	DIN 1835B		HSS-CO 8%			2Z	ACERO INOX F	196	
NEW	DIN 327N	DIN 1835B		HSS-CO 8%	TIALN			2Z	ACERO INOX F	197
NEW	DIN 327N	DIN 1835B		PM	ALTIN			3Z	ACERO INOX F	198
	DIN 327N	DIN 1835B		HSS-CO 8%			2Z	ACERO INOX F TI	199	
NEW	DIN 327N	DIN 1835B		PM	ALTIN			2Z	ACERO F	199
	DIN 844N	DIN 1835B		HSS-CO 8%			3Z-6Z	ACERO INOX F TI	200	
NEW	DIN 844N	DIN 1835B		HSS-CO 8%			3Z-6Z	ACERO INOX F TI	201	
NEW	DIN 844N	DIN 1835B		HSS-CO 8%	TIALN			3Z-6Z	ACERO INOX F TI	202
	DIN 844NR	DIN 1835B		HSS-CO 8%		NR	4Z-5Z	ACERO INOX F	203	
NEW	DIN 844NR	DIN 1835B		HSS-CO 8%		NR	4Z-5Z	ACERO INOX F	203	
	DIN 844NR-F	DIN 1835B		HSS-CO 8%		NR-F	3Z-5Z	ACERO INOX F	203	
NEW	DIN 844HR	DIN 1835B		PM	ALTIN		HR	4Z-6Z	ACERO INOX F TI	204
NEW	DIN 844HR-F	DIN 1835B		PM	ALTIN		HR-F	4Z-6Z	ACERO INOX F TI	205
NEW	ESP	DIN 1835B		PM	ALCrN			4Z	ACERO INOX	206
NEW	DIN 851N	DIN 1835B		HSS-CO 5%		RANURAS EN "T" "T" SLOTS RANURES À "T"		ACERO TI	206	
NEW	DIN 850	DIN 1835B		HSS-CO 5%	6Z-12Z	RANURAS WOODRUFF WOODRUFF SLOTS RANURES WOODRUFF		ACERO TI	207	
NEW	DIN 1833C	DIN 1835B		HSS-CO 5%	10Z-12Z	FRESA EN BISEL DOVETAIL MILLING CUTTERS FRAISES ANGULAIRES		ACERO TI	208	

ÍNDICE GENERAL

GENERAL INDEX • INDEX GÉNÉRAL

FRESAS CON MANGO CILINDRICO / STRAIGHT SHANK END MILLS / FRAISES QUEUE CYLINDRIQUE 208

NEW	DIN 1833D	DIN 1835B		HSS-CO 5%	10Z-12Z	FRESA EN BISEL DOVETAIL MILLING CUTTERS FRAISES ANGULAIRES	ACERO	TI	208
NEW	DIN 6518	DIN 1835B		HSS-CO 8%	4Z-6Z	FRESA RADIO CORNER ROUNDING CUTTER FRAISE A RAYON	ACERO	TI	209

FRESAS CON MANGO CONICO / TAPER SHANK END MILLS / FRAISES QUEUE CONIQUE 210

NEW	DIN 326N			HSS-CO 5%	2Z		ACERO	INOX	210		
NEW	DIN 845N			HSS-CO 5%	4Z-8Z		ACERO	INOX	F	TI	211
NEW	DIN 845N			HSS-CO 5%	4Z-8Z		ACERO	INOX	F	TI	212

FRESAS DE AGUJERO / MILLING CUTTERS / FRAISES A TROU 213

NEW	DIN 1880N	DIN 138		HSS-CO 5%	6Z-14Z		ACERO	INOX	F	213	
NEW	DIN 1880N	DIN 138		HSS-CO 5%	TIALN	6Z-14Z	ACERO	INOX	F	213	
NEW	DIN 1880N	DIN 138		HSS-CO 5%		6Z-10Z	ACERO	INOX	F	214	
NEW	DIN 1880N	DIN 138		HSS-CO 5%	TIALN	6Z-10Z	ACERO	INOX	F	214	
NEW	DIN 885A	DIN 138		HSS-CO 5%			ACERO	INOX	F	CU	215

ESTUCHES DE FRESAS CON MANGO CILINDRICO / STRAIGHT SHANK END MILLS SET / COFFRETS DE FRAISES DE QUEUE CYLINDRIQUE 217

NEW	CONJUNTOS SETS COFFRETS									217
------------	-------------------------------	--	--	--	--	--	--	--	--	-----

ROSCADO / THREADING • FILÉTAGE

INFORMACIÓN TÉCNICA / TECHNICAL INFORMATION / INFORMATION TECHNIQUE		220
ÚTILES Y ACCESORIOS / ACCESORIES / OUTILS ET ACCESSOIRES		226
GIRAMACHOS CRIQUE TAP HOLDER WITH RATCHET PORTE TARAUDS		226
GIRAMACHOS AJUSTABLES ADJUSTABLE TAP WRENCHES PORTE TARAUDS		226
PROLONGADOR EXTENSION EXTENSION		227
DIN 1814 VOLVEDORES DIE HOLDERS PORTE FILIÈRES		228
EXTRACTORES DE TORNILLOS SCREW EXTRACTORS EXTRACTEURS DE VIS		230
MACHOS MANO / HAND TAPS / TARAUDS À MAIN		232
DIN 352		M HSS-G TOL 6H ACERO 400-800 N/mm² 232
DIN 352 ENTRADA CÓNICA NON-SERIAL LFORM ENTRÉE CONIQUE		M HSS-G TOL 6H ACERO 400-800 N/mm² 233
DIN 2181		MF HSS-G TOL 6H ACERO 400-800 N/mm² 234
DIN 351		BSW HSS-G ACERO 400-800 N/mm² 240
DIN 2181		BSF HSS-G ACERO 400-800 N/mm² 241
ISO 529		BA HSS-G ACERO 400-800 N/mm² 241
DIN 352		UNC HSS-G TOL 2B ACERO 400-800 N/mm² 242
DIN 2181		UNF HSS-G TOL 2B ACERO 400-800 N/mm² 243
DIN 5157		G(BSP) HSS-G ACERO 400-800 N/mm² 244

ÍNDICE GENERAL
GENERAL INDEX • INDEX GÉNÉRAL

MACHOS MANO / HAND TAPS / TARAUDS À MAIN

244

DIN 2181		VG	HSS-G		244
DIN 40432		PG	HSS-G		245
ISO 529 ENTRADA CÓNICA NON-SERIAL LFORM ENTRÉE CONIQUE		UNEF	HSS-CO 5%	TOL 2B	246
		TR	HSS-G	TOL 7H	246
DIN 352		M	HSS-CO 5%	TOL 6H	247
DIN 352 CON PUNTA PILOTO ROUGHER PILOTED EBAUCHEUR À PILOTE		M	HSS-CO 5%	TOL 6H	247
DIN 2181		MF	HSS-CO 5%	TOL 6H	248
DIN 5157		G(BSP)	HSS-CO 5%		249
DIN 352		M	HSS-G	TOL 6H	250
DIN 2181		MF	HSS-G	TOL 6H	251
DIN 352		UNC	HSS-G	TOL 2B	252
DIN 2181		UNF	HSS-G	TOL 2B	252

ROSCADO THREADING • FILÉTAGE

MACHOS MANO / HAND TAPS / TARAUDS À MAIN 253

DIN 352		BSW	HSS-G	LH	ACERO 400-800 N/mm ²	253
DIN 5157		G(BSP)	HSS-G	LH	ACERO 400-800 N/mm ²	253

MACHOS MÁQUINA CORTOS / SHORT MACHINE TAPS / TARAUDS MACHINE COURTS 254

DIN 352		M	HSS-CO 5%	FORM B	FORM C/35°	FORM B-AZ	TOL 6H	ACERO 800-1100 N/mm ²	254
ISO 529		M	HSS-G	FORM B	FORM B-AZ	TOL 6H	ACERO 400-800 N/mm ²	255	
ISO 529		M	HSS-G	FORM C/35°	TOL 6H	ACERO 400-800 N/mm ²	256		
DIN 2181		MF	HSS-G	FORM D	TOL 6H	ACERO 400-800 N/mm ²	257		
DIN 351		BSW	HSS-G	FORM D	ACERO 400-800 N/mm ²	258			
DIN 5157		G(BSP)	HSS-G	FORM D	ACERO 400-800 N/mm ²	258			
≈DIN 352		UNC	HSS-G	FORM D	TOL 2B	ACERO 400-800 N/mm ²	259		
≈DIN 352		UNF	HSS-G	FORM D	TOL 2B	ACERO 400-800 N/mm ²	259		
		NPT	HSS-G	FORM C	FORM B	FORM C/35°	ACERO 400-800 N/mm ²	260	

ÍNDICE GENERAL

GENERAL INDEX • INDEX GÉNÉRAL

MACHOS MÁQUINA COMBINADOS / COMBINED MACHINE TAPS / TARAUDS COMBINÉS 261

	M	HSS-G	$\frac{1}{4}$	TOL 6H	ACERO 400-800 N/mm ²	261
--	---	-------	---------------	--------	---------------------------------	-----

	M	HSS-G	TIN	$\frac{1}{4}$	TOL 6H	ACERO 800-1100 N/mm ²	261
--	---	-------	-----	---------------	--------	----------------------------------	-----

	UNC	HSS-G	$\frac{1}{4}$		ACERO 400-800 N/mm ²	262
--	-----	-------	---------------	--	---------------------------------	-----

	UNF	HSS-G	$\frac{1}{4}$		ACERO 400-800 N/mm ²	262
--	-----	-------	---------------	--	---------------------------------	-----

	M	HSS-CO 5%		TOL 6H	ACERO 800-1100 N/mm ²	263
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	BSW	HSS-CO 5%			ACERO 1100-1400 N/mm ²	263
--	-----	-----------	--	--	-----------------------------------	-----

INFORMACIÓN TÉCNICA MACHOS MÁQUINA / MACHINE TAPS TECHNICAL INFORMATION / INFORMATION TECHNIQUE TARAUDS MACHINE 264

MACHOS MÁQUINA / MACHINE TAPS / TARAUDS MACHINE 266

DIN 371 DIN 376		M	HSS-CO 5%	FORM C	TOL 6H	ACERO 400-800 N/mm ²	266
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DIN 371 DIN 376		M	HSS-CO 5%	FORM B	TOL 6H	ACERO 400-800 N/mm ²	267
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DIN 371 DIN 376		M	HSS-CO 5%	TIN	FORM B	TOL 6H	ACERO 400-800 N/mm ²	268
--------------------	--	---	-----------	-----	--------	--------	---------------------------------	-----

DIN 371 DIN 376		M	HSS-CO 5%	VAP	FORM B	TOL 6H	ACERO 400-800 N/mm ²	268
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DIN 371 DIN 376		M	HSS-CO 5%	FORM C/15°	TOL 6H	ACERO 400-800 N/mm ²	269
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ROSCADO THREADING • FILÉTAGE













MACHOS MÁQUINA / MACHINE TAPS / TARAUDS MACHINE

270

DIN 371 DIN 376		M	HSS-CO 5%	FORM C/35°	TOL 6H	ACERO 400-800 N/mm²	270		
DIN 371 DIN 376		M	HSS-CO 5%	TIN	FORM C/35°	TOL 6H	ACERO 400-800 N/mm²	271	
DIN 371 DIN 376		M	HSS-CO 5%	VAP	FORM C/35°	TOL 6H	ACERO 400-800 N/mm²	271	
DIN 371 DIN 376		M	HSS-CO 5%	FORM B-AZ	TOL 6H	ACERO 400-800 N/mm²	272		
DIN 371 EXTRALARGOS EXTRALONG EXTRALONG		M	HSS-CO 5%	FORM B	TOL 6H	ACERO 400-800 N/mm²	273		
DIN 371 EXTRALARGOS EXTRALONG EXTRALONG		M	HSS-CO 5%	FORM C/35°	TOL 6H	ACERO 400-800 N/mm²	274		
DIN 371 DIN 376 SOBREDIMENSIONADOS OVERSIZE SURCOTÉS		M	HSS-CO 5%	FORM B	TOL 6G	TOL 7G	TOL 6H +0,1mm	ACERO 400-800 N/mm²	275
DIN 371 DIN 376 SOBREDIMENSIONADOS OVERSIZE SURCOTÉS		M	HSS-CO 5%	FORM C/35°	TOL 6G	TOL 7G	TOL 6H +0,1mm	ACERO 400-800 N/mm²	276
DIN 374		MF	HSS-CO 5%	FORM C	TOL 6H	ACERO 400-800 N/mm²	277		
DIN 374		MF	HSS-CO 5%	FORM B	TOL 6H	ACERO 400-800 N/mm²	278		
DIN 374		MF	HSS-CO 5%	FORM C/35°	TOL 6H	ACERO 400-800 N/mm²	280		
DIN 371 DIN 376		BSW	HSS-CO 5%	FORM B		ACERO 400-800 N/mm²	282		

ÍNDICE GENERAL
GENERAL INDEX • INDEX GÉNÉRAL

MACHOS MÁQUINA / MACHINE TAPS / TARAUDS MACHINE 283

DIN 371 DIN 376		BSW	HSS-CO 5%	FORM C/35°	ACERD 400-800 N/mm²	283
DIN 371 DIN 376		UNC	HSS-CO 5%	FORM B	TOL 2B ACERD 400-800 N/mm²	284
DIN 371 DIN 376		UNC	HSS-CO 5%	FORM C/35°	TOL 2B ACERD 400-800 N/mm²	285
DIN 371 DIN 376		UNF	HSS-CO 5%	FORM B	TOL 2B ACERD 400-800 N/mm²	286
DIN 371 DIN 376		UNF	HSS-CO 5%	FORM C/35°	TOL 2B ACERD 400-800 N/mm²	287
ISO 529		UN	HSS-CO 5%	FORM B	TOL 2B ACERD 400-800 N/mm²	288
ISO 529		UN	HSS-CO 5%	FORM C/35°	TOL 2B ACERD 400-800 N/mm²	289
ISO 529		UNEF	HSS-CO 5%	FORM B	TOL 2B ACERD 400-800 N/mm²	290
ISO 529		UNEF	HSS-CO 5%	FORM C/35°	TOL 2B ACERD 400-800 N/mm²	291
ISO 529		UNS	HSS-CO 5%	FORM B	TOL 2B ACERD 400-800 N/mm²	292
ISO 529		UN	HSS-CO 5%	FORM B	TOL 2B ACERD 400-800 N/mm²	293
DIN 5156		G(BSP)	HSS-CO 5%	FORM C	ACERD 400-800 N/mm²	294

ROSCADO THREADING • FILÉTAGE

MACHOS MÁQUINA / MACHINE TAPS / TARAUDS MACHINE







































294

DIN 5156		G(BSP)	HSS-CO 5%	FORM B		ACERO 400-800 (mm)	294
DIN 5156		G(BSP)	HSS-CO 5%	FORM C/35°		ACERO 400-800 (mm)	295
DIN 5156		RC (BSPT)	HSS-CO 5%	FORM C		ACERO 400-800 (mm)	295
		NPT	HSS-CO 5%	FORM C		ACERO 400-800 (mm)	296
DIN 374		VG	HSS-CO 5%	FORM C		ACERO 800-1100 (mm)	296
DIN 374		BSC	HSS-CO 5%	FORM C		ACERO 800-1100 (mm)	296
DIN 371 DIN 376		M	HSS-CO 5%	FORM C	LH	TOL 6H ACERO 400-800 (mm)	297
DIN 371 DIN 376		M	HSS-CO 5%	FORM B	LH	TOL 6H ACERO 400-800 (mm)	298
DIN 371 DIN 376		M	HSS-CO 5%	FORM C/35°	LH	TOL 6H ACERO 400-800 (mm)	299
DIN 374		MF	HSS-CO 5%	FORM B	LH	TOL 6H ACERO 400-800 (mm)	300
DIN 374		MF	HSS-CO 5%	FORM C/35°	LH	TOL 6H ACERO 400-800 (mm)	302
DIN 5156		G(BSP)	HSS-CO 5%	FORM C	LH	TOL 6H ACERO 400-800 (mm)	303

ÍNDICE GENERAL
GENERAL INDEX • INDEX GÉNÉRAL

MACHOS MÁQUINA DE BANDA / COLOURED RING MACHINE TAPS / TARAUDS MACHINE BANDE COLORÉE

304

NEW	DIN 371 DIN 376		 ESPECIAL INOX SPECIAL ACER INOXYDABLE	M	PM	HL	FORM B	TOL 6H	 ACERO 923-1100	 INOX	 CU	304
NEW	DIN 371 DIN 376		 ESPECIAL INOX SPECIAL ACER INOXYDABLE	M	PM	HL	FORM C/35°	TOL 6H	 ACERO 923-1100	 INOX	 CU	304
NEW	DIN 371 DIN 376			M	HSS-E-V3	TIN	FORM B	TOL 6H	 ACERO 923-1100	 INOX	 AL	305
NEW	DIN 371 DIN 376			M	HSS-E-V3	TIN	FORM C/35°	TOL 6H	 ACERO 923-1100	 INOX	 AL	305
	DIN 371 DIN 376			M	HSS-CO 5%		FORM B	TOL 6H	 INOX			306
	DIN 371 DIN 376			M	HSS-CO 5%		FORM C/40°	TOL 6H	 INOX			306
	DIN 374			MF	HSS-CO 5%		FORM B		 INOX			307
	DIN 374			MF	HSS-CO 5%		FORM C/39°		 INOX			307
	DIN 371 DIN 376			UNC	HSS-CO 5%		FORM B		 INOX			308
	DIN 371 DIN 376			UNC	HSS-CO 5%		FORM C/39°		 INOX			308
	DIN 371 DIN 376			UNF	HSS-CO 5%		FORM B		 INOX			309
	DIN 371 DIN 376			UNF	HSS-CO 5%		FORM C/39°		 INOX			309
	DIN 5156			G(BSP)	HSS-CO 5%		FORM B		 INOX			310
	DIN 5156			G(BSP)	HSS-CO 5%		FORM C/39°		 INOX			310

ROSCADO THREADING • FILÉTAGÉ

MACHOS MÁQUINA DE BANDA / COLOURED RING MACHINE TAPS / TARAUDS MACHINE BANDE COLORÉE

311

NEW	DIN 371 DIN 376		advance MAXIMO RENDIMIENTO	M	PM	FUTURA	FORM B	TOL 6H	ACERO 1100-1400 N/mm ²	311
NEW	DIN 371 DIN 376		advance MAXIMO RENDIMIENTO	M	PM	FUTURA	FORM C/40°	TOL 6H	ACERO 1100-1400 N/mm ²	311
NEW	DIN 371		advance MAXIMO RENDIMIENTO	M	PM	FUTURA	FORM C/15°	TOL 6H	ACERO 1100-1400 N/mm ²	311
NEW	DIN 371 DIN 376		advance MAXIMO RENDIMIENTO	M	HSS-CO 5%	ALUSPEED	FORM B	TOL 6H	AL	312
NEW	DIN 371 DIN 376		advance MAXIMO RENDIMIENTO	M	HSS-CO 5%	ALUSPEED	FORM C/45°	TOL 6H	AL	312

MACHOS MÁQUINA POR LAMINACIÓN / FORMING TAPS / TARAUDS À REFOULER

313

DIN 2174		M	HSS-CO 5%	TIN	TOL 6HX	TOL ISO2X	313
DIN 2174 LUBRICACIÓN OIL GROOVE AVEC RANURE GRAISSAGE		M	HSS-CO 5%	TIN	TOL 6HX	TOL ISO2X	314

MACHOS TUERQUEROS / MACHINE NUT TAPS / TARAUDS MACHINE POUR ÉCROUS

315




DIN 357		M	HSS-CO 5%	TOL ISO2	ACERO 400-800 N/mm ²	315
		TR	HSS-G	ACERO 400-800 N/mm ²	316	
		TR	HSS-G	LH ACERO 400-800 N/mm ²	317	

COJINETES / DIES / FILIÈRES

318

DIN 223		M	HSS-G	TOL 6g	ACERO 400-800 N/mm ²	318
Ø 25 / Ø25.4 / Ø 38.1 ESPECIALES ESPECIFIC SPÉCIALES		M	HSS-G	FORM A TOL 6e TOL 6g	ACERO 400-800 N/mm ²	319
DIN 223		MF	HSS-G	TOL 6g	ACERO 400-800 N/mm ²	320
DIN 223		BSW	HSS-G	ACERO 400-800 N/mm ²	323	
DIN 223		BSF	HSS-G	ACERO 400-800 N/mm ²	324	

ÍNDICE GENERAL
GENERAL INDEX • INDEX GÉNÉRAL

COJINETES / DIES / FILIÉRES						318
BS1127		BA	HSS-G	FORM CA	ACERO 400-800 N/mm²	324
DIN 223		UNC	HSS-G		ACERO 400-800 N/mm²	325
DIN 223		UNF	HSS-G		ACERO 400-800 N/mm²	326
DIN 223		UNEF	HSS-G		ACERO 400-800 N/mm²	327
DIN 5158		G(BSP)	HSS-G		ACERO 400-800 N/mm²	328
		R (BSPT)	HSS-G	FORM CA	ACERO 400-800 N/mm²	328
DIN 40434		PG	HSS-G		ACERO 400-800 N/mm²	328
DIN 223		NPT	HSS-G		ACERO 400-800 N/mm²	329
		VG	HSS-G		TOL 6g ACERO 400-800 N/mm²	329
		BSC	HSS-G		TOL 6g ACERO 400-800 N/mm²	329
DIN 223		NPTF	HSS-G	FORM CA	ACERO 400-800 N/mm²	330
DIN 223		M	HSS-CO 5%		TOL 6g ACERO 800-1100 N/mm²	330
DIN 223		MF	HSS-CO 5%		TOL 6g ACERO 800-1100 N/mm²	331
DIN 5158		G(BSP)	HSS-CO 5%		ACERO 800-1100 N/mm²	331
DIN 223		M	HSS-G	LH	TOL 6g ACERO 400-800 N/mm²	332
DIN 223		MF	HSS-G	LH	TOL 6g ACERO 400-800 N/mm²	333
DIN 223		BSW	HSS-G	LH	ACERO 400-800 N/mm²	334
DIN 223		UNC	HSS-G	LH	ACERO 400-800 N/mm²	334
DIN 223		UNF	HSS-G	LH	ACERO 400-800 N/mm²	335
DIN 5158		G(BSP)	HSS-G	LH	ACERO 400-800 N/mm²	335

ROSCADO / THREADING • FILÉTAGE

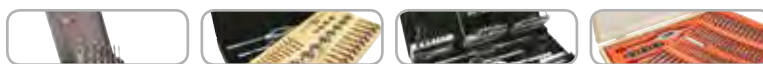
COJINETES / DIES / FILIÈRES

336

DIN 382		M	HSS-G	TOL 6g	ACERO 400-800 N/mm ²	336
DIN 382		MF	HSS-G	TOL 6g	ACERO 400-800 N/mm ²	337
DIN 382		BSW	HSS-G		ACERO 400-800 N/mm ²	338
DIN 382		BSF	HSS-G		ACERO 400-800 N/mm ²	338
DIN 382		G(BSP)	HSS-G		ACERO 400-800 N/mm ²	339

ESTUCHES Y CONJUNTOS / SETS AND ASSORTMENTS / COFFRETS ET ENSEMBLES

340



340

INFORMACIÓN TÉCNICA REPARACIÓN DE ROSCAS / THREAD REPAIR TECHNICAL INFORMATION / INFORMATION TECHNIQUE RÉPARATION

352

MACHOS PARA INSERTOS REPARADORES / TAPS FOR WIRE THREAD INSERTS / TARAUDS POUR FILETS RAPPORTÉS

358

INTERMEDIO / SECOND LEAD INTERMÈDE		M	HSS-G	FORM D	TOL ISO1 4H	ACERO 400-800 N/mm ²	358
2 PIEZAS / 2 PIÈCES / 2 PIÈCES		M	HSS-G	FORM D	TOL ISO1 4H	ACERO 400-800 N/mm ²	359
INTERMEDIO / SECOND LEAD INTERMÈDE		UNC	HSS-G	FORM D	TOL 3B	ACERO 400-800 N/mm ²	360
2 PIEZAS / 2 PIÈCES / 2 PIÈCES		UNC	HSS-G	FORM D	TOL 3B	ACERO 400-800 N/mm ²	360
INTERMEDIO / SECOND LEAD INTERMÈDE		UNF	HSS-G	FORM D	TOL 3B	ACERO 400-800 N/mm ²	361
2 PIEZAS / 2 PIÈCES / 2 PIÈCES		UNF	HSS-G	FORM D	TOL 3B	ACERO 400-800 N/mm ²	361
INTERMEDIO / SECOND LEAD INTERMÈDE		G(BSP)	HSS-G	FORM D	TOL ISO1 4H	ACERO 400-800 N/mm ²	362
2 PIEZAS / 2 PIÈCES / 2 PIÈCES		G(BSP)	HSS-G	FORM D	TOL ISO1 4H	ACERO 400-800 N/mm ²	362
INTERMEDIO / SECOND LEAD INTERMÈDE		BSW	HSS-G	FORM D	TOL ISO1 4H	ACERO 400-800 N/mm ²	363
INTERMEDIO / SECOND LEAD INTERMÈDE		BSF	HSS-G	FORM D	TOL ISO1 4H	ACERO 400-800 N/mm ²	363

MACHOS PARA INSERTOS REPARADORES / TAPS FOR WIRE THREAD INSERTS / TARAUDS POUR FILETS RAPPORTÉS

364

INTERMEDIO SECOND LEAD INTERMÈDE		BA	HSS-G	FORM D	TOL ISO1 4H	ACERO 400-800 N/mm ²	364
INTERMEDIO SECOND LEAD INTERMÈDE		BS	HSS-G	FORM D	TOL ISO1 4H	ACERO 400-800 N/mm ²	364
PASANTE SPIRAL POINT ENTRÉE GUN		M	HSS-CO 5%	FORM B	TOL ISO1 4H	ACERO 900-1100 N/mm ²	365
CIEGO SPIRAL FLUTE HÉLICOIDALE		M	HSS-CO 5%	FORM C/35°	TOL ISO1 4H	ACERO 900-1100 N/mm ²	366

ÍNDICE GENERAL
GENERAL INDEX • INDEX GÉNÉRAL

MACHOS PARA INSERTOS REPARADORES / TAPS FOR WIRE THREAD INSERTS / TARAUDS POUR FILETS RAPPORTÉS 366

CON PUNTA PILOTO
ROUGHER PILOTED
EBAUCHEUR À PILOTE  M **HSS-G** TOL ISO1 4H  366

LAMINACIÓN
FORMING TAPS
TARAUDS À REFOULER  M **HSS-CO 5%** TOL ISO1 4H 367

INSERTOS REPARADORES DE ROSCA / WIRE THREAD INSERTS / FILETS RAPPORTÉS 368

DIN 8140  M TOL ISO2 6H 368


DIN 8140  MF TOL ISO2 6H 368

DIN 8140 ROSCAS PARA BUJÍAS
FOR SPARK PLUG
POUR BOUGIES  MF TOL ISO2 6H 369

DIN 8140 AUTOFRENANTES
SCREW LOCKING
INDESERRABLES  M TOL ISO2 6H 369

DIN 8140  UNC TOL 2B 370

DIN 8140  UNF TOL 2B 371

DIN 8140  BSW TOL ISO2 6H 372

DIN 8140  G(BSP) TOL ISO2 6H 373

DIN 8140  BSF TOL ISO2 6H 373

ACCESORIOS REPARACIÓN / ACCESORIES WIRE THRED INSERTS / ACCESSOIRES FILETS RAPPORTÉS 374

ACCESORIOS REPARACIÓN
ACCESORIES WIRE THRED INSERTS
ACCESSOIRES FILETS RAPPORTÉS  374

KITS REPARADORES DE ROSCA / THREAD REPAIR KIT / KITS DE RÉPARATION DE FILETAGE 378

KITS REPARADORES
REPAIR KIT
KITS DE RÉPARATION  378

MALETINES REPARADORES
REPAIR SET
COFFRETS RÉPARATION  384

KITS REPARACIÓN PARA INSERCIÓN A MÁQUINA
REPAIR KIT FOR MACHINE
KIT RÉPARATION À MACHINE  385

ACCESORIOS ACCESSORIES • ACCESSOIRES

PORTABROCAS / DRILL CHUCK
MANDRINS  388

ESPIGAS / TAPER DRILL CHUCKS
ARBRES DE MONTAGE  390

CASQUILLOS REDUCTORES / GROUND SLEEVES
DOUILLES DE RÉDUCTION  391

ACCESORIOS ACCESSORIES • ACCESSOIRES

CASQUILLOS AUMENTADORES / EXTENSION SLEEVES DOUILLES RALLONGÉS					392
CONVERSION DE ANCLAJE SDS-MAX A SDS-PLUS CONVERSION FROM SDS-MAX SHANK TO SDS-PLUS CONVERTEUR DE SDS-MAX A SDS-PLUS					392
ADAPTADORES / ADAPTERS ADAPTATEURS					393
ÚTILES DE SUJECIÓN / CLAMPING TOOLS OUTILS DE FIXATION					393
MARCADORES MARQUERS MARQUEURS					394
ACEITE DE CORTE Y ROSCADO CUTTING AND TAPPING FLUID FLUIDE POUR FILETAGE ET DE COUP					395

HEXAGONAL HEXAGONAL • HEXAGONAL

JX PORCELANATO JX PORCELAIN JX GRÉS CÉRAMIQUE					398	
MULTIUSOS MULTIPURPOSE MULTI USAGE					398	
MADERA 3 PUNTAS 3 POINT WOOD DRILL BIT FORET A BOIS 3 POINTES					399	
MADERA 3 PUNTAS SERIE CORTA WOOD DRILL BIT SHORT SERIES FORET A BOIS SERIE COURTE					399	
PALA B FLAT DRILL BIT TYPE B MÈCHE PLATE TYPE B					400	
PALA C FLAT DRILL BIT TYPE C MÈCHE PLATE TYPE C					401	
BROCA METAL METAL DRILL BIT FORETS METAL						402
BROCA METAL SERIE CORTA METAL DRILL BIT SHORT SERIES FORETS METAL SERIE COURTE						402
AVELLANADOR 90° COUNTERSINK 90° CHANFRENEUR 90°						403
HEX TAP HEX TAP HEX TAP						404
MACHOS COMBINADOS COMBINED TAPS TARAUDS COMBINÉS						405
REPARADOR DE ROSCA THREADING REPAIR KIT KIT DE RÉPARATION DE FILETAGE					407	
PUNTAS DE ATORNILLAR SCREWDRIVER BITS ÉMBOUTS					408	
JUEGOS DE PUNTAS SCREWDRIVER BIT SETS COFFRET ÉMBOUTS					412	
ADAPTADOR ADAPTERS ADAPTATEUR					415	

METROLOGÍA METROLOGY • MÉTROLOGIE







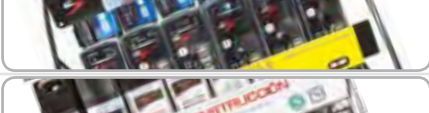






RELOJES COMPARADORES Y BASES MAGNÉTICAS INDICATOR AND MAGNETIC BASE EMBASE MAGNETIQUE ET COMPARETEURS					418
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ÍNDICE GENERAL

GENERAL INDEX • INDEX GÉNÉRAL

CALIBRES CALIPERS PIEDS À COULISSES	 	419
MICRÓMETROS MICROMETERS MICROMÈTRES	 	422
ESTUCHES MEDICIÓN MEASURING SETS COFFRETS MESURE	 	424
GALGAS GAUGES JAUGES	 	426
ESCUADRAS Y TRANSPORTADORES SET SQUARES & PROTRACTORS EQUERRES ET RAPORTEURS	 	427
COMPASES SPRING CALIPERS COMPASSES	 	428

DISPLAYS DISPLAYS • DISPLAYS

MINI EXPOSITOR MINI DISPLAY MINI ÉXPOSITEUR		432
NEW DISPLAY JR061 DISPLAY JR061 DISPLAY JR061		437
NEW DISPENSADOR DE SOBREMESA CERRADO CLOSED DESKTOP DISPENSER DISTRIBUTEUR DE BUREAU FERMÉ		437
MÓDULOS CONSTRUCCIÓN CONSTRUCTION MODULE MODULE CONSTRUCTION		438
MÓDULOS MADERA WOOD MODULE MODULE BOIS		442
MÓDULOS METAL METAL MODULE MODULE MÉTAL		444
COMBINADO STANDARD STANDARD COMBINED STANDARD COMBINÉE		449
MÓDULOS HEXAGONAL HEXAGONAL MODULE MODULE HEXAGONALE		450
MÓDULOS ESTUCHES SETS MODULE MODULE COFFRETS		451
EXPOSITOR LINEAL METER DISPLAY PRÉSENTOIRE LINÉALE		452
EXPOSITORES SOBREMESA METAL TABLE DISPLAY - METAL EXPOSITEUR BASE TABLE MÉTAL		454
EXPOSITORES SOBREMESA ROSCADO TABLE DISPLAY - THREADING EXPOSITEUR BASE TABLE FILÉTAGE	 	456

ÍNDICE ICONOGRAFÍA / ICONOGRAPHY INDEX / INDEX ICONOGRAPHIE

458

NOVEDADES

- Brocas JR para porcelanato:
BLISTER RÍGIDO para PdV
- CORONAS DIAMANTADA
para amoladora


NEW FEATURES

- *JR drill bits for porcelanic:
RIGID BLISTER for POS*
- *DIAMOND CORE BITS for
grinder*

NOUVEAUTÉS

- *Forets JR pour ceramique:
BLISTER RIGIDE pour PdV*
- *TRÉPAN DIAMANTÉ pour
broyeur*

CONSTRUCTION-CONSTRUCTION

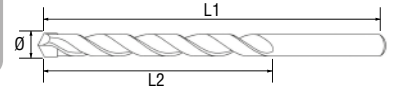




CONSTRUCCIÓN

BROCA JR PARA PORCELANATO
JR DRILL-BIT FOR PORCELANIC
FORET JR POUR CÉRAMIQUE

NEW



Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.	Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
3,00	85	50	1	JR0030	5,06	7,50	125	75	1	JR0075	7,13
3,50	85	50	1	JR0035	5,83	8,00	125	75	1	JR0080	8,03
4,00	85	50	1	JR0040	4,95	8,50	125	75	1	JR0085	8,71
4,50	85	50	1	JR0045	6,04	9,00	150	90	1	JR0090	8,71
5,00	85	50	1	JR0050	5,03	9,50	150	90	1	JR0095	9,45
5,50	100	65	1	JR0055	6,28	10,00	150	90	1	JR0100	8,71
6,00	100	65	1	JR0060	5,03	10,50	150	90	1	JR0105	10,11
6,50	100	65	1	JR0065	6,28	11,00	150	90	1	JR0110	12,50
7,00	125	75	1	JR0070	6,72	12,00	150	90	1	JR0120	17,45

ESTUCHE BROCA JR 5 PIEZAS
JR DRILL-BIT SET 5 PIECES
COFFRET FORET JR

Medidas / Sizes

4 - 5 - 6 - 6 - 8 mm

Uds. / Pcs.	Cod.	€/Unid.
1	010205S1	30,40



EXPOSITOR SOBREMESA JR
BASIC DISPLAY JR • EXPOSITEUR BASE TABLE JR

NEW



Ø (mm)	L (mm)	Uds. / Pcs.	€/Unid.
3,00	85	8	
4,00	85	8	
5,00	85	8	
6,00	100	16	
8,00	125	8	
10,00	150	8	
SET BROCA JR 5 PIEZAS		5	
SET 5 PIECES			
Cod. JR061		61	486,46

NOTA: Composición con 5 ganchos / Stand with 5 hooks / Présentoirs avec 5 crochets



Expositor MINI
470 x 190 x 140 mm

BROCAS CILÍNDRICAS CONSTRUCCIÓN

CYLINDRICAL MASONRY DRILL BITS • FORETS CONSTRUCTION

ACCESORIOS PORCELANATO

PORCELANIC ACCESSORIES • ACCESSOIRES CÉRAMIQUE



DISPENSADOR DE AGUA

WATER DISPENSER

DISPENSEUR D'EAU

Cod.	€/Unid.
JRZZZ	21,90



GUÍA CON VENTOSA Y DISPENSADOR DE AGUA DE BOMBA

SUCTION GUIDE AND WATER DISPENSER

GUIDE AVEC VENTOUSE ET DISPENSEUR D'EAU

Cod.	€/Unid.
JRZ02	38,20



GUÍA CON VENTOSA

SUCTION DRILLING GUIDE

GUIDE AVEC VENTOUSE

Cod.	€/Unid.
JRZ01	20,73



MARCADOR PUNTERO AUTOMÁTICO

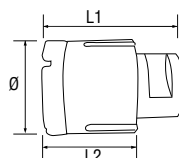
AUTOMATIC CENTER PUNCH

MARQUEUR AUTOMATIQUE

Cod.	€/Unid.
5PU5000	11,57

CORONA DIAMANTADA

DIAMOND CORE BIT • TRÉPAN DIAMANTÉ



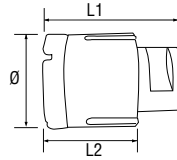
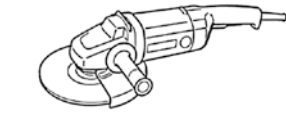
Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
5,00	70	40	1	01020605	26,18
6,00	70	40	1	01020606	26,61
8,00	80	40	1	01020608	31,29
10,00	80	40	1	01020610	33,62
12,00	80	40	1	01020612	35,79
14,00	80	40	1	01020614	39,59
15,00	80	40	1	01020615	43,18
20,00	90	50	1	01020620	55,46

Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
22	90	50	1	01020622	60,75
25	90	50	1	01020625	68,96
30	90	50	1	01020630	91,95
34	90	50	1	01020634	115,48
35	90	50	1	01020635	118,78
40	90	50	1	01020640	135,58
45	90	50	1	01020645	152,19

CORONA DIAMANTADA PARA AMOLADORA

DIAMOND CORE BIT FOR GRINDER
TRÉPAN DIAMANTÉ
POUR BROYEUR

NEW





Ø (mm)	Lubricación interior con cera <i>Lubrication with wax / Lubrification avec cire</i>	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
6	✓	60	35	1	1CDM140060	22,70
8	✓	60	35	1	1CDM140080	22,70
10	✓	60	35	1	1CDM140100	22,70
12	✓	60	35	1	1CDM140120	25,07
15	✓	60	35	1	1CDM140150	26,25
18	-	60	40	1	1CDM140180	31,39
20	-	60	40	1	1CDM140200	34,70
25	-	60	40	1	1CDM140250	42,98
32	-	60	40	1	1CDM140320	54,57
35	-	60	40	1	1CDM140350	59,53
40	-	60	40	1	1CDM140400	67,81
44	-	60	40	1	1CDM140440	74,61
50	-	60	40	1	1CDM140500	84,55
60	-	60	40	1	1CDM140600	101,10
68	-	60	40	1	1CDM140680	114,34
75	-	60	40	1	1CDM140750	144,49

- | | | |
|---|---|--|
| <ul style="list-style-type: none"> • Trabajo en seco • Empezar la perforación con la corona ligeramente inclinada. • Enderezarla poco a poco para trabajar de forma vertical • Velocidad de perforación: 5000-12000 rpm. • Suaves movimientos circulares permiten aumentar la velocidad de perforación y mejoran la refrigeración. • Hacer pequeñas pausas para refrigerar la corona. | <ul style="list-style-type: none"> • Dry running. • Start drilling with the drill bit slightly tilted. • Straighten it bit by bit until it is operating vertically. • Drilling speed: 5000-12000 rpm. • Smooth circular movements allow the drilling speed to be increased and improves cooling. • Take small breaks to cool the drill bit. | <ul style="list-style-type: none"> • Travail à sec. • Commencer la perforation avec la couronne légèrement inclinée. • La redresser peu à peu pour travailler de façon verticale. • Vitesse de perforation : 5000-12000 rpm. • Mouvements circulaires légers qui permettent d'augmenter la vitesse de perforation et d'améliorer la réfrigération. • Faire de petites pauses pour reposer la couronne. |
|---|---|--|

UTILIDADES / USES / UTILISATION

35 mm	Instalación de grifería / pipework installation / installation de robinetterie
40 mm	Instalación de los desagües de los electrodomésticos / installation of drainage for domestic appliances / installation des évacuations des appareils électroménagers
50 mm	Instalación desagües / installation of industrial drainage / installation d'évacuations industrielles
60mm	Instalación cajetines electricidad / installation of electrical terminal boxes / installation de boîtiers électriques

ADAPTADORES ADAPTOR • ADAPTATEUR

	Conversión / Conversion / Conversion	L1 (mm)	Uds. Pcs.	Cod.	€/Unid.
	De M14 a Mango Hexagonal From M14 to Hexagonal Shank De M14 a Manche Hexagonale	65	1	1ACM1401	7,68
	De M14 a Mango SDS-PLUS From M14 to SDS-PLUS Shank De M14 a Manche SDS-PLUS	78	1	1ACM1402	10,02

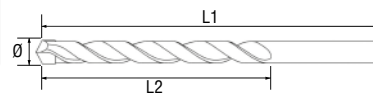
BROCAS CILÍNDRICAS CONSTRUCCIÓN

CYLINDRICAL MASONRY DRILL BITS • FORETS CONSTRUCTION

TORNADO *TORNADO • TORNADO*



DIN 8039



Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
3	60	30	1	1T003060	3,77
4	75	40	1	1T004075	3,80
5	85	50	1	1T005085	3,35
5	150	110	1	1T005150	5,60
6	100	60	1	1T006100	3,80
6	150	110	1	1T006150	6,11
6	200	135	1	1T006200	8,22
7	100	60	1	1T007100	4,48
8	120	80	1	1T008120	4,92
8	200	135	1	1T008200	7,83
8	400	350	1	1T008400	13,67
9	120	80	1	1T009120	5,74
10	120	80	1	1T010120	6,72
10	200	135	1	1T010200	10,82
10	400	350	1	1T010400	15,16

Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
11	150	90	1	1T011150	9,85
12	150	90	1	1T012150	9,19
12	200	135	1	1T012200	14,10
12	400	350	1	1T012400	17,76
13	150	90	1	1T013150	13,20
14	150	90	1	1T014150	13,51
14	400	350	1	1T014400	22,38
15	150	90	1	1T015150	16,57
16	150	90	1	1T016150	16,65
16	400	350	1	1T016400	25,37
18	160	100	1	1T018160	21,65
18	400	350	1	1T018400	31,94
20	160	100	1	1T020160	23,88
20	400	350	1	1T020400	37,31

ESTUCHE BROCA TORNADO

TORNADO DRILL BITS SET
COFFRET FORETS TORNADO

Medidas / Sizes

4 - 5 - 6 - 8 - 10 mm

Uds. / Pcs.	Cod.	€/Unid.
1	1917T327N	23,47



Medidas / Sizes

3 - 4 - 5 - 6 - 7 - 8 - 9 - 10 mm

Uds. / Pcs.	Cod.	€/Unid.
1	1917T333N	33,15



ESTUCHE COMBINADO METAL-CONSTRUCCIÓN-MADERA

COMBINED SET METAL-CONSTRUCTION-WOOD
COFFRET COMBINÉ MÉTAL-CONSTRUCTION-BOIS

ADVANCE BOX (9 UDS. / PCS.)



Composición / Contains / Composition

HSS CO **HSS-CO 5%** + TORNADO + MADERA

Medidas / Sizes Cod. €/Unid.

5 - 6 - 8 mm 19CA339 30,58

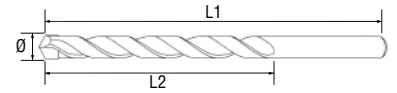
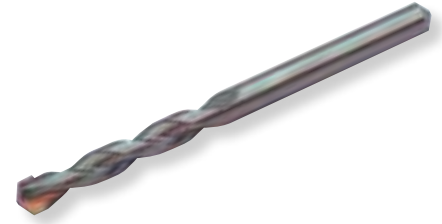


19CA339

GRANITO PLUS GRANITE PLUS • GRANITE PLUS



DIN 8039



Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
4,00	75	40	1	1GR04075	2,94
5,00	85	50	1	1GR05085	4,03
6,00	100	60	1	1GR06100	5,12

Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
8,00	120	80	1	1GR08120	6,56
10,00	120	80	1	1GR10120	9,10

ESTUCHE BROCA GRANITO PLUS
GRANITE PLUS DRILL BITS SET
COFFRET FORETS GRANITE PLUS

Medidas / Sizes

4 - 5 - 6 - 8 - 10 mm

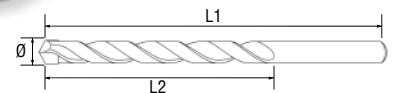
Uds. / Pcs.	Cod.	€/Unid.
1	1GR327N	35,35



GRANITO: BLISTER RÍGIDO
GRANITE: RIGID PLATIC BLISTER
GRANITE: BLISTER DE PLASTIQUE RIGIDE



DIN 8039



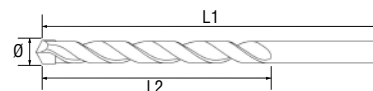
Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
3	60	30	1	105A03060BL	1,55
4	75	40	1	105A04075BL	1,69
5	85	50	1	105A05085BL	1,96
6	100	60	1	105A06100BL	2,57

Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
8	120	80	1	105A08120BL	3,94
10	120	80	1	105A10120BL	5,21
12	150	90	1	105A12150BL	6,69

BROCAS CILÍNDRICAS CONSTRUCCIÓN

CYLINDRICAL MASONRY DRILL BITS • FORETS CONSTRUCTION

GRANITO GRANITE • GRANITE



Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
3,00	60	30	1	105A03060	1,26
4,00	75	40	1	105A04075	1,53
5,00	85	50	1	105A05085	1,79
6,00	100	60	1	105A06100	2,34
6,00	200	135	1	105A06200	4,49
6,00	400	270	1	105A06400	6,89
7,00	100	60	1	105A07100	2,95
8,00	120	80	1	105A08120	3,58
8,00	200	135	1	105A08200	4,84
8,00	400	270	1	105A08400	8,23
9,00	120	80	1	105A09120	4,65
10,00	120	80	1	105A10120	4,74
10,00	200	135	1	105A10200	5,28
10,00	400	270	1	105A10400	11,81

Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
11,00	150	90	1	105A11150	5,83
12,00	150	90	1	105A12150	6,08
12,00	200	135	1	105A12200	6,63
12,00	400	270	1	105A12400	13,86
14,00	150	90	1	105A14150	6,89
14,00	400	270	1	105A14400	17,08
16,00	150	90	1	105A16150	8,23
16,00	400	270	1	105A16400	19,22
18,00	160	100	1	105A18160	10,73
18,00	400	270	1	105A18400	22,09
20,00	160	100	1	105A20160	11,89
20,00	400	270	1	105A20400	24,77

ESTUCHE BROCA GRANITO

GRANITO DRILL BITS SET
COFFRET FORETS GRANITO

Medidas / Sizes

4 - 5 - 6 - 8 - 10 mm

Uds. / Pcs.	Cod.	€/Unid.
1	1915A327N	18,15



Medidas / Sizes

3 - 4 - 5 - 6 - 7 - 8 - 9 - 10 mm

Uds. / Pcs.	Cod.	€/Unid.
1	1915A333N	28,16



ESTUCHE COMBINADO METAL-CONSTRUCCIÓN-MADERA

COMBINED SET METAL-CONSTRUCTION-WOOD
COFFRET COMBINÉ MÉTAL-CONSTRUCTION-BOIS

STANDARD BOX (9 UDS. / PCS.)

Composición / Contains / Composition			Medidas / Sizes	Cod.	€/Unid.
HSS G	HSS-G	+ GRANITO + MADERA	5 - 6 - 8 mm	19CM339	22,08

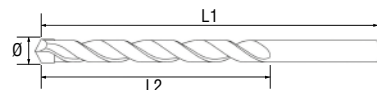


19CM339

BASIC BASIC • BASIC



DIN 8039



Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.	Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
3,00	60	30	1	16F03060	0,71	11,00	150	90	1	16F11150	2,25
4,00	75	40	1	16F04075	0,79	12,00	150	90	1	16F12150	2,57
5,00	85	50	1	16F05085	0,98	12,00	200	135	1	16F12200	3,63
6,00	100	60	1	16F06100	1,22	12,00	300	200	1	16F12300	4,99
6,00	200	135	1	16F06200	2,08	12,00	400	270	1	16F12400	5,34
6,00	300	200	1	16F06300	2,57	13,00	150	90	1	16F13150	3,14
7,00	100	60	1	16F07100	1,45	14,00	150	90	1	16F14150	3,35
8,00	120	80	1	16F08120	1,37	14,00	400	270	1	16F14400	7,78
8,00	200	135	1	16F08200	2,53	15,00	150	90	1	16F15150	3,66
8,00	300	200	1	16F08300	3,33	16,00	150	90	1	16F16150	4,29
8,00	400	270	1	16F08400	3,47	16,00	400	270	1	16F16400	9,12
9,00	120	80	1	16F09120	2,00	18,00	160	100	1	16F18160	5,67
10,00	120	80	1	16F10120	2,08	18,00	400	270	1	16F18400	10,57
10,00	200	135	1	16F10200	2,92	20,00	160	100	1	16F20160	7,31
10,00	300	200	1	16F10300	3,79	20,00	400	270	1	16F20400	11,89
10,00	400	270	1	16F10400	4,13	22,00	400	270	1	16F22400	13,17

ESTUCHE BROCA BASIC
BASIC DRILL BITS SET
COFFRET FORETS BASIC

Medidas / Sizes

4 - 5 - 6 - 8 - 10 mm

Uds. / Pcs.	Cod.	€/Unid.
1	1916F327N	10,09



Medidas / Sizes

3 - 4 - 5 - 6 - 7 - 8 - 9 - 10 mm

Uds. / Pcs.	Cod.	€/Unid.
1	1916F333N	20,70



ESTUCHE COMBINADO METAL-CONSTRUCCIÓN-MADERA
COMBINED SET METAL-CONSTRUCTION-WOOD
COFFRET COMBINÉ MÉTAL-CONSTRUCTION-BOIS

BASIC BOX (9 UDS. / PCS.)

Composición / Contains / Composition

Medidas / Sizes

Cod.

€/Unid.

HSS WHITE

HSS

+

BASIC



+

MADERA



5 - 6 - 8 mm

19CB339

15,98



19CB339

BROCAS CILÍNDRICAS CONSTRUCCIÓN

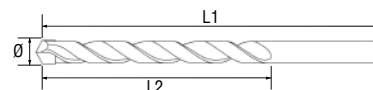
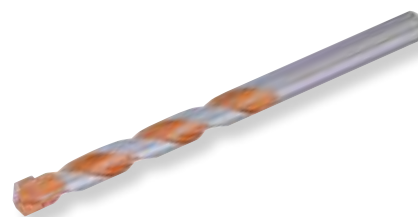
CYLINDRICAL MASONRY DRILL BITS • FORETS CONSTRUCTION

BROCA MULTI-USO

MULTI-PURPOSE DRILL-BIT • FORET MULTIFUNCTION



DIN 8039



Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
3,00	70	40	1	1MU03070	6,97
4,00	75	40	1	1MU04075	6,66
5,00	85	50	1	1MU05085	7,20
5,00	150	110	1	1MU05150	10,06
5,50	85	50	1	1MU55085	7,74
6,00	100	60	1	1MU06100	7,81
6,00	150	110	1	1MU06150	11,47
6,50	100	60	1	1MU65100	8,37
6,50	150	110	1	1MU65150	11,99
7,00	100	60	1	1MU07100	8,91

Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
8,00	120	80	1	1MU08120	9,75
8,00	200	135	1	1MU08200	14,32
9,00	120	80	1	1MU09120	11,23
10,00	120	80	1	1MU10120	12,85
10,00	200	135	1	1MU10200	18,35
12,00	150	90	1	1MU12150	17,57
12,00	200	135	1	1MU12200	24,01
14,00	150	90	1	1MU14150	23,80
16,00	150	90	1	1MU16150	29,72

ESTUCHE BROCA MULTI-USO

MULTI-PURPOSE DRILL-BIT DRILL BITS SET
COFFRET FORETS MULTIFUNCTION

Medidas / Sizes

4 - 5 - 6 - 8 - 10 mm

Uds. / Pcs.	Cod.	€/Unid.
1	1MU327N	47,66



Medidas / Sizes

3 - 4 - 5 - 6 - 7 - 8 - 9 - 10 mm

Uds. / Pcs.	Cod.	€/Unid.
1	1MU333N	69,27



BROCA PARA VIDRIO GLASS DRIL-BIT • FORET POUR VERRE



Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
3,00	58	3,00	1	1VI0300	4,76
4,00	58	3,00	1	1VI0400	5,13
5,00	58	4,00	1	1VI0500	5,63
6,00	58	5,00	1	1VI0600	6,23
7,00	78	5,00	1	1VI0700	6,82

Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
8,00	78	6,00	1	1VI0800	8,06
9,00	98	6,00	1	1VI0900	9,89
10,00	98	7,00	1	1VI1000	10,19
12,00	98	8,00	1	1VI1200	16,62

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

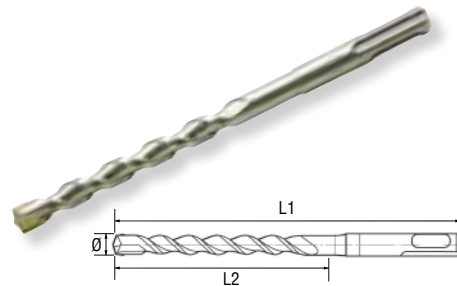
HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

CYCLONE SDS-PLUS SDS-PLUS CYCLONE • CYCLONE SDS-PLUS

Basic



Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
4	110	50	1	1CY04110	3,55
5	110	50	1	1CY05110	2,86
5	160	100	1	1CY05160	3,55
6	110	50	1	1CY06110	2,86
6	160	100	1	1CY06160	3,33
6	210	150	1	1CY06210	4,95
7	110	50	1	1CY07110	3,66
7	160	100	1	1CY07160	4,02
8	110	50	1	1CY08110	3,47
8	160	100	1	1CY08160	3,55
8	210	150	1	1CY08210	4,49
8	260	200	1	1CY08260	6,02
10	110	50	1	1CY10110	4,05
10	160	100	1	1CY10160	4,46
10	210	150	1	1CY10210	5,59
10	260	200	1	1CY10260	6,54
10	450	390	1	1CY10450	14,69

Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
12	160	100	1	1CY12160	5,16
12	210	150	1	1CY12210	6,37
12	260	200	1	1CY12260	7,72
12	310	250	1	1CY12310	9,28
12	450	390	1	1CY12450	14,08
14	160	100	1	1CY14160	6,97
14	210	150	1	1CY14210	9,15
14	260	200	1	1CY14260	9,57
14	450	390	1	1CY14450	16,43
16	160	100	1	1CY16160	9,40
16	210	150	1	1CY16210	10,80
16	310	250	1	1CY16310	13,27
16	450	390	1	1CY16450	19,93
18	210	150	1	1CY18210	17,08
20	350	290	1	1CY20350	22,96
22	450	390	1	1CY22450	39,00
25	450	390	1	1CY25450	46,50

ESTUCHE BROCA CYCLONE CYCLONE DRILL BITS SET • COFFRET FORETS CYCLONE

Medidas / Sizes
5 x 110, 6 x 110, 6 x 160, 8 x 110, 8 x 160, 10 x 160, 12 x 160 mm

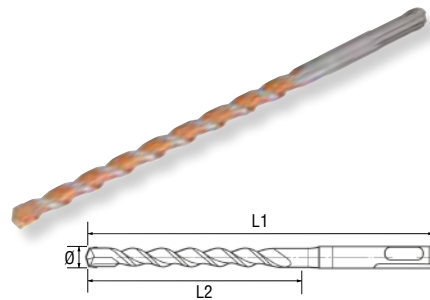
Uds. / Pcs.	Cod.	€/Unid.
7	1105P72	33,07

Medidas / Sizes Uds. / Pcs.
6 x 160, 8 x 160, 10 x 160, 12 x 160 mm 4

Puntero / Point Chisel
Cinzel / Flat Chisel
Cinzel Ancho / Spade Chisel
x 140 mm 3

Cod.	€/Unid.
1106P72	87,75

BROCA MULTI-USO SDS-PLUS
SDS-PLUS MULTI- PURPOSE DRILL BIT
FORET MULTI MATERIAUX SDS-PLUS



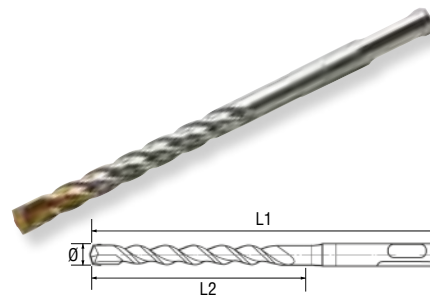
Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
6,00	160	100	1	1MS06160	18,27
8,00	160	100	1	1MS08160	22,00
8,00	210	150	1	1MS08210	25,94
10,00	160	100	1	1MS10160	25,64

Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
10,00	260	200	1	1MS10260	36,60
12,00	160	100	1	1MS12160	27,83
12,00	260	200	1	1MS12260	43,05
14,00	260	200	1	1MS14260	48,59

BROCAS PARA MARTILLO

HAMMER DRILL BITS • FORETS MARTEAUX

ST-2 SDS-PLUS SDS-PLUS ST-2 • ST-2 SDS-PLUS



Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
4,00	110	50	1	1ST04110	5,22
5,00	110	50	1	1ST05110	4,21
5,00	160	100	1	1ST05160	5,22
5,00	210	150	1	1ST05210	8,10
5,50	110	50	1	1ST55110	4,97
5,50	160	100	1	1ST55160	5,58
6,00	110	50	1	1ST06110	4,21
6,00	160	100	1	1ST06160	4,91
6,00	210	150	1	1ST06210	7,28
6,00	260	200	1	1ST06260	10,58
6,00	460	400	1	1ST06460	19,31
6,50	110	50	1	1ST65110	5,08
6,50	160	100	1	1ST65160	5,88
6,50	260	200	1	1ST65260	9,66
7,00	110	50	1	1ST07110	5,40
7,00	160	100	1	1ST07160	5,91
8,00	110	50	1	1ST08110	5,11
8,00	160	100	1	1ST08160	5,22
8,00	210	150	1	1ST08210	6,59
8,00	260	200	1	1ST08260	8,88
8,00	310	250	1	1ST08310	12,77
8,00	460	400	1	1ST08460	19,94
9,00	160	100	1	1ST09160	7,40
9,00	260	200	1	1ST09260	12,45
10,00	110	50	1	1ST10110	5,97
10,00	160	100	1	1ST10160	6,57
10,00	210	150	1	1ST10210	8,24
10,00	260	200	1	1ST10260	9,63
10,00	310	250	1	1ST10310	14,55
10,00	460	400	1	1ST10460	21,63
10,00	600	550	1	1ST10600	31,47
11,00	160	100	1	1ST11160	8,30
11,00	260	200	1	1ST11260	12,66
12,00	160	100	1	1ST12160	7,59
12,00	200	150	1	1ST12210	9,37
12,00	260	200	1	1ST12260	11,36
12,00	310	250	1	1ST12310	16,60
12,00	450	400	1	1ST12450	20,73
12,00	600	550	1	1ST12600	31,33

Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
13,00	160	100	1	1ST13160	10,27
13,00	260	200	1	1ST13260	13,46
14,00	165	100	1	1ST14165	10,27
14,00	200	150	1	1ST14200	13,46
14,00	260	200	1	1ST14260	14,10
14,00	310	250	1	1ST14310	15,75
14,00	450	400	1	1ST14450	24,18
14,00	600	550	1	1ST14600	37,68
15,00	160	100	1	1ST15160	13,44
15,00	260	200	1	1ST15260	17,80
16,00	160	100	1	1ST16160	13,84
16,00	200	150	1	1ST16200	15,89
16,00	260	200	1	1ST16260	17,48
16,00	300	250	1	1ST16300	22,71
16,00	450	400	1	1ST16450	29,35
16,00	600	550	1	1ST16600	38,73
16,00	800	750	1	1ST16800	57,70
16,00	1.000	950	1	1ST161000	89,33
18,00	200	150	1	1ST18200	25,16
18,00	300	250	1	1ST18300	33,12
18,00	450	400	1	1ST18450	36,01
18,00	600	550	1	1ST18600	48,64
18,00	1.000	950	1	1ST181000	102,29
19,00	200	150	1	1ST19200	27,44
19,00	450	400	1	1ST19450	44,10
20,00	200	150	1	1ST20200	30,63
20,00	300	250	1	1ST20300	33,82
20,00	450	400	1	1ST20450	39,43
20,00	600	550	1	1ST20600	50,78
20,00	1.000	950	1	1ST201000	108,14
22,00	250	200	1	1ST22250	43,38
22,00	450	400	1	1ST22450	57,42
22,00	600	550	1	1ST22600	75,29
24,00	250	200	1	1ST24250	49,76
24,00	450	400	1	1ST24450	63,79
25,00	250	200	1	1ST25250	51,36
25,00	450	400	1	1ST25450	68,45
26,00	450	400	1	1ST26450	68,90

NOTA: Para otras medidas, consultar / Request for other sizes / Pour d'autres dimensions, nous consulter

NOTA: Para longitudes útiles de más de 400 mm UTILIZAR BROCA PREVIA de mismo diámetro, hasta 150 mm de profundidad. / For useful lengths of over 400 mm USE A PRE-DRILL BIT of the same diameter up to 150 mm in depth. / Pour des longueurs utiles de plus de 400 mm UTILISER LE FORET DE PRE-PERÇAGE de même diamètre, jusqu'à 150 mm de profondeur.

ESTUCHE BROCA ST-2 ST-2 DRILL BITS SET • COFFRET FORETS ST-2

Medidas / Sizes		
5 x 110, 6 x 110, 6 x 160, 8 x 110, 8 x 160, 10 x 160, 12 x 160 mm		
Uds. / Pcs.	Cod.	€/Unid.
7	1105P73	58,01

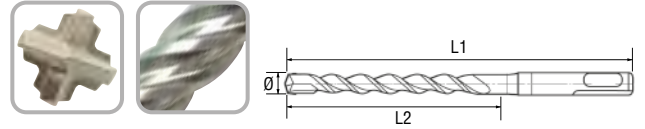
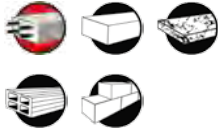


Medidas / Sizes	Uds. / Pcs.
6 x 160, 8 x 160, 10 x 160, 12 x 160 mm	4
Puntero / Point Chisel Cinzel / Flat Chisel Cinzel Ancho / Spade Chisel x 140 mm	3
Cod.	€/Unid.
1106P73	99,37



HURRICANE MULTIARISTAS SDS-PLUS

SDS-PLUS HURRICANE MULTICUTTER • MULTITAILLANT HURRICANE SDS-PLUS



Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
5	110	50	1	1HU05110	16,98
5	160	100	1	1HU05160	17,05
6	110	50	1	1HU06110	12,45
6	160	100	1	1HU06160	12,73
6	210	150	1	1HU06210	13,64
6	260	200	1	1HU06260	14,81
6	310	250	1	1HU06310	19,93
7	160	100	1	1HU07160	15,25
8	110	50	1	1HU08110	12,73
8	160	100	1	1HU08160	13,30
8	210	150	1	1HU08210	17,22
8	260	200	1	1HU08260	17,70
8	450	400	1	1HU08450	47,73
10	110	50	1	1HU10110	14,52
10	160	100	1	1HU10160	14,25
10	210	150	1	1HU10210	15,40
10	310	250	1	1HU10310	19,83
10	450	400	1	1HU10450	48,66
12	160	100	1	1HU12160	15,92
12	210	150	1	1HU12210	17,43

Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
12	260	200	1	1HU12260	20,99
12	310	250	1	1HU12310	27,47
12	450	400	1	1HU12450	53,75
14	160	100	1	1HU14160	23,65
14	210	150	1	1HU14210	24,55
14	310	250	1	1HU14310	27,48
14	450	400	1	1HU14450	59,29
16	210	150	1	1HU16210	31,49
16	260	200	1	1HU16260	34,95
16	310	250	1	1HU16310	37,56
16	450	400	1	1HU16450	58,56
18	260	200	1	1HU18260	60,45
18	450	400	1	1HU18450	80,05
20	260	200	1	1HU20260	78,94
20	450	400	1	1HU20450	85,71
22	450	400	1	1HU22450	109,58
24	450	400	1	1HU24450	119,71
25	450	400	1	1HU25450	126,13
28	450	400	1	1HU28450	135,98
30	450	400	1	1HU30450	153,03

NOTA: Para longitudes útiles de más de 400 mm UTILIZAR BROCA PREVIA de mismo diámetro, hasta 150 mm de profundidad. / For useful lengths of over 400 mm USE A PRE-DRILL BIT of the same diameter up to 150 mm in depth. / Pour des longueurs utiles de plus de 400 mm UTILISER LE FORET DE PRE-PERÇAGE de même diamètre, jusqu'à 150 mm de profondeur.

ESTUCHE BROCA HURRICANE HURRICANE DRILL BITS SET • COFFRET FORETS HURRICANE

Medidas / Sizes		
5 x 110, 6 x 110, 6 x 160, 8 x 110, 8 x 160, 10 x 160, 12 x 160 mm		
Uds. / Pcs.	Cod.	€/Unid.
7	1105P71	98,36



Medidas / Sizes		Uds. / Pcs.
6 x 160, 8 x 160, 10 x 160, 12 x 160 mm		4
Puntero / Point Chisel		3
Cinzel / Flat Chisel		
Cinzel Ancho / Spade Chisel x 140 mm		
Cod.	€/Unid.	
1106P71	130,65	



BROCAS PARA MARTILLO

HAMMER DRILL BITS • FORETS MARTEAUX

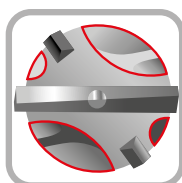
SDS-MAX STORM

SDS-MAX STORM • SDS-MAX STORM

La nueva broca **STORM** con anclaje **SDS-MAX** proporciona nuevas ventajas en este tipo de herramienta. El novedoso sistema de la punta evita la fricción en mayor medida, lo que significa que aumenta la durabilidad y reduce el coste por agujero. Además, la extracción de viruta a través de sus 4 canales por las aberturas diseñadas en la punta, la convierte en la broca más rápida en esta gama.

*The new **STORM** drill bit with an **SDS-MAX** shank provides new advantages for this type of tool. The new cutting edge system largely reduces friction, thereby increasing durability and diminishing costs per hole. Furthermore, the extraction of chip swarf through the 4 flutes built into the nosepiece makes it the fastest drill in this range.*

*Le nouveau foret **STORM** à ancrage **SDS-MAX** offre de nouveaux avantages pour ce type d'outillage. Le modèle de pointe innovant évite dans une grande mesure la friction, ce qui signifie une augmentation de sa durabilité et une réduction du coût par trou. Par ailleurs, l'extraction des alésures à travers ses 4 canaux, par les ouvertures placées sur la pointe en fait le foret le plus rapide de cette gamme.*



- Diseño para una fricción baja y mayor velocidad de corte.
- Cabeza de 4 puntas de Carburo de máxima calidad para maximizar la velocidad de corte.

- *Designed to produce minimal friction and greater cutting speed.*
- *Best quality Carbure 4 cutter head design maximizing speed and minimizing vibration.*

- *Conçu pour obtenir une faible friction et une plus grande vitesse de coupe.*
- *Tête à 4 pointes en Carbure de la plus haute qualité afin de maximiser la vitesse de coupe et minimiser la vibration.*



- Apertura en la punta diseñada especialmente para evacuación de viruta por los 4 canales de extracción.

- *Opening in the nosepiece specially designed for the removal of chip swarf through 4 extraction flutes.*

- *Ouverture sur la pointe spécialement conçue pour l'évacuation des copeaux à travers ses 4 canaux d'extraction.*



- 4 canales de extracción para una perforación rápida y cómoda.

- *4 extraction flutes for a speedy and smooth drill.*

- *4 canaux d'extraction pour une perforation rapide et facile.*



- Núcleo central optimizado, mejora la transmisión de energía desde el mango hasta la punta.

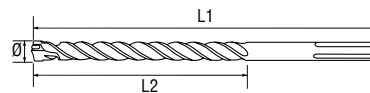
- *Optimised central core to improve the transmission of energy from the handle to the nosepiece.*

- *Noyau central optimisé, qui améliore la transmission d'énergie de la poignée à la pointe.*



Broca fabricada bajo los estándares de calidad PGM / Manufactured on PGM quality standards / Fabriqué sous les normes de qualité PGM

SDS-MAX STORM
SDS-MAX STORM • SDS-MAX STORM



Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
2 ARISTAS / 2 CUTTING EDGES					
12	340	200	1	11021212340	63,16
12	540	400	1	11021212540	80,08
14	340	200	1	11021214340	68,27
14	540	400	1	11021214540	82,23
15	340	200	1	11021215340	70,17
15	540	400	1	11021215540	83,92
4 ARISTAS / 4 CUTTING EDGES					
16	340	200	1	11021216340	72,25
16	540	400	1	11021216540	88,23
18	340	200	1	11021218340	74,46
18	540	400	1	11021218540	90,55
20	320	200	1	11021220320	83,67
20	520	400	1	11021220520	94,15
20	920	800	1	11021220920	154,60
22	320	200	1	11021222320	90,87
22	520	400	1	11021222520	97,55
22	920	800	1	11021222920	164,12
22	1320	1200	1	110212221320	266,97
24	320	200	1	11021224320	97,66
24	520	400	1	11021224520	109,06

Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
4 ARISTAS / 4 CUTTING EDGES					
25	320	200	1	11021225320	103,43
25	520	400	1	11021225520	109,99
25	920	800	1	11021225920	180,65
28	370	250	1	11021228370	119,16
28	570	450	1	11021228570	134,39
30	370	250	1	11021230370	121,20
30	570	450	1	11021230570	139,03
32	370	250	1	11021232370	130,67
32	570	450	1	11021232570	147,41
32	920	800	1	11021232920	211,62
32	1320	1200	1	110212321320	482,77
35	370	250	1	11021235370	142,51
35	570	450	1	11021235570	182,27
38	370	250	1	11021238370	176,88
38	570	450	1	11021238570	198,18
40	570	450	1	11021240570	247,79
40	920	800	1	11021240920	314,99
40	1320	1200	1	110212401320	617,98
45	570	450	1	11021245570	339,44
45	920	800	1	11021245920	452,59

NOTA: Para longitudes útiles de más de 400 mm UTILIZAR BROCA PREVIA de mismo diámetro, hasta 150 mm de profundidad. / For useful lengths of over 400 mm USE A PRE-DRILL BIT of the same diameter up to 150 mm in depth. / Pour des longueurs utiles de plus de 400 mm UTILISER LE FORET DE PRE-PERÇAGE de même diamètre, jusqu'à 150 mm de profondeur.

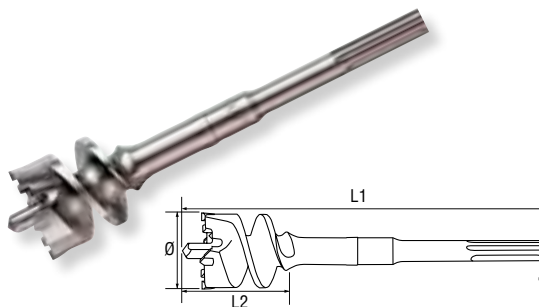
NOTA: Para longitudes útiles de más de 800 mm UTILIZAR BROCA PREVIA de mismo diámetro, hasta 400 mm de profundidad. / For useful lengths of over 800 mm USE A PRE-DRILL BIT of the same diameter up to 400 mm in depth. / Pour des longueurs utiles de plus de 800 mm UTILISER LE FORET DE PRE-PERÇAGE de même diamètre, jusqu'à 400 mm de profondeur.

BROCAS PARA MARTILLO

HAMMER DRILL BITS • FORETS MARTEAUX

BROCA ROMPEDORA SDS-MAX

SDS-MAX CORE CUTTER • FORET TRÉPAN SDS-MAX



Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
55,00	550	410	1	1R055550	447,84
55,00	990	850	1	1R055990	525,63
65,00	550	410	1	1R065550	497,47

Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
65,00	990	850	1	1R065990	575,70
80,00	550	410	1	1R080550	600,72
80,00	990	850	1	1R080990	697,72

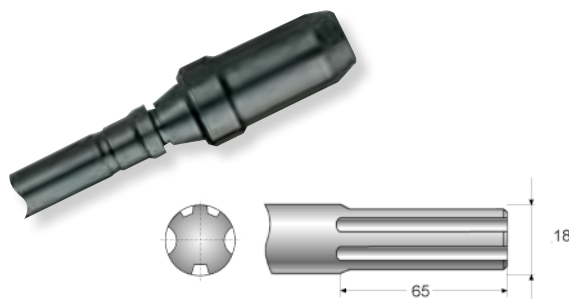
NOTA: Para otras medidas, consultar / Request for other sizes / Pour d'autres dimensions, nous consulter

CONVERSOR DE ANCLAJE SDS-MAX A SDS-PLUS

CONVERSION FROM SDS-MAX SHANK TO SDS-PLUS
CONVERTEUR DE SDS-MAX A SDS-PLUS



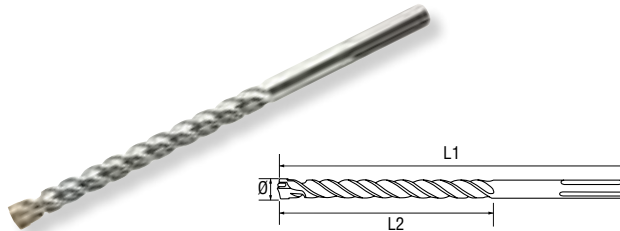
L1 (mm)	Uds. / Pcs.	Cod.	€/Unid.
225	1	1C02250	131,97



Para taladros con sistema SDS-MAX, HILTI Y-Groove y Licencia Bosch. / Drills with SDS-MAX, HILTI Y-Groove and Bosch License system. / Perceuse avec système SDS-MAX, HILTI Y-Groove et Bosch Licence.

BROCA SDS-TOP

SDS-TOP • SDS-TOP



Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
2 ARISTAS DE CORTE / 2 CUTTING EDGES					
6,00	200	100	1	1TP06200	39,00
6,00	300	200	1	1TP06300	43,06
8,00	200	100	1	1TP08200	44,16
8,00	300	200	1	1TP08300	45,58
10,00	200	100	1	1TP10200	47,63
10,00	300	200	1	1TP10300	49,02
10,00	500	400	1	1TP10500	76,06
12,00*	200	100	1	1TP12200	49,14
12,00	300	200	1	1TP12300	54,06
12,00	500	400	1	1TP12500	77,77
12,00	600	500	1	1TP12600	98,91
14,00	300	200	1	1TP14300	59,23
14,00	500	400	1	1TP14500	84,40
15,00*	500	400	1	1TP15500	85,97
16,00	300	200	1	1TP16300	69,02
16,00	500	400	1	1TP16500	90,57

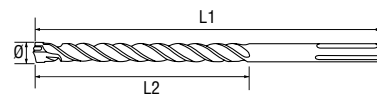
Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
4 ARISTAS DE CORTE / 4 CUTTING EDGES					
18,00	300	200	1	1TP18300	81,97
18,00	500	400	1	1TP18500	106,57
20,00	300	200	1	1TP20300	86,97
20,00	500	400	1	1TP20500	109,85
22,00	300	200	1	1TP22300	123,53
22,00	500	400	1	1TP22500	139,61
24,00	300	200	1	1TP24300	128,85
24,00	500	400	1	1TP24500	161,64
25,00*	300	200	1	1TP25300	132,39
25,00	500	400	1	1TP25500	166,00
28,00	300	200	1	1TP28300	148,29
28,00	500	400	1	1TP28500	181,98
30,00	350	250	1	1TP30350	157,81
30,00*	550	450	1	1TP30550	196,25
32,00*	350	250	1	1TP32350	163,79
32,00	550	450	1	1TP32550	212,15

*Hasta agotar existencias / Until end of stock / Jusqu'à épuisement des stocks

NOTA: Para longitudes útiles de más de 400 mm UTILIZAR BROCA PREVIA de mismo diámetro, hasta 150 mm de profundidad. / For useful lengths of over 400 mm USE A PRE-DRILL BIT of the same diameter up to 150 mm in depth. / Pour des longueurs utiles de plus de 400 mm UTILISER LE FORET DE PRE-PERÇAGE de même diamètre, jusqu'à 150 mm de profondeur.

NOTA: Para longitudes útiles de más de 800 mm UTILIZAR BROCA PREVIA de mismo diámetro, hasta 400 mm de profundidad. / For useful lengths of over 800 mm USE A PRE-DRILL BIT of the same diameter up to 400 mm in depth. / Pour des longueurs utiles de plus de 800 mm UTILISER LE FORET DE PRE-PERÇAGE de même diamètre, jusqu'à 400 mm de profondeur.

BROCA MANGO ESTRIADO
SPLINED SHANK • CANNELE



Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.	Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
12,00	340	200	1	1ES12340	97,83	24,00	920	780	1	1ES24920	230,04
14,00	340	200	1	1ES14340	119,99	25,00	340	200	1	1ES25340	121,15
16,00	340	200	1	1ES16340	108,65	25,00	540	400	1	1ES25540	157,49
16,00	540	400	1	1ES16540	117,10	26,00	540	400	1	1ES26540	157,49
18,00	340	200	1	1ES18340	117,30	26,00	920	780	1	1ES26920	306,75
18,00	540	400	1	1ES18540	120,17	28,00	540	400	1	1ES28540	157,49
18,00	920	780	1	1ES18920	183,48	28,00	920	780	1	1ES28920	306,75
20,00	340	200	1	1ES20340	111,52	30,00	540	400	1	1ES30540	172,67
20,00	540	400	1	1ES20540	127,30	32,00	540	400	1	1ES32540	188,78
20,00	920	780	1	1ES20920	183,48	32,00	920	780	1	1ES32920	306,75
22,00	340	200	1	1ES22340	114,40	35,00	540	400	1	1ES35540	196,76
22,00	540	400	1	1ES22540	132,31	36,00	540	400	1	1ES36540	220,36
22,00	920	780	1	1ES22920	200,97	36,00	920	780	1	1ES36920	400,88
24,00	340	200	1	1ES24340	117,30	42,00	920	780	1	1ES42920	476,17
24,00	540	400	1	1ES24540	132,31						

Hasta agotar existencias / Until end of stock / Jusqu'à épuisement des stocks

NOTA: Para longitudes útiles de más de 400 mm UTILIZAR BROCA PREVIA de mismo diámetro, hasta 150 mm de profundidad. / For useful lengths of over 400 mm USE A PRE-DRILL BIT of the same diameter up to 150 mm in depth. / Pour des longueurs utiles de plus de 400 mm UTILISER LE FORET DE PRE-PERÇAGE de même diamètre, jusqu'à 150 mm de profondeur.

CONSTRUCCIÓN
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WOOD • BOIS

METAL
METAL • METAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

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ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

BROCAS PARA ENCOFRAR
SHUTTERING DRILL BIT • FORET POUR COFFRAGE

BROCA PARA ENCOFRAR CILÍNDRICA
SHUTTERING STRAIGHT DRILL-BIT
FORET POUR COFFRAGE



Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
8,00	400	100	1	12011108400	14,36
8,00	600	100	1	12011108600	14,77
8,00	800	100	1	12011108800	16,41
10,00	400	100	1	12011110400	16,00
10,00	600	100	1	12011110600	16,75
10,00	800	100	1	12011110800	18,80
12,00	400	100	1	12011112400	19,14
12,00	600	100	1	12011112600	19,96
12,00	800	100	1	12011112800	22,01
14,00	400	100	1	12011114400	22,09
14,00	600	100	1	12011114600	22,77
14,00	800	100	1	12011114800	24,89
16,00	400	100	1	12011116400	24,14
16,00	600	100	1	12011116600	24,61
16,00	800	100	1	12011116800	26,94

Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
18,00	400	100	1	12011118400	31,86
18,00	600	100	1	12011118600	34,12
18,00	800	100	1	12011118800	37,74
20,00	400	100	1	12011120400	38,50
20,00	600	100	1	12011120600	40,13
20,00	800	100	1	12011120800	42,60
22,00	400	100	1	12011122400	45,87
22,00	600	100	1	12011122600	47,18
22,00	800	100	1	12011122800	49,57
24,00	400	100	1	12011124400	54,70
24,00	600	100	1	12011124600	58,59
24,00	800	100	1	12011124800	60,37
26,00	400	100	1	12011126400	65,17
28,00	400	100	1	12011128400	78,01
30,00	400	100	1	12011130400	91,41

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DISPLAYS
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BROCAS PARA ENCOFRAR

SHUTTERING DRILL BIT • FORET POUR COFFRAGE

BROCA PARA ENCOFRAR SDS-PLUS

SHUTTERING SDS-PLUS DRILL-BIT
FORET POUR COFFRAGE SDS-PLUS



DIN 7490



Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
10,00	400	100	1	12011210400	33,33
10,00	600	100	1	12011210600	34,01
12,00	400	100	1	12011212400	36,00
12,00	600	100	1	12011212600	36,95
12,00	800	100	1	12011212800	39,88
14,00	400	100	1	12011214400	29,81
14,00	600	100	1	12011214600	30,44
14,00	800	100	1	12011214800	34,51
16,00	400	100	1	12011216400	34,23
16,00	600	100	1	12011216600	34,51
16,00	800	100	1	12011216800	37,04
18,00	400	100	1	12011218400	51,35

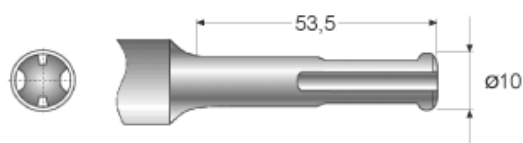
Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
18,00	600	100	1	12011218600	53,95
18,00	800	100	1	12011218800	58,28
20,00	400	100	1	12011220400	59,36
20,00	600	100	1	12011220600	61,01
20,00	800	100	1	12011220800	64,55
22,00	400	100	1	12011222400	68,74
22,00	600	100	1	12011222600	69,96
22,00	800	100	1	12011222800	72,26
24,00	400	100	1	12011224400	78,69
24,00	600	100	1	12011224600	84,09
24,00	800	100	1	12011224800	85,76

PUNTEROS Y CINCELES

CHISELS AND POINTERS • BURINS ET PICS

ANCLAJE SDS-PLUS

SDS-PLUS SHANK • QUEUE SDS-PLUS



	L1 (mm)	Ancho Wide	Uds. Pcs.	Cod.	€/Unid.
PUNTERO POINT CHISEL	250	-	1	01040101	11,22
ROTO-PERCUSSION ROTO-PERCUSSION	250	-	1	01040102	13,85
CINCEL FLAT CHISEL	250	20	1	01040103	11,22
CINCEL ANCHO SPADE CHISEL	250	40	1	01040104	18,94

	L1 (mm)	Ancho Wide	Uds. Pcs.	Cod.	€/Unid.
CINCEL AZULEJO TILE CHISEL	200	40	1	01040105	29,63
ACANALADOR HOLLOW CHISEL	240	22	1	01040106	23,26
ACANALADOR ALAS CHISEL WITH GLIDES	250	22	1	01040212	59,38

APLICACIONES / APPLICATIONS / APPLICATIONS

AEG	APH 14, PH 210, PHE 16, PHE 19, PHE 20, PHE 24, PHE 26, PN 3000 SuperX2, PN 3500X, PN 3000R2, PN 3000XN2, PN 3000SuperXN2, PN 3000X2
ATLAS COPCO	ATLAS COPCO: PPH 30X2E, PPH 26RA, PPH 26XE, PPH 24X2E, PPH 24E, PLH 32XE, PLH 30XE, PLH 30E, PH 3X, PHE 24RX/R, PHE 26R, PHE 26RA, PHE 3, PHE 30RX2
BLACK & DEKER	5009, 5013, 5015, 5016, 5053, 5054, 5056, 5057, KD 651HRE, KD 645HRX
BOSCH	11207, 11210, 11211, 11212, 11213, 11215, 11216, 11222, 11224, 11228, 11236, GBH 2-24DSE, GBH 2-24DSR, GBH 2-24DFR, GAH 500DSR, GBH 4DEF, GBH 4DSC, PBH 200RE
DEWALT	514K, 523K, 557K, 566K, 567K
ELU	MBH 24RLM, MBH 26RLM
FELISATTI	T 724PREC
HILTI	TE 6C, TE 15C, TE 24, TE 25, TE 104
HITACHI	DH 22VB, DH 22VD, DH 24PG, VR 16, BRT22
KANGO	200, 285, 327, 422, 426, 430 D
KRESS	PSX 550, PSE 500, PSE 600, PCX 750, HMX 24, 240 APBE Set
MAQUITA	HR 160, HR 1821, HR 2000, HR 2010, HR 2020, HR 2400, HR 2410, HR 2420, HR 2430, HR 2431, HR 2432, HR 2440, HR 2445, HR2450, HR2455, HR2510, HR2511, HR 3000C
METABO	6010, 6018, 6020, 6024, 6026, BH 6009S, BH E 205R, BH E 24SR, BH E 6011S-R+L, BH E 6024S-R+L, BH E 6028S-R+L, KH E 28, KH E 2, KH E 24, KH E 24contact, UH E 28multi, UH E 22multi, BH EA 14S-R+L
MILWAUKEE	5302, 5303, 5312, 5317, 5320, 5324, 5343, 5344, 5347, 5348, 5362, 5366, 5368, 5369
SPARKY	BPR241E
RIOBI	ED 160, ED211
itw SPIT	335

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METAL
METAL • MÉTAL

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MILLING • FRAISAGE

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THREADING • FILETAGE

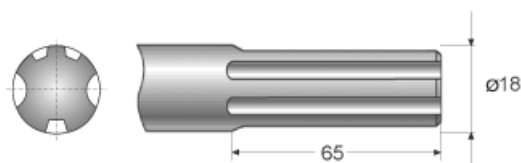
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DISPLAYS
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ANCLAJE SDS-MAX
SDS-MAX SHANK • QUEUE SDS-MAX



	L1 (mm)	Ancho Wide	Uds. Pcs.	Cod.	€/Unid.
PUNTERO POINT CHISEL					
	280	-	1	01040201	15,64
	400	-	1	01040202	17,34
	600	-	1	01040203	27,73
CINCEL FLAT CHISEL					
	280	24	1	01040204	15,64
	400	24	1	01040205	17,43
	600	24	1	01040206	30,70

	L1 (mm)	Ancho Wide	Uds. Pcs.	Cod.	€/Unid.
CINCEL ANCHO SPADE CHISEL					
	300	80	1	01040213	40,81
	400	50	1	01040208	39,53
CINCEL AZULEJO TILE CHISEL					
	300	50	1	01040251	43,39
ACANALADOR HOLLOW CHISEL					
	300	26	1	01040210	38,54
ACANALADOR ALAS CHISEL WITH GLIDES					
	380	35	1	01040211	112,55

APLICACIONES / APPLICATIONS / APPLICATIONS

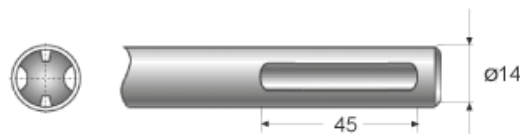
AEG	PM 10, PN 6000S, PN 4000E
ATLAS COPCO	PH 5S, PHE 5S, PB 6S, PBE, 6S, PHE 6S, PHE 7F, PHE 7S, PB "IOS, PB 14S, PHE 40S, PHE 45S, PHE 50S
BLACK & DEKER	5097, 5099
BOSCH	11214 EVS, 11216, 11223, 11227, 11230, 11231, 11235, 11309, 11311, 11312, 11313, 11316, 11245, GBH 5DEC, GBH 7DE, GBH 7DCE, GBH 8DCE, GBH 10DC, GBH 11DE, GSH 5CE, GSH 10C, GSH 11E, GBH 5DCE, GBH 5/40DE, GBH 7/45DE, GBH 5/40DCE, GBH 8/65DCE
DEWALT	DW 540K, DW 541K, DW 543K, DW 545K, DW 570K, D 25900K
ELU	BH 40K, BH 40EK, BH 45EK, SH 50EK
HILTI	TE 52, TE 54, TE 55, TE 72, TE 74, TE 75, TE 76, TE 76-ATC, TE 92, TE 504, TE 505, TE 705, TE 704
HITACHI	DH 40MA, DH 40MB, DH 50MB, DH 65MB, H 45MA, H 60MA, H 60MB
KANGO	710 MV, 760 MV, 810 MV, 845 MV, 850 MV, 900 MV, 1400 MV
KRESS	1150PSKmax
MAQUITA	HR 500C, HM 1100C, HM 1100S, HM 1200C, HM 1202C, HR4000C, HR4001C, HR4011C, HR4500C, HR5001C
METABO	6045, Bh 6045S
MILWAUKEE	5308, 5313, 5315-21, 5315-22, PH 45SQ
SPARKY	BP 400E
RIOBI	ER 382K, DE 382NP
itwSPIT	351, 355, 385, 371, 455
WACKER	EHB 7/230, EH 9BLM, EHB 11BLM



PUNTEROS Y CINCELES



CHISELS AND POINTERS • BURINS ET PICS

ANCLAJE SDS-TOP

SDS-TOP SHANK • QUEUE SDS-TOP



	L1 (mm)	Ancho Wide	Uds. Pcs.	Cod.	€/Unid.
PUNTERO POINT CHISEL					
	270	-	1	1040217	23,46
CINCEL FLAT CHISEL					
	270	20	1	1040230	24,43

	L1 (mm)	Ancho Wide	Uds. Pcs.	Cod.	€/Unid.
CINCEL ANCHO SPADE CHISEL					
	250	40	1	1040244	38,89
ACANALADOR HOLLOW CHISEL					
	250*	22	1	1040250	49,56

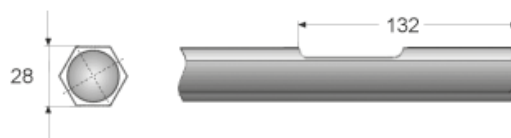
*Hasta agotar existencias / Until end of stock / Jusqu'à épuisement des stocks

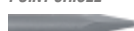

APLICACIONES / APPLICATIONS / APPLICATIONS


AEG	PN 11
BOSCH	GBH 4Top
HILTI	TE 35
MAQUITA	HR 3550C

ANCLAJE SW-28

SW-28 SHANK • QUEUE SW-28



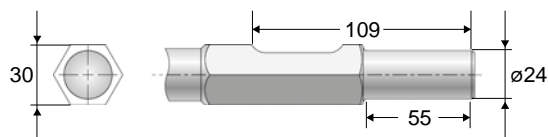
	L1 (mm)	Ancho Wide	Uds. Pcs.	Cod.	€/Unid.
PUNTERO POINT CHISEL					
	400	-	1	01040224	53,67
CINCEL FLAT CHISEL					
	400	35	1	01040236	54,70

	L1 (mm)	Ancho Wide	Uds. Pcs.	Cod.	€/Unid.
CINCEL ANCHO SPADE CHISEL					
	400	80	1	01040245	116,06

APLICACIONES / APPLICATIONS / APPLICATIONS

ATLAS COPCO	PB 32B
BLACK & DEKER	5027
BOSCH	11304, 11308, 12308, 12314, GSH 27, USH 27, HSH 28
HITACHI	H 65, H 85, H 90SB
KANGO	2500
MAQUITA	HM 1303B, HM 1500B, HM 1800
MILWAUKEE	5338

ANCLAJE SW-30
SW-30 SHANK • QUEUE SW-30



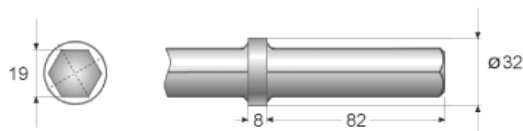
	L1 (mm)	Ancho Wide	Uds. Pcs.	Cod.	€/Unid.
PUNTERO POINT CHISEL					
	400	-	1	01040216	59,20
CINCEL FLAT CHISEL					
	400	32	1	01040243	59,48

	L1 (mm)	Ancho Wide	Uds. Pcs.	Cod.	€/Unid.
CINCEL ANCHO SPADE CHISEL					
	400	75	1	01040249	73,36

APLICACIONES / APPLICATIONS / APPLICATIONS

HITACHI	H 65SA, PH 65A, H 65SB, H 70SA, H 655B
MAQUITA	8900N, 8900S, HK 1300, HM 0810T, HM 1300, HM 1303, HM 1304, HM 1400, HM 1500

ANCLAJE SW-19 WACKER
SW-19 WACKER SHANK • QUEUE SW-19 WACKER



	L1 (mm)	Ancho Wide	Uds. Pcs.	Cod.	€/Unid.
PUNTERO POINT CHISEL					
	480	-	1	01040227	37,96
CINCEL FLAT CHISEL					
	480	35	1	01040238	38,10

	L1 (mm)	Ancho Wide	Uds. Pcs.	Cod.	€/Unid.
CINCEL ANCHO SPADE CHISEL					
	300	80	1	01040247	52,95

Hasta agotar existencias / Until end of stock / Jusqu'à épuisement des stocks

APLICACIONES / APPLICATIONS / APPLICATIONS

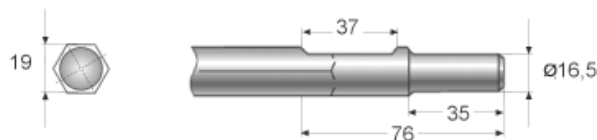
IMPEX	DS 120
METABO	MHE 10S
OUTIFIX	OX1000
ROCOSA	80-100
itwSPIT	CH 120, DS 120
WACKER	WACKER: BH 23, BHB 14, EH 22/380, EH 23/220, EH 24/042, EHB 7/230EB8, EHB 10/220, EH 8/220, EHL 8Y, EHU 8Y/220, EHUB 10Y/220, LHB5, SH 60K


PUNTEROS Y CINCELES


CHISELS AND POINTERS • BURINS ET PICS

ANCLAJE SW-19 BOSCH 16,5

SW-19 SHANK BOSCH 16,5
QUEUE SW-19 BOSCH 16,5



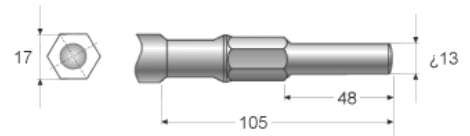
	L1 (mm)	Ancho Wide	Uds. Pcs.	Cod.	€/Unid.
PUNTERO POINT CHISEL					
	300	-	1	01040221	19,53
	400	-	1	1040223	25,06



	L1 (mm)	Ancho Wide	Uds. Pcs.	Cod.	€/Unid.
CINCEL FLAT CHISEL					
	300	22	1	01040234	19,50
	400	22	1	01040235	25,06

APLICACIONES / APPLICATIONS / APPLICATIONS

AEG	PH 26, PHD 26, PH 38, PHD 38, PHE 38, PH 240, PH 240D, PH 350, PH 350D, PDH 350D
ATLAS COPCO	PH 5H, PH 11H, PB 10H, PHE 5H
BLACK & DEKER	5041, 5042, 5043, 5044, 5045, 5059, 5093, 5095, 5096, 5098
BOSCH	11202, 11203, 11204, 11205, 11206, 11207, 11209, 11212, 11214, 11219, 11220, 11232, 11233, 11244E, 11306, 11307, 11310, 11314, GBH 7/45D, GBH 7/75DE, UBH 6/35, UBH 6/35D, UBH 10/5, UBH 12/50, USH 6
DEWALT	530K, 531K, 532K, 533K, 551K, 558K
ELU	BH 41K, SBH 41K, BH 41EK, BH 46EK
HITACHI	DH 38YA, DH 38YE, DH 38YF, DH 40FA, DH 40FB, DH 50SB, DS 50SB, DH 45SB
KANGO	430S, 501S, 637S, 750S, 950KS, 950S, 950XS, 975S
MAQUITA	HM 0810B, HM 1140C, HR 3520B, HR 3520EB, HR 3850B, HR 3851, HR 4040C, HR 5000
METABO	11285, 11295, 11305, 11315, BHe 6030S, RH 66, RH 99, RH 99X, 1129, 1130, 6030, 6040, 6046
MILWAUKEE	5309, 5312, 5316, 5317, 5334, 5341, 5343, 5344, 5347, 5348, 5352, 5353, 5363, 5367
PEUGEOT	PM 26, PM 38
RIOBI	ED 350K, ED 382, ED 382P, ER 382, ER 382K
itw SPIT	350
WACKER	EBH 7S

ANCLAJE HITACHI + SW 17
HITACHI SHANK + SW 17
QUEUE HITACHI + SW 17



	L1 (mm)	Ancho Wide	Uds. Pcs.	Cod.	€/Unid.		L1 (mm)	Ancho Wide	Uds. Pcs.	Cod.	€/Unid.
PUNTERO POINT CHISEL						CINCEL FLAT CHISEL					
	280	-	1	01040218	19,71		280	22	1	01040231	19,71
	360	-	1	01040219	22,31		360	22	1	01040232	22,31
	450	-	1	01040220	27,65		450	22	1	01040233	27,65

Hasta agotar existencias / Until end of stock / Jusqu'à épuisement des stocks

APLICACIONES / APPLICATIONS / APPLICATIONS

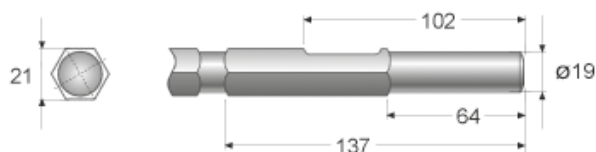
HITACHI	HITACHI: DH 28Y, DH 38YB, DH 38YB1, DH 42, H41SA, H 45SA, PH 40F, PHU 45, PR 25B, PR 38E, VR 38, VRY 38YB
MAQUITA	8035 NB, HM 0810, HM 0810T, HM 1200, HR 3500, HR 3510, HR 3520, HR 3850
RIOBI	CH 450PK, CH 460PK, CH 500K, CH 500P, ER 382K


PUNTEROS Y CINCELES


CHISELS AND POINTERS • BURINS ET PICS


ANCLAJE KANGO

KANGO SHANK • QUEUE KANGO



	L1 (mm)	Ancho Wide	Uds. Pcs.	Cod.	€/Unid.
PUNTERO POINT CHISEL					
	300	-	1	01040228	21,26
	380	-	1	01040229	26,69
	460	-		01040215	30,06

	L1 (mm)	Ancho Wide	Uds. Pcs.	Cod.	€/Unid.
CINCEL FLAT CHISEL					
	300	25	1	01040239	21,26
	380	25	1	01040240	26,69
	460	25	1	01040241	30,05

	L1 (mm)	Ancho Wide	Uds. Pcs.	Cod.	€/Unid.
CINCEL ANCHO SPADE CHISEL					
	380	50	1	01040248	48,46
	380	80	1	01040207	50,06

APLICACIONES / APPLICATIONS / APPLICATIONS

ATLAS COPCO	PB 6C, PB 10, PB 10C, PB 14C, PH 11C
CASALS	ATILA
HITACHI	DH 50SA, DH 50SA1, H 55SA, H 55SC
IMCO	1150, 150R
KANGO	900, 900X, 928, 950, 950K, 950X, 1400
MAQUITA	HM 1200K, HR 3850K, HR 5000K
RIOBI	CH 425, CH 485K

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES


HEXAGONAL
HEXAGONAL • HEXAGONAL



METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

ANCLAJE SW-19 BOSCH USH 10
SW-19 BOSCH USH 10 SHANK
QUEUE SW-19 BOSCH USH 10



	L1 (mm)	Ancho Wide	Uds. Pcs.	Cod.	€/Unid.
PUNTERO POINT CHISEL					
	300	-	1	01040225	18,66
	400	-	1	01040226	24,35

	L1 (mm)	Ancho Wide	Uds. Pcs.	Cod.	€/Unid.
CINCEL FLAT CHISEL					
	300	25	1	01040237	18,66
	400	25	1	01040214	24,35
CINCEL ANCHO SPADE CHISEL					
	400	50	1	01040246	37,66

APLICACIONES / APPLICATIONS / APPLICATIONS

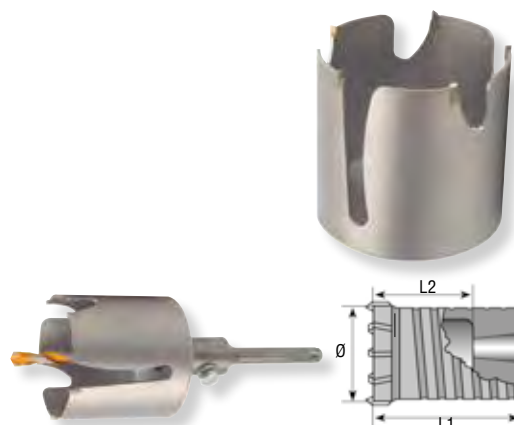
BOSCH	11302, 11305, 12312, USH 10
CASALS	TORNADO
DEWALT	5021K, DW 558K
ELU	SH 60K
HITACHI	H 55SC
KANGO	638S, 900B, 900KS, 900S, 900XS, 1400B
MAQUITA	HM 1200B, HM 1211B
MILWAUKEE	5535
itw SPIT	400

CORONAS Y ADAPTADORES

CORE BITS AND ACCESORIES • TRÉPANS ET ACCESOIRES

CORONA MULTIFUNCIÓN PARA TRABAJOS LIGEROS

UNIVERSAL HOLE SAW
TRÉPAN MULTIFUNCTION



Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Z	Cod.	€/Unid.
Sanitarios y calefacción / Sanitary and heating pipes / Sanitaires et chauffage						
25,00	73	60	1	3	1CT025	55,43
30,00	73	60	1	3	1CT030	57,04
35,00	73	60	1	3	1CT035	60,71
Tubería y desagüe / Pipes and wastepipes / Tuyauteries et déversoirs						
40,00	73	60	1	3	1CT040	61,31
Tubería de agua, aislamientos y desagües / Water pipes, insulation and wastepipes / Tuyauteries, isolations et déversoirs						
45,00	73	60	1	3	1CT045	64,38
50,00	73	60	1	3	1CT050	66,37
Focos empotrados / Recessed lights / Foyers encastrés						
55,00	73	60	1	3	1CT055	76,65
58,00	73	60	1	5	1CT058	87,06
60,00	73	60	1	5	1CT060	87,12
63,00	73	60	1	5	1CT063	87,19
Caja de empalmes / Junction box / Boites de jonctions						
65,00	73	60	1	5	1CT065	87,86
68,00	73	60	1	5	1CT068	92,39
74,00	73	60	1	5	1CT074	105,47
Cajas de distribución / Switchboxes / Switchbox						
80,00	73	60	1	5	1CT080	109,41
90,00	73	60	1	5	1CT090	149,76
Conductos de aire / Vent pipes / Conduit d'aire						
105,00	73	60	1	6	1CT105	165,58

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

ADAPTADOR MANGO SDS-PLUS PARA CORONA MULTIFUNCIÓN

SDS-PLUS SHANK FOR UNIVERSAL HOLE SAW • QUEUE SDS-PLUS POUR TRÉPAN MULTIFUNCTION



M16

L1 (mm)	Uds. / Pcs.	Cod.	€/Unid.
100	1	1AS100	31,57
200	1	1AS200	48,56
350	1	1AS350	65,22



NOTA: No se recomienda el uso del adaptador de 350 mm con coronas mayores de 45 mm de diámetro. / Not recommended adapter of 350 mm for more than 45 mm. diameter hole saws. / Adaptateur 350 mm non recommandé avec trépan supérieures à 45 mm.

NOTA: Para realizar un trabajo de diámetro mayor a 45 mm se recomienda el uso del sistema SDS-MAX. / For diameters bigger than 45 mm, SDS-MAX system recommended / Pour des travaux supérieures à 45 mm, système recommandé SDS-MAX.

ADAPTADOR MANGO HEXAGONAL PARA CORONA MULTIFUNCIÓN

HEXAGONAL SHANK FOR UNIVERSAL HOLE SAW • QUEUE HEXAGONALE POUR TRÉPAN MULTIFUNCTION



M16

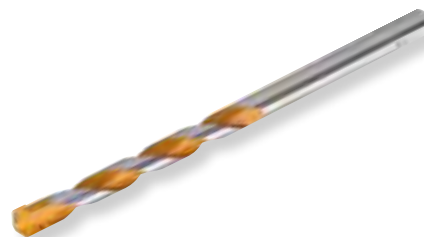
L1 (mm)	Ø (mm)	Uds. / Pcs.	Cod.	€/Unid.
80	11	1	1AH080	27,82
200	11	1	1AH200	34,83
350	11	1	1AH350	47,18



BROCA DE CENTRAR PARA CORONA MULTIFUNCIÓN

CENTRE DRILL BIT FOR UNIVERSAL HOLE SAW
FORET DE CENTRAGE POUR TRÉPAN MULTIFUNCTION

L1 (mm)	Uds. / Pcs.	Cod.	€/Unid.
8 x 120	1	1AP08120	10,92

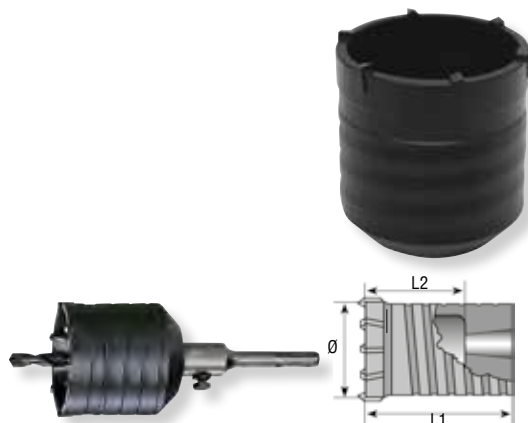


CORONAS Y ADAPTADORES

CORE BITS AND ACCESORIES • TRÉPANS ET ACCESOIRES

CORONA SISTEMA M16 TRABAJOS MEDIOS

HOLLOW CORE M16 ASSEMBLY • TRÉPAN BÉTON M16



Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Z	Cod.	€/Unid.
25,00	80	60	1	5	1M16025	58,80
30,00	80	60	1	6	1M16030	61,88
35,00	80	60	1	6	1M16035	67,33
40,00	90	70	1	6	1M16040	72,39
45,00	90	70	1	6	1M16045	78,81
50,00	90	70	1	6	1M16050	80,38
55,00	72	52	1	6	1M16055	81,49
60,00	72	52	1	6	1M16060	83,08
65,00	72	50	1	6	1M16065	84,25
68,00	72	50	1	6	1M16068	88,14
80,00	82	60	1	6	1M16080	98,76
90,00	82	60	1	8	1M16090	137,20
100,00	82	60	1	8	1M16100	175,99

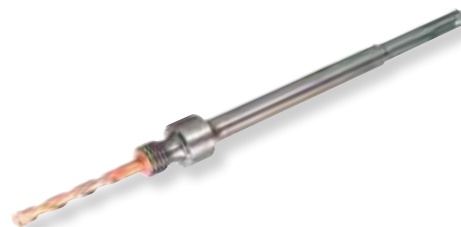
ADAPTADOR SDS-PLUS CON BROCA CENTRADORA

SDS-PLUS ADAPTER WITH CENTER DRILL

ADAPTATEUR AVEC MÊCHE DE CENTRAGE



L1 (mm)	Uds. / Pcs.	Cod.	€/Unid.
178	1	1AC178	49,81
268	1	1AC268	67,48
418	1	1AC418	96,33



NOTA: No se recomienda el uso del adaptador de 418 mm con coronas mayores de 45 mm de diámetro. / Not recommended adapter of 418 mm for more than 45 mm. diameter hole saws. / Adaptateur 418 mm non recommandé avec trépan supérieures à 45 mm.

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

RECOMENDACIONES DE USO PARA PROLONGADORES SDS-PLUS Y HEXAGONALES PARA CORONAS M16

USAGE RECOMMENDATIONS FOR SDS-PLUS EXTENSIONS AND HEX SOCKETS FOR M16 DRILL BITS • RECOMMANDATIONS D'UTILISATION POUR RALLONGES SDS-PLUS ET HEXAGONALES POUR COURONNES M16






PROFUNDIDAD DEPTH PROFONDEUR		ADAPTADOR RECOMENDADO RECOMENDED SHANK ADAPTER ADAPTATEUR RECOMMANDÉ	
< 100 mm	1AC178	SDS-PLUS CON BROCA CENTRADORA L= 178 mm (Pág. 63) SDS PLUS SHANK ADAPTER WITH CENTER DRILL L= 178 mm (Pag. 63) ADAPTATEUR QUEUE SDS-PLUS AVEC MÉCHE DE CENTRAGE L= 178 mm (Pág. 63)	✓
	1AS100	SDS-PLUS L= 100 mm (Pág. 66) SDS-PLUS SHANK ADAPTER L= 100 mm (Pag. 66) QUEUE SDS-PLUS L= 100 mm (Pág. 66)	✓
	1AH080	HEXAGONAL L=80 mm (Pág. 66) HEXAGONAL SHANK ADAPTER L=80 mm (Pag. 66) QUEUE HEXAGONAL L=80 mm (Pág. 66)	✓
100-200 mm	1AC268	SDS-PLUS CON BROCA CENTRADORA L= 268 mm (Pág. 63) SDS PLUS SHANK ADAPTER WITH CENTER DRILL L= 268 mm (Pag. 63) ADAPTATEUR QUEUE SDS-PLUS AVEC MÉCHE DE CENTRAGE L= 268 mm (Pág. 63)	POSSIBLE POSSIBLE POSSIBLE
	1AS200	SDS-PLUS L= 200 mm (Pág. 66) SDS-PLUS SHANK ADAPTER L= 200 mm (Pag. 66) QUEUE SDS-PLUS L= 200 mm (Pág. 66)	POSSIBLE POSSIBLE POSSIBLE
	1AH200	HEXAGONAL L=200 mm (Pág. 66) HEXAGONAL SHANK ADAPTER L=200 mm (Pag. 66) QUEUE HEXAGONAL L=200 mm (Pág. 66)	POSSIBLE POSSIBLE POSSIBLE
> 200 mm	1AC268	SDS-PLUS CON BROCA CENTRADORA L= 268 mm (Pág. 63) SDS PLUS SHANK ADAPTER WITH CENTER DRILL L= 268 mm (Pag. 63) ADAPTATEUR QUEUE SDS-PLUS AVEC MÉCHE DE CENTRAGE L= 178 mm (Pág. 63)	✓
	1AS200	SDS-PLUS L= 200 mm (Pág. 66) SDS-PLUS SHANK ADAPTER L= 200 mm (Pag. 66) QUEUE SDS-PLUS L= 200 mm (Pág. 66)	✓
	1AH200	HEXAGONAL L=200 mm (Pág. 66) HEXAGONAL SHANK ADAPTER L=200 mm (Pag. 66) QUEUE HEXAGONAL L=200 mm (Pág. 66)	✓

CORONAS Y ADAPTADORES

CORE BITS AND ACCESORIES • TRÉPANS ET ACCESOIRES

RECOMENDACIONES DE USO PARA PROLONGADORES SDS-PLUS Y HEXAGONALES PARA CORONAS M16

USAGE RECOMMENDATIONS FOR SDS-PLUS EXTENSIONS AND HEX SOCKETS FOR M16 DRILL BITS • RECOMMANDATIONS D'UTILISATION POUR RALLONGES SDS-PLUS ET HEXAGONALES POUR COURONNES M16

PROFUNDIDAD DEPTH PROFONDEUR		ADAPTADOR RECOMENDADO RECOMENDED SHANK ADAPTER ADAPTATEUR RECOMMANDÉ	
> 200 mm	1AC418	SDS-PLUS CON BROCA CENTRADORA L= 418 mm (Pág. 63) SDS PLUS SHANK ADAPTER WITH CENTER DRILL L= 418 mm (Pag. 63) ADAPTATEUR QUEUE SDS-PLUS AVEC MÊCHE DE CENTRAGE L= 418 mm (Pág. 63)	
	1AS350	SDS-PLUS L= 350 mm (Pág. 66) SDS-PLUS SHNAK ADAPTER L= 350 mm (Pag. 66) QUEUE SDS-PLUS L= 350 mm (Pág. 66)	
	1AH350	HEXAGONAL L=350 mm (Pág. 66) HEXAGONAL SHANK ADAPTER L=350 mm (Pag. 66) QUEUE HEXAGONAL L=350 mm (Pág. 66)	



Siempre que necesitemos taladrar con alargadores de más de 200 mm de largo, deberemos utilizar un taladrado previo con los adaptadores de menor longitud, a fin de evitar roturas derivadas de las tensiones que se producen en el mismo. De esta forma se aumenta la vida útil tanto del alargador como de la corona. No seguir estas recomendaciones se considerará como utilización inadecuada del producto, perdiendo la cobertura de la garantía.

Whenever you need to drill with extensions more than 200 mm in length, you must pre-drill with adapters of lesser length in order to avoid breakage caused by the stresses that such drilling will cause. This increases the service life of both the extension and the drill bit. Failure to follow these recommendations will be considered improper use of the product, invalidating the warranty coverage.

Lorsque vous devez percer avec des rallonges de plus de 200 mm de long, il faut utiliser une perceuse au préalable avec les adaptateurs de moindre longueur afin d'éviter des cassures dérivées des tensions. Ainsi, il est possible d'augmenter la vie utile aussi bien de la rallonge que de la couronne. Ne pas suivre ces recommandations sera considéré comme une utilisation on adaptée du produit, ce dernier perdra donc la couverture de la garantie.



ADAPTADOR SDS-PLUS PARA CORONA M16

SDS-PLUS SHANK ADAPTER FOR M16 HOLE SAW • QUEUE SDS-PLUS POUR TRÉPAN M16



L1 (mm)	Uds. / Pcs.	Cod.	€/Unid.
100	1	1AS100	31,57
200	1	1AS200	48,56
350	1	1AS350	65,22



NOTA: No se recomienda el uso del adaptador de 350 mm con coronas mayores de 45 mm de diámetro. / Not recommended adapter of 350 mm for more than 45 mm diameter hole saws. / Adaptateur 350 mm non recommandé avec trépan supérieures à 45 mm.

NOTA: Para realizar un trabajo de diámetro mayor a 45 mm se recomienda el uso del sistema SDS-MAX. / For diameters bigger than 45 mm, SDS-MAX system recommended / Pour des travaux supérieures à 45 mm, système recommandé SDS-MAX.

ADAPTADOR MANGO HEXAGONAL PARA CORONA M16

HEXAGONAL SHANK ADAPTER FOR M16 HOLE SAW • QUEUE HEXAGONALE POUR TRÉPAN M16



L1 (mm)	∅ (mm)	Uds. / Pcs.	Cod.	€/Unid.
80	11	1	1AH080	27,82
200	11	1	1AH200	34,83
350	11	1	1AH350	47,18



BROCA DE CENTRAR PARA CORONA M16

CENTRE DRILL BIT FOR M16 HOLE SAW • FORET DE CENTRAGE POUR TRÉPAN M16

L1 (mm)	Uds. / Pcs.	Cod.	€/Unid.
8x120	1	1AP09120	6,88



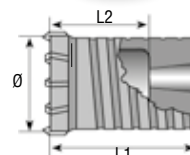
CORONAS Y ADAPTADORES

CORE BITS AND ACCESORIES • TRÉPANS ET ACCESOIRES

CORONA SISTEMA 1:8 PARA TRABAJOS INTENSIVOS

1:8 SYSTEM INTENSIVE USE HOLE SAW

TRÉPAN SYSTÈME 1:8 POUR DES TRAVAUX INTENSIFS



Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Z	Cod.	€/Unid.
35,00	100	75	1	6	1CC035	118,85
40,00	100	75	1	6	1CC040	121,50
45,00	100	75	1	6	1CC045	128,04
50,00	100	75	1	6	1CC050	132,43
60,00	100	75	1	6	1CC060	165,07
66,00	100	75	1	6	1CC066	165,88
80,00	100	75	1	8	1CC080	188,89
90,00	100	75	1	8	1CC090	219,98
100,00	100	75	1	8	1CC100	253,86



Adaptador
Adapter
Adaptateur



Cuña
Wedge
Cale

Broca Centradora
Center Drill
Foret de Centrage

Corona
Hole Saw Core
Trépan

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS









ADAPTADOR SISTEMA 1:8 PARA TRABAJOS INTENSIVOS

1:8 SYSTEM ADAPTER • ADAPTATEURS SYSTÈME 1:8



Entrada cónica 1:20 / Tapper insert 1:20 / Entrée conique 1:20

USO NORMAL / NORMAL USING
UTILISATION HABITUELLE

	Anclaje Shank	L1 (mm)	Uds. Pcs.	Cod.	€/Unid.
Adaptador / Adapter / Adaptateur   	SDS-MAX	250	1	1AB3210	79,39
 	ESTRIADO	250	1	1AB4210	82,76
Broca Centradora / Center Drill <i>Foret de Centrage</i>  	-	12 x 135	1	1AB6135	14,50
Cuña / Wedge / Cale 	-	-	1	1ABCU01	18,27

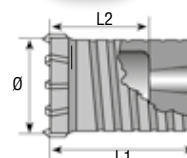
Hasta agotar existencias / Until end of stock / Jusqu'à épuisement des stocks

CORONAS Y ADAPTADORES

CORE BITS AND ACCESORIES • TRÉPANS ET ACCESOIRES

CORONA SISTEMA RL PARA INSTALACIÓN DE AIRE ACONDICIONADO

SPECIAL RL SYSTEME FOR AIR CONDITIONING INSTALLATION
SYSTÈME SPÉCIAL RL POUR L'INSTALLATION DE CLIMATISATION



Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Z	Cod.	€/Unid.
50,00	105	80	1	8	RL0050	101,21
55,00	105	80	1	8	RL0055	107,16
60,00	105	80	1	12	RL0060	113,12
65,00	105	80	1	12	RL0065	119,06

Hasta agotar existencias / Until end of stock / Jusqu'à épuisement des stocks

ADAPTADOR SDS-PLUS

SDS-PLUS ADAPTER • ADAPTATEUR SDS-PLUS



L1 (mm)	Uds. / Pcs.	Cod.	€/Unid.
105	1	RL2105	35,72
300	1	RL2300	69,06



Hasta agotar existencias / Until end of stock / Jusqu'à épuisement des stocks

PUNZÓN GUÍA

PUNCH GUIDE • POINÇON GUIDE

Uds. / Pcs.	Cod.	€/Unid.
1	RL3003	16,96



Hasta agotar existencias / Until end of stock / Jusqu'à épuisement des stocks

MODO DE EMPLEO USING GUIDE • UTILISATION



- Introducir el adaptador en la corona.
- Insert the adapter on the hole saw.
- Introduire l'adaptateur dans le trépan.
- Con una presión suave, introducir el punzón en el adaptador.
- Fix the punch guide softly on the adapter.
- Fixez le poinçon guide dans l'adaptateur doucement.
- Corona lista para realizar el trabajo.
- Hole saw ready to work.
- Trépan préparé pour réaliser le travail.
- Después de taladrar 5 mm, sacar el punzón y continuar el trabajo.
- After drilling 5 mm, pull off the punch guide and continue working.
- Après percer 5 mm, enlever le poinçon et continuer le travail.

CORONA UNIVERSAL
UNIVERSAL HOLE SAW CORE • TRÉPAN UNIVERSEL



Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
33,00	65	55	1	1CU033	14,31
53,00	65	55	1	1CU053	15,30
67,00	65	55	1	1CU067	17,15
73,00	65	55	1	1CU073	20,41
83,00	65	55	1	1CU083	24,54

ACCESORIOS
ACCESSORIES • ACCESOIRES

L1 (mm)	Uds. / Pcs.	Cod.	€/Unid.
Plato de Sujeción / Locating Plate / Base Pour Fixer Le Trépan			
33-83	1	1AP10	15,87
Broca Centradora / Center Drill / Foret Centrage			
9,00	1	1AP09	7,26



Revoluciones Máximas Recomendadas: 1.500 R.P.M. / Maximum Recommended Speed: 1.500 R.P.M. / Maximum Vitesse Recommandée: 1.500 R.P.M.

NOTA: Los accesorios se venden por separado / Los accesorios se venden por separado / Los accesorios se venden por separado

CORONAS Y ADAPTADORES

CORE BITS AND ACCESORIES • TRÉPANS ET ACCESOIRES

SISTEMA S94 S94 SYSTEM • SYSTÈME S94

Para taladrados en profundidades de hasta 2 metros / Drilling depth up to 2 metres. / Pour perçages jusqu'à 2 mètres de profondeur
 Rango de diámetros desde 35 mm a 150 mm / Range of diameters from 35 mm. to 150 mm. / Niveau de diamètres entre 35 mm et 150 mm



ADAPTADORES SISTEMA S94
 S94 SYSTEM ADAPTERS
 ADAPTATEURS SYSTÈME S94

CORONA
 HOLE SAW
 TRÉPAN

BROCA DE CENTRAR
 CENTRE DRILL BIT
 FORET DE CENTRAGE



ADAPTADORES SISTEMA S94
 S94 SYSTEM ADAPTERS
 ADAPTATEURS SYSTÈME S94

PROLONGADORES
 EXTENSION
 PROLONGATEURS

HÉLICES EXTRACTORA S94
 S94 SCREW EXTRACTORS
 HÉLICE D'EXTRACTION

BROCA TIPO P
 P TYPE DRILL BIT
 FORET TYPE P

BROCA DE CENTRAR
 CENTRE DRILL BIT
 FORET DE CENTRAGE



ADAPTADORES SISTEMA S94
 S94 SYSTEM ADAPTERS
 ADAPTATEURS SYSTÈME S94

PROLONGADORES
 EXTENSION
 PROLONGATEURS

HÉLICES EXTRACTORA S94
 S94 SCREW EXTRACTORS
 HÉLICE D'EXTRACTION

PROLONGADORES
 EXTENSION
 PROLONGATEURS



HÉLICES EXTRACTORA S94
 S94 SCREW EXTRACTORS
 HÉLICE D'EXTRACTION

BROCA TIPO S
 S TYPE DRILL BIT
 FORET TYPE S

BROCA DE CENTRAR
 CENTRE DRILL BIT
 FORET DE CENTRAGE

CONSTRUCCIÓN
 CONSTRUCTION • CONSTRUCTION

MADERA
 WOOD • BOIS

METAL
 METAL • MÉTAL

FRESADO
 MILLING • FRAISAGE

ROSCADO
 THREADING • FILETAGE

ACCESORIOS
 ACCESSORIES • ACCESSOIRES

HEXAGONAL
 HEXAGONAL • HEXAGONAL

METROLOGÍA
 METROLOGY • MÉTROLOGIE

DISPLAYS
 DISPLAYS • DISPLAYS

CORONA HOLE SAW • TRÉPAN



Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
40,00	100	70	1	1C1040	147,24
50,00	100	70	1	1C1050	164,18
60,00	100	70	1	1C1060	190,04
65,00	100	70	1	1C1065	197,44
80,00	100	70	1	1C1080	231,17

Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
90,00	100	70	1	1C1090	266,53
100,00	100	70	1	1C1100	308,97
110,00	100	70	1	1C1110	327,84
125,00	100	70	1	1C1125	460,59

BROCA TIPO S S TYPE DRILL BIT • FORET TYPE S



Ø (mm)	Z	Uds. / Pcs.	Cod.	€/Unid.
35,00	3	1	1S94S035	231,26
42,00	3	1	1S94S042	280,05
45,00	3	1	1S94S045	308,11
52,00	3	1	1S94S052	350,19
55,00	3	1	1S94S055	351,81
60,00	4	1	1S94S060	406,49
65,00	4	1	1S94S065	476,29
70,00	4	1	1S94S070	504,71

Ø (mm)	Z	Uds. / Pcs.	Cod.	€/Unid.
80,00	4	1	1S94S080	539,50
90,00	6	1	1S94S090	623,17
100,00	6	1	1S94S100	672,32
110,00	6	1	1S94S110	840,20
125,00	6	1	1S94S125	952,57
135,00	6	1	1S94S135	1.281,56
150,00	6	1	1S94S150	1.414,23

BROCA TIPO P P TYPE DRILL BIT • FORET TYPE P



Ø (mm)	Z	Uds. / Pcs.	Cod.	€/Unid.
35,00	3	1	1S94P035	252,74
42,00	3	1	1S94P042	305,74
52,00	3	1	1S94P052	385,69
55,00	3	1	1S94P055	388,91
60,00	6	1	1S94P060	449,19
65,00	6	1	1S94P065	519,00

Ø (mm)	Z	Uds. / Pcs.	Cod.	€/Unid.
70,00	6	1	1S94P070	553,44
80,00	6	1	1S94P080	588,32
90,00	6	1	1S94P090	630,17
100,00	6	1	1S94P100	672,25
110,00	6	1	1S94P110	840,90
125,00	6	1	1S94P125	967,49

Hasta agotar existencias / Until end of stock / Jusqu'à épuisement des stocks












BROCAS Y CORONAS SISTEMA S94

HOLE SAWS AND DRILL BITS FOR SYSTEM S94 • TRÉPANS ET FORETS PUOR SYSTÈME S94

ADAPTADORES SISTEMA S94

S94 SYSTEM ADAPTERS

ADAPTATEURS SYSTÈME S94

	Anclaje / Shank	L1 (mm)	Uds. / Pcs.	Cod.	€/Unid.
	 SDS-PLUS	110	1	1AI1110	117,96
	 SDS-TOP*	190	1	1AI2190	123,44
	 SDS-MAX	190	1	1AI3190	121,84
		400	1	1AI3400	134,62
		575	1	1AI3575	143,47
		975	1	1AI3975	217,17
	ESTRIADO	175	1	1AI4175	105,51
	Hitachi DH 38 YB DH 45 SA, H 41 SA, H 65 SB VRY38, DH 28 Y, Maki-ta 8022B-8035B Ryobi CH 450 P, ER 382 K	170	1	1AI5170	126,72
	Duss P20 - P30 - P60 - P90 P80, PK 100	210	1	1AI6210	126,72
	Kango 950; 950x 900x, 928 1400	200	1	1AI7200	126,72
	Wacker E HUB 10 Y EH8/220, BHB 14	185	1	1AI8185	126,72

*Hasta fin de existencias / Until end of stock / Jusqu'à fin de stocks

PROLONGADORES

EXTENSION • PROLONGATEURS

Uso con / Using with	L1 (mm)	Uds. / Pcs.	Cod.	€/Unid.
	300	1	1PR300	175,09
	450	1	1PR400	199,19



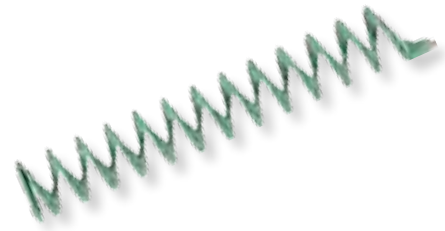
HÉLICES EXTRACTORAS S94

S94 SCREW EXTRACTORS • HÉLICES D'EXTRACTION S94

Ø (mm)	Rango / Range	Uds. / Pcs.	Cod.	€/Unid.
42,00	Tipo S y P	1	1S94H01	98,15
45,00	Tipo S	1	1S94H02	114,60
52,00 - 55,00 - 60,00	Tipo S y P	1	1S94H03	163,20
65,00 - 70,00	Tipo S	1	1S94H04	264,86
80,00	Tipo S	1	1S94H05	490,14

Hasta fin de existencias / Until end of stock / Jusqu'à fin de stocks




Ø (mm)	Rango / Range	Uds. / Pcs.	Cod.	€/Unid.
32,00	32 - 45	1	1S94H06	138,83
47,00	52 - 60	1	1S94H07	181,15
63,00	64 - 70	1	1S94H08	220,75
78,00	80 - 150	1	1S94H09	305,75



BROCA DE CENTRAR

CENTRE DRILL BIT • FORET DE CENTRAGE



Uso con / Using with	L1 (mm)	L1 (mm)	Uds. / Pcs.	Cod.	€/Unid.
	12,00	155	1	1BC12155	40,45
	16,00	124	1	1BC16124	40,45
	16,00	174	1	1BC16174	43,48

ELEMENTO DE UNIÓN THREADED BOLT • ÉLÉMENT D'UNION

Uds. / Pcs.	Cod.	€/Unid.
1	1EU001	25,49



GRASA PARA ROSCA 120 GR

THREAD GREASE 120 GR • GRAISSE 120 GR

Uds. / Pcs.	Cod.	€/Unid.
1	1GR001	11,21



DISCOS DIAMANTE

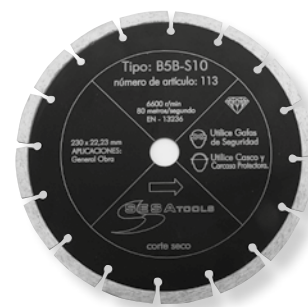
DIAMOND DISCS • DISQUES DIAMANTÉS

CONSTRUCCIÓN B5B-S10

CONSTRUCTION B5B-S10 • CONSTRUCTION B5B-S10



Ø (mm)	Eje	Uds. / Pcs.	Cod.	€/Unid.
115	22,23	1	1130115022	16,88
125	22,23	1	1130125022	20,00



Ø (mm)	Eje	Uds. / Pcs.	Cod.	€/Unid.
180	22,23	1	1130180022	40,77
230	22,23	1	1130230022	42,94

CONSTRUCCIÓN FÓRMULA 1

CONSTRUCTION FORMULA 1 • CONSTRUCTION FORMULA 1



Ø (mm)	Eje	Uds. / Pcs.	Cod.	€/Unid.
115	22,23	1	1160115022	75,26
125	22,23	1	1160125022	86,32
150	22,23	1	1160150022	130,60



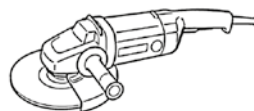
Ø (mm)	Eje	Uds. / Pcs.	Cod.	€/Unid.
180	22,23	1	1160180022	152,74
230	22,23	1	1160230022	182,96

TG SUPER THIN PORCELANATO

TG SUPER THIN PORCELANICS • TG SUPER THIN CARRELAGE



Ø (mm)	Eje	Uds. / Pcs.	Cod.	€/Unid.
115	22,23	1	1500115022	53,64
115	22,23	1	1500115022 FL*	67,04
125	22,23	1	1500125022	75,26
125	22,23	1	1500125022 FL*	91,63



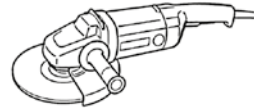
Ø (mm)	Eje	Uds. / Pcs.	Cod.	€/Unid.
150	22,23	1	1500150022	101,82
180	22,23	1	1500180022	130,60
230	22,23	1	1500230022	188,16

*FL: Alma reforzada (evita holguras en máquinas desgastadas) / *FL: Reinforced core (avoids looseness in worn machines) / *Ame renforcée (évite le jeu sur les machines usées)

CANTERO TITAN TURBO-I
STONE TITAN TURBO-I • TITAN TURBO-I POUR PIERRE



Ø (mm)	Eje	Uds. / Pcs.	Cod.	€/Unid.
115	22,23	1	1520115022	84,11
125	22,23	1	1520125022	101,82
150	22,23	1	1520150022	141,66

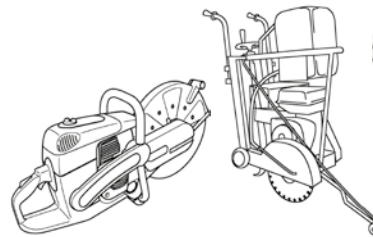


Ø (mm)	Eje	Uds. / Pcs.	Cod.	€/Unid.
180	22,23	1	1520180022	172,67
230	22,23	1	1520230022	194,79

TITAN TURBO-II PARA CORTADORA
TITAN TURBO-II FOR LIGHTWEIGHT FLOOR SAWS
TITAN TURBO-II POUR SCIES À CHARIOT



Ø (mm)	Eje	Uds. / Pcs.	Cod.	€/Unid.
300	20,00	1	1530300020	329,82
300	22,23	1	1530300022	329,82
300	25,40	1	1530300025	329,82



Ø (mm)	Eje	Uds. / Pcs.	Cod.	€/Unid.
350	20,00	1	1530350020	438,28
350	22,23	1	1530350022	438,28
350	25,40	1	1530350025	438,28

SET DISCOS DE DIAMANTE 4+4 (B5B-S10 + TG SUPERTHIN)
DIAMOND DISCS SET 4+4 (B5B-S10 + TG SUPERTHIN)
COFFRET DISQUES DIAMANTÉS 4+4 (B5B-S10 + TG SUPERTHIN)

Calidad Quality	Ø (mm)	Eje	Uds. Pcs.	Cod.	€/Unid.
B5B-S10	115	22,23	4	K1101150	278,04
TGSUPERTHIN	115	22,23	4		



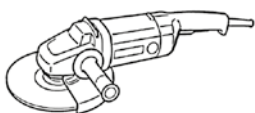
PLATOS DIAMANTADOS

GRINDING WHEELS • MEULES POUR DÉGROSSISSEMENT

PLATO DIAMANTADO HORMIGÓN

GRINDING WHEELS FOR CONCRETE

MEULE POUR DÉGROSSISSEMENT POUR BÉTON

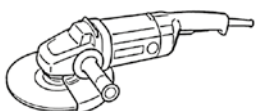


Ø (mm)	Conexión	Uds. / Pcs.	Cod.	€/Unid.
100	M14	1	213010001400	219,14
125	M14	1	213012501400	307,68

PLATO DIAMANTADO PIEDRA NATURAL

GRINDING WHEELS FOR NATURAL STONE

MEULE POUR DÉGROSSISSEMENT POUR PIERRE NATURELLE



Ø (mm)	Conexión	Uds. / Pcs.	Cod.	€/Unid.
100	M14	1	214010001400	263,42
125	M14	1	214012501400	351,96

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

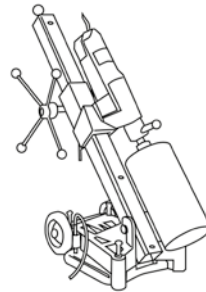
DISPLAYS
DISPLAYS • DISPLAYS

CORONAS PERFORACIÓN DIAMANTE B.K.1

B.K.1 DIAMOND DEEP DRILLING HOLE SAWS
TRÉPAN POUR CARROTAGE B.K.1



INSERCIÓN ROSCA INTERNA 1/2" GAS
INTERNAL THREAD 1/2" GAS
FILET 1/2" GAS



SEGMENTADO / SEGMENTS

Ø (mm)	Long. / Length (mm)	Z	Largo / Long (mm)	Ancho / Width (mm)	Altura / Height (mm)	Uds. / Pcs.	Cod.	€/Unid.
22	300	1	-	2,00	8,00	1	6010022	163,31
25	300	1	-	2,00	8,00	1	6010025	170,57
32	300	4	17,00	3,00	8,00	1	6010032	185,45
35	300	3	25,00	3,50	8,00	1	6010035	188,45
42	300	4	25,00	3,50	10,00	1	6010042	206,35
52	300	5	25,00	3,50	10,00	1	6010052	221,79
62	400	5	25,00	3,50	10,00	1	6010062	254,12

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILÉTAGÉ

ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

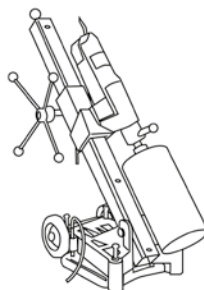
CORONAS PERFORADORAS DIAMANTE

DIAMOND DEEP DRILLING HOLE SAWS • TRÉPAN POUR CARROTAGE B.K.1A

CORONAS PERFORACIÓN DIAMANTE B.K.2

B.K.2 DIAMOND DEEP DRILLING HOLE SAWS
TRÉPAN POUR CARROTAGE B.K.2

INSERCIÓN ROSCA INTERNA 1 1/4" UNC
INTERNAL THREAD 1.1/4"
FILET 1.1/4" UNC



SEGMENTADO / SEGMENTS

Ø (mm)	Long. / Length (mm)	Z	Largo / Long (mm)	Ancho / Width (mm)	Altura / Height (mm)	Uds. / Pcs.	Cod.	€/Unid.
52	400	5	25,00	3,50	10,00	1	6050052	221,78
57	400	5	25,00	3,50	10,00	1	6050057	232,54
62	400	5	25,00	3,50	10,00	1	6050062	254,08
72	400	6	25,00	3,50	10,00	1	6050072	286,37
82	400	7	25,00	3,50	10,00	1	6050082	320,82
92	400	8	25,00	3,50	10,00	1	6050092	363,90
102	400	9	25,00	4,00	10,00	1	6050102	385,36
112	400	9	25,00	4,00	10,00	1	6050112	428,49
122	400	10	25,00	4,00	10,00	1	6050122	495,23
132	400	10	25,00	4,00	10,00	1	6050132	495,23
162	400	12	25,00	4,00	10,00	1	6050162	630,89
230	400	17	25,00	4,00	10,00	1	6050230	1026,57

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

NOVEDADES 

- ESTUCHES brocas pala

NEW FEATURES 

- Flat drill bit SETS

NOUVEAUTÉS 

- COFFRETS méche plate

WOOD-BOIS

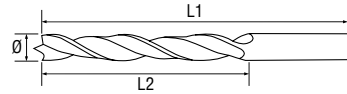




MADERA

BROCA 3 PUNTAS: BLISTER RÍGIDO

BRAND POINT DRILL BIT: RIGID PLASTIC BLISTER • FORET 3 POINTES: BLISTER RIGIDE A PLASTIQUE

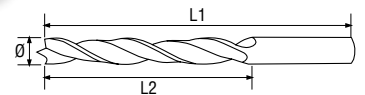
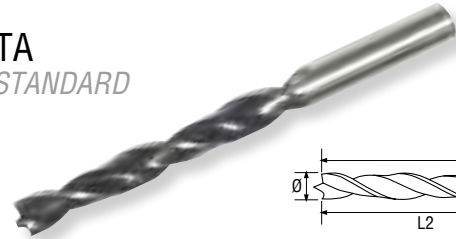


Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
3,00	70	46	1	102003BL	0,99
4,00	80	52	1	102004BL	1,03
5,00	90	60	1	102005BL	1,07
6,00	100	66	1	102006BL	1,11
8,00	120	80	1	102008BL	1,49
10,00	133	90	1	102010BL	1,85
12,00	155	102	1	102012BL	2,49



BROCA 3 PUNTAS USO GENERAL SERIE CORTA

STANDARD BRAD POINT DRILL BIT • FORET 3 POINTES STANDARD



Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
3,00	70	46	1	102003	0,57
4,00	80	52	1	102004	0,64
5,00	90	60	1	102005	0,72
6,00	100	66	1	102006	0,95
7,00	110	72	1	102007	1,10
8,00	120	80	1	102008	1,35
9,00	130	87	1	102009	1,55
10,00	133	90	1	102010	1,67
11,00	150	100	1	102011	2,00

Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
12,00	155	102	1	102012	2,27
13,00	160	102	1	102013	2,36
14,00	160	102	1	102014	2,57
15,00	165	107	1	102015	2,89
16,00	165	107	1	102016	3,56
18,00	200	130	1	102018	4,59
20,00	200	130	1	102020	5,89
22,00	200	130	1	102022	7,30

ESTUCHE COMBINADO METAL-CONSTRUCCIÓN-MADERA

COMBINED SET METAL-CONSTRUCTION-WOOD
COFFRET COMBINÉ MÉTAL-CONSTRUCTION-BOIS

BASIC BOX (9 UDS. / PCS.)

Composición / Contains / Composition				Medidas / Sizes	Cod.	€/Unid.		
HSS WHITE	HSS	+	BASIC	+	MADERA	5 - 6 - 8 mm	19CB339	15,98



STANDARD BOX (9 UDS. / PCS.)

Composición / Contains / Composition				Medidas / Sizes	Cod.	€/Unid.		
HSS G	HSS-G	+	GRANITO	+	MADERA	5 - 6 - 8 mm	19CM339	22,08



ADVANCE BOX (9 UDS. / PCS.)



Composición / Contains / Composition				Medidas / Sizes	Cod.	€/Unid.		
HSS CO	HSS-CO 5%	+	TORNADO	+	MADERA	5 - 6 - 8 mm	19CA339	30,58



BROCAS PARA MADERA

WOOD DRILL BITS • FORETS À BOIS

ESTUCHE BROCAS 3 PUNTAS

BRAD POINT DRILL BIT SET
COFFRET FORET 3 POINTES STANDARD

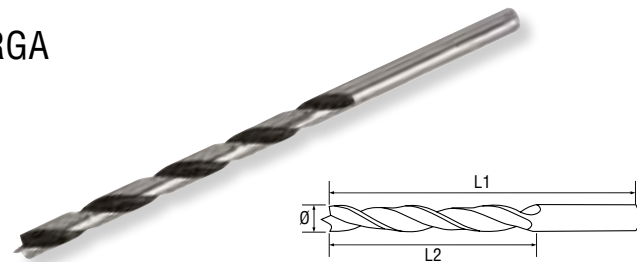
Ref.	Ø (mm)
333	3 - 10 x 1,0 mm

Uds. / Pcs.	Cod.	€/Unid.
8	196333	14,49



BROCA 3 PUNTAS USO GENERAL SERIE LARGA

STANDARD BRAD POINT DRILL BIT LONG SERIE
ORET 3 POINTES STANDARD SÉRIE LONGUE

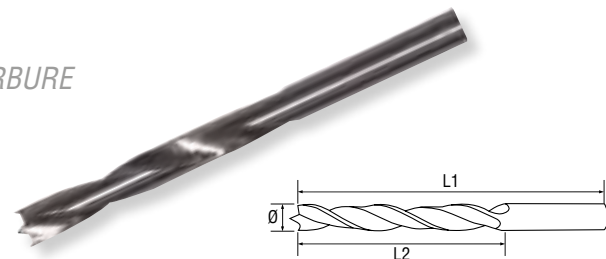


Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
6,00	245	160	1	1021L06	2,17
7,00	245	160	1	1021L07	2,45
8,00	245	160	1	1021L08	2,79
9,00	245	160	1	1021L09	3,00
10,00	245	160	1	1021L10	3,41
11,00	245	200	1	1021L11	4,09
12,00	245	200	1	1021L12	4,23

Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
13,00	245	200	1	1021L13	4,43
14,00	245	200	1	1021L14	4,97
15,00	245	200	1	1021L15	5,52
16,00	245	200	1	1021L16	6,13
18,00	245	200	1	1021L18	6,81
20,00	245	200	1	1021L20	8,58

BROCA 3 PUNTAS METAL DURO SERIE CORTA

HARD METAL POINT DRILL BIT • FORET 3 POINTES AU CARBURE



Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
3,00	76	32	1	10240300	4,18
3,50*	76	35	1	10240350	4,56
4,00	76	35	1	10240400	4,58
5,00	87	50	1	10240500	4,62
5,50*	100	55	1	10240550	4,99
6,00	100	57	1	10240600	5,05
7,00*	100	57	1	10240700	5,13

Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
8,00	103	60	1	10240800	5,27
9,00*	103	60	1	10240900	5,43
10,00	103	60	1	10241000	5,98
10,50*	103	60	1	10241050	6,83
11,00*	103	60	1	10241100	7,75
12,00*	103	60	1	10241200	8,83
13,00*	103	60	1	10241300	9,89

*Hasta fin de existencias / *Until end of stock / *Jusqu'à épuisement des stocks

BROCA 3 PUNTAS METAL DURO SERIE CORTA A IZQUIERDAS

HARD METAL POINT DRILL BIT LEFT HAND • FORET 3 POINTES AU CARBURE COUPE À GAUCHE

Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
3,00	76	32	1	10240300I	6,38
3,50	76	35	1	10240350I	6,44
5,00	85	50	1	10240500I	6,51

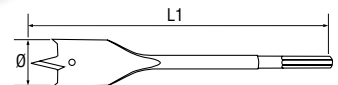
Hasta fin de existencias / Until end of stock / Jusqu'à épuisement des stocks

TOPES DE PROFUNDIDAD PARA BROCAS
DEPTH ADJUSTING COLLAR • BUTÉES DE PERÇAGE



Ø (mm)	Gama de medidas / Range (mm)	Uds. / Pcs.	Cod.	€/Unid.
3,50	De 2,0 a 3,5	1	Y10035	3,73
5,00	De 4,0 a 5,0	1	Y10050	4,27
6,50	De 5,5 a 6,5	1	Y10065	5,07
8,00	De 7,0 a 8,0	1	Y10080	5,07
10,00	De 8,5 a 10,0	1	Y10100	5,07
12,00	De 10,5 a 12,0	1	Y10120	5,07

BROCA PALA TIPO B FLAT DRILL BIT TYPE B • MÉCHE PLATE TYPE B



Ø (mm)	L1 (mm)	Mango / Shank Ø (mm)	Uds. Pcs.	Cod.	€/Unid.
6,00	157	6,5	1	103006	1,79
8,00	157	6,5	1	103008	1,79
10,00	157	6,5	1	103010	1,89
12,00	157	6,5	1	103012	2,28
14,00	157	6,5	1	103014	2,53
15,00	157	6,5	1	103015	2,53
16,00	157	6,5	1	103016	2,56
17,00	157	6,5	1	103017	2,68
18,00	157	6,5	1	103018	2,71
19,00	157	6,5	1	103019	2,79
20,00	157	6,5	1	103020	2,95
22,00	157	6,5	1	103022	3,45

Ø (mm)	L1 (mm)	Mango / Shank Ø (mm)	Uds. Pcs.	Cod.	€/Unid.
24,00	157	6,5	1	103024	3,78
25,00	157	6,5	1	103025	3,94
26,00	157	6,5	1	103026	4,18
28,00	157	6,5	1	103028	4,52
30,00	157	6,5	1	103030	4,71
32,00	157	6,5	1	103032	4,83
33,00	157	6,5	1	103033	5,25
34,00	157	6,5	1	103034	5,44
35,00	157	6,5	1	103035	6,15
36,00	157	6,5	1	103036	6,23
38,00	157	6,5	1	103038	6,56
40,00	157	6,5	1	103040	6,89

ESTUCHE BROCAS PALA TIPO B
FLAT DRILL BIT SET TYPE B • COFFRET MÉCHE PLATE TYPE B

Ref.	Medidas / Sizes	Tipo / Type	€/Unid.
PB13	6-8-10-12-13-14-16-18-19-20-22-24-25	B	34,70

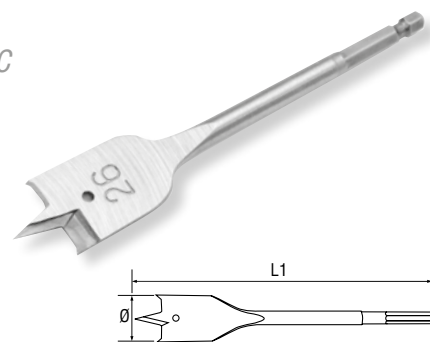


NEW

BROCAS PARA MADERA

WOOD DRILL BITS • FORETS À BOIS

BROCA PALA TIPO C FLAT DRILL BIT TYPE C • MÉCHE PLATE TYPE C



Ø (mm)	L1 (mm)	Mango / Shank Ø (mm)	Uds. Pcs.	Cod.	€/Unid.
6,00	152	6,5	1	103C06	2,05
8,00	152	6,5	1	103C08	2,05
9,00	152	6,5	1	103C09	2,12
10,00	152	6,5	1	103C10	2,28
11,00	152	6,5	1	103C11	2,46
12,00	152	6,5	1	103C12	2,59
13,00	152	6,5	1	103C13	2,64
14,00	152	6,5	1	103C14	2,77
15,00	152	6,5	1	103C15	2,97
16,00	152	6,5	1	103C16	3,01
18,00	152	6,5	1	103C18	3,09
19,00	152	6,5	1	103C19	3,19
20,00	152	6,5	1	103C20	3,30
22,00	152	6,5	1	103C22	3,54

Ø (mm)	L1 (mm)	Mango / Shank Ø (mm)	Uds. Pcs.	Cod.	€/Unid.
23,00	152	6,5	1	103C23	3,82
24,00	152	6,5	1	103C24	3,98
25,00	152	6,5	1	103C25	4,39
26,00	152	6,5	1	103C26	4,54
28,00	152	6,5	1	103C28	5,02
30,00	152	6,5	1	103C30	5,31
32,00	152	6,5	1	103C32	5,54
33,00	152	6,5	1	103C33	5,76
34,00	152	6,5	1	103C34	5,97
35,00	152	6,5	1	103C35	6,26
36,00	152	6,5	1	103C36	6,61
38,00	152	6,5	1	103C38	6,96
40,00	152	6,5	1	103C40	7,23

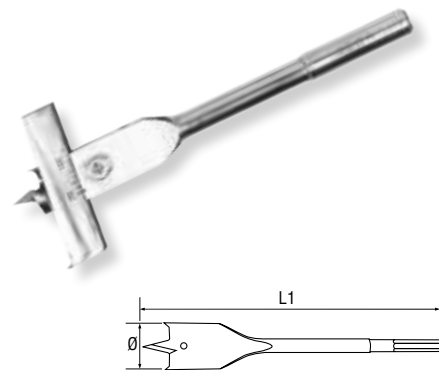
ESTUCHE BROCAS PALA TIPO C

FLAT DRILL BIT SET TYPE C • COFFRET MÉCHE PLATE TYPE C

Ref.	Medidas / Sizes	Tipo / Type	€/Unid.
PC13	6-8-10-12-13-14-16-18-19-20-22-24-25	C	38,89



BROCA PALA EXTENSIBLE
ADJUSTABLE FLAT DRILL BIT • MÊCHE PLATE EXTENSIBLE



Ø (mm)	L1 (mm)	Uds. / Pcs.	Cod.	€/Unid.
15 - 45	120	1	1201031545	48,12
22 - 76	155	1	1201032276	81,22

ALARGADOR PARA BROCA PALA
FLAT DRILL BIT EXTENSION • RALLONGE POUR MÊCHE PLATE



Entrada Inlet (mm)	Mango Shank (mm)	L1 (mm)	Uds. Pcs.	Cod.	€/Unid.
6,35	Hex. 1/4"	305	1	UL00334	17,69

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • METAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

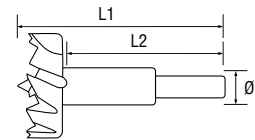
BROCA PARA MADERA

WOOD DRILL-BITS • WOOD DRILL-BITS

BROCA PARA ENCAJE DE BISAGRAS PUNTA Y PRECORTADORES DE MD

FORSTNER TYPE WITH HM TIPS

MÈCHE À FAÇONNER AU CARBURE



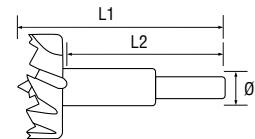
Ø (mm)	L1 (mm)	Mango / Shank Ø (mm)	Uds. Pcs.	Cod.	€/Unid.
20,00	90	8	1	102120	17,28
25,00	90	8	1	102125	19,85
26,00	90	8	1	102126	22,61

Ø (mm)	L1 (mm)	Mango / Shank Ø (mm)	Uds. Pcs.	Cod.	€/Unid.
30,00	90	8	1	102130	23,94
35,00	90	10	1	102135	27,56
40,00	90	10	1	102140	29,54

BROCA PARA ENCAJE DE BISAGRAS FORSTNER HSS AFILADO ESPECIAL

FORSTNER TYPE WITH HSS SPECIAL CUT

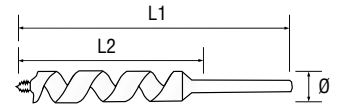
MÈCHE À FAÇONNER HSS AFILAGE SPÉCIAL



Ø (mm)	L1 (mm)	Mango / Shank Ø (mm)	Uds. Pcs.	Cod.	€/Unid.
15,00	90	8	1	12011015	39,34
16,00	90	8	1	12011016	39,34
18,00	90	8	1	12011018	39,34
20,00	90	8	1	12011020	39,34
22,00	90	8	1	12011022	39,34
25,00	90	8	1	12011025	40,98

Ø (mm)	L1 (mm)	Mango / Shank Ø (mm)	Uds. Pcs.	Cod.	€/Unid.
26,00	90	8	1	12011026	42,63
30,00	90	10	1	12011030	44,26
35,00	90	10	1	12011035	47,54
40,00	90	10	1	12011040	54,10
45,00	90	10	1	12011045	71,58
50,00	90	10	1	12011050	73,81

LEWIS LEWIS • LEWIS



Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.	Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
4,00	200	100	1	12010804200	14,58	18,00	600	480	1	12010818600	65,39
5,00	200	100	1	12010805200	15,84	20,00	200	100	1	12010820200	23,57
6,00	200	100	1	12010806200	15,55	20,00	300	220	1	12010820300	42,10
7,00	200	100	1	12010807200	16,55	20,00	450	360	1	12010820450	46,84
8,00	200	100	1	12010808200	15,57	20,00	600	480	1	12010820600	67,86
8,00	300	220	1	12010808300	27,37	22,00	200	100	1	12010822200	26,74
8,00	450	360	1	12010808450	29,29	22,00	300	220	1	12010822300	49,69
10,00	200	100	1	12010810200	15,80	22,00	450	360	1	12010822450	52,44
10,00	300	220	1	12010810300	27,37	22,00	600	480	1	12010822600	72,63
10,00	450	360	1	12010810450	31,69	24,00	200	100	1	12010824200	30,46
10,00	600	480	1	12010810600	49,87	24,00	300	220	1	12010824300	45,28
12,00	200	100	1	12010812200	17,57	24,00	450	360	1	12010824450	57,16
12,00	300	220	1	12010812300	29,15	24,00	600	480	1	12010824600	76,59
12,00	450	360	1	12010812450	33,52	25,00	450	360	1	12010825450	57,36
12,00	600	480	1	12010812600	51,49	26,00	200	100	1	12010826200	36,33
14,00	200	100	1	12010814200	18,75	26,00	300	220	1	12010826300	58,51
14,00	300	220	1	12010814300	32,75	26,00	450	360	1	12010826450	64,52
14,00	450	360	1	12010814450	35,55	26,00	600	480	1	12010826600	80,69
14,00	600	480	1	12010814600	55,84	28,00	200	100	1	12010828200	40,07
16,00	200	100	1	12010816200	20,44	28,00	300	220	1	12010828300	66,47
16,00	300	220	1	12010816300	34,96	28,00	450	360	1	12010828450	72,67
16,00	450	360	1	12010816450	43,09	28,00	600	480	1	12010828600	91,29
16,00	600	480	1	12010816600	59,03	30,00	200	100	1	12010830200	47,01
18,00	200	100	1	12010818200	23,20	30,00	300	220	1	12010830300	78,08
18,00	300	220	1	12010818300	38,99	30,00	450	360	1	12010830450	83,64
18,00	450	360	1	12010818450	44,84	30,00	600	480	1	12010830600	102,56

BROCA PARA MADERA

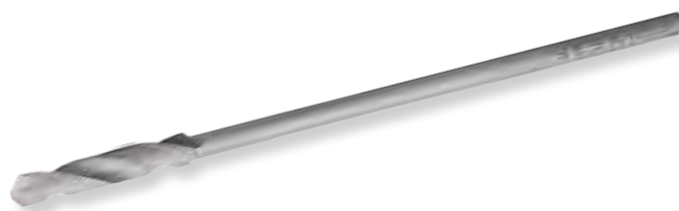
WOOD DRILL-BITS • FORETS À BOIS

BROCA PARA ENCOFRAR CILÍNDRICA

SHUTTERING STRAIGHT DRILL-BIT
FORET POUR COFFRAGE



DIN 7490



Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
8,00	400	100	1	12011108400	14,36
8,00	600	100	1	12011108600	14,77
8,00	800	100	1	12011108800	16,41
10,00	400	100	1	12011110400	16,00
10,00	600	100	1	12011110600	16,75
10,00	800	100	1	12011110800	18,80
12,00	400	100	1	12011112400	19,14
12,00	600	100	1	12011112600	19,96
12,00	800	100	1	12011112800	22,01
14,00	400	100	1	12011114400	22,09
14,00	600	100	1	12011114600	22,77
14,00	800	100	1	12011114800	24,89
16,00	400	100	1	12011116400	24,14
16,00	600	100	1	12011116600	24,61
16,00	800	100	1	12011116800	26,94

Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
18,00	400	100	1	12011118400	31,86
18,00	600	100	1	12011118600	34,12
18,00	800	100	1	12011118800	37,74
20,00	400	100	1	12011120400	38,50
20,00	600	100	1	12011120600	40,13
20,00	800	100	1	12011120800	42,60
22,00	400	100	1	12011122400	45,87
22,00	600	100	1	12011122600	47,18
22,00	800	100	1	12011122800	49,57
24,00	400	100	1	12011124400	54,70
24,00	600	100	1	12011124600	58,59
24,00	800	100	1	12011124800	60,37
26,00	400	100	1	12011126400	65,17
28,00	400	100	1	12011128400	78,01
30,00	400	100	1	12011130400	91,41

BROCA PARA ENCOFRAR SDS-PLUS

SHUTTERING SDS-PLUS DRILL-BIT
FORET POUR COFFRAGE SDS-PLUS



DIN 7490



Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
10,00	400	100	1	12011210400	33,33
10,00	600	100	1	12011210600	34,01
12,00	400	100	1	12011212400	36,00
12,00	600	100	1	12011212600	36,95
12,00	800	100	1	12011212800	39,88
14,00	400	100	1	12011214400	29,81
14,00	600	100	1	12011214600	30,44
14,00	800	100	1	12011214800	34,51
16,00	400	100	1	12011216400	34,23
16,00	600	100	1	12011216600	34,51
16,00	800	100	1	12011216800	37,04
18,00	400	100	1	12011218400	51,35

Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
18,00	600	100	1	12011218600	53,95
18,00	800	100	1	12011218800	58,28
20,00	400	100	1	12011220400	59,36
20,00	600	100	1	12011220600	61,01
20,00	800	100	1	12011220800	64,55
22,00	400	100	1	12011222400	68,74
22,00	600	100	1	12011222600	69,96
22,00	800	100	1	12011222800	72,26
24,00	400	100	1	12011224400	78,69
24,00	600	100	1	12011224600	84,09
24,00	800	100	1	12011224800	85,76

AVELLANADOR COUNTERSINK • FRAISE À CHANFREINER



Broca / Drill Bit Ø (mm)	Avellanador Countersink Bit Ø (mm)	Uds. Pcs.	Cod.	€/Unid.
3,00	12,00	1	1201090312	6,72
4,00	12,00	1	1201090412	6,72
5,00	12,00	1	1201090512	6,72
6,00	12,00	1	1201090612	6,72
3,00	16,00	1	1201090316	8,60

Broca / Drill Bit Ø (mm)	Avellanador Countersink Bit Ø (mm)	Uds. Pcs.	Cod.	€/Unid.
4,00	16,00	1	1201090416	8,60
5,00	16,00	1	1201090516	8,60
6,00	16,00	1	1201090616	8,60
8,00	16,00	1	1201090816	8,60

BROCA PARA ENSAMBLAJE

ASSEMBLING DRILLS • MÈCHE ÉTAGÉE POUR VIS D'ASSEMBLAGE



Ø (mm)	L1 (mm)	Uds. / Pcs.	Cod.	€/Unid.
5 x 50	86	1	103J05	4,79
7 x 50	109	1	103K07	5,58

BARRENA GIMLET • VRILLE



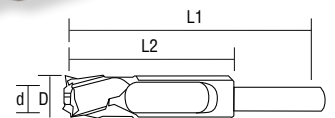
Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
2,00	106	32	1	12010302	7,80
3,00	112	34	1	12010303	9,21
4,00	137	40	1	12010304	12,16

Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
5,00	142	46	1	10210305	12,94
6,00	162	49	1	12010306	15,61
8,00	162	63	1	12010308	18,43

Hasta fin de existencias / Until end of stock / Jusqu'à épuisement des stocks

FRESA ESPECIAL TAPONES

PLUG CUTTER • MÈCHE À BOUCHONNER



d (mm)	D (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
10,00	20,00	140	112	1	12010710	31,21
12,00	23,00	140	135	1	12010712	36,84
15,00	27,00	140	160	1	12010715	48,60

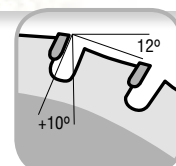
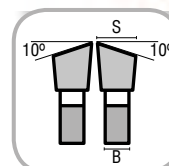
Hasta fin de existencias / Until end of stock / Jusqu'à épuisement des stocks

DISCOS MADERA

CIRCULAR SAWBLADES • LAMES DE SCIES CIRCULAIRES POUR BOIS

DISCO PARA MADERA BASTA

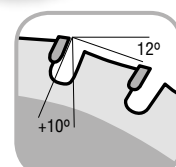
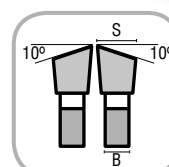
ROUGH WOOD CIRCULAR SAWBLADES
DISQUE POUR BOIS A TEXTURE GROSSIERE



Ø (mm)	S Grosor / Thickness (mm)	B Grosor / Thickness (mm)	Ø Eje / Axe (mm)	Z	Cod.	€/Unid.
250	3,2	2,2	30	60	2DM25060	53,06
300	3,2	2,2	30	72	2DM30072	60,89

DISCO PARA MADERA FINA

FINE WOOD CIRCULAR SAWBLADES
DISQUE POUR BOIS A TEXTURE FINE

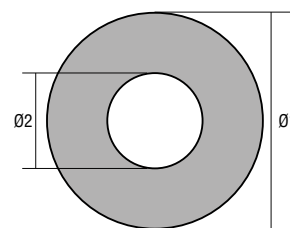


Ø (mm)	S Grosor / Thickness (mm)	B Grosor / Thickness (mm)	Ø Eje / Axe (mm)	Z	Cod.	€/Unid.
250	3,2	2,2	30	80	2DM25080	57,46
300	3,2	2,2	30	96	2DM30096	71,91

ANILLOS REDUCTORES

REDUCTIONS RINGS • BAGUES DE RÉDUCTION

Ø1 / Ø2 (mm)	Cod.	€/Unid.
30 / 25	2DR3025	4,13
30 / 20	2DR3020	4,13
30 / 18	2DR3018	4,13
30 / 16	2DR3016	4,13



NOVEDADES

- Broca de PUNTEAR
- ESTUCHES para coronas con base ELECTROMÁGNÉTICA

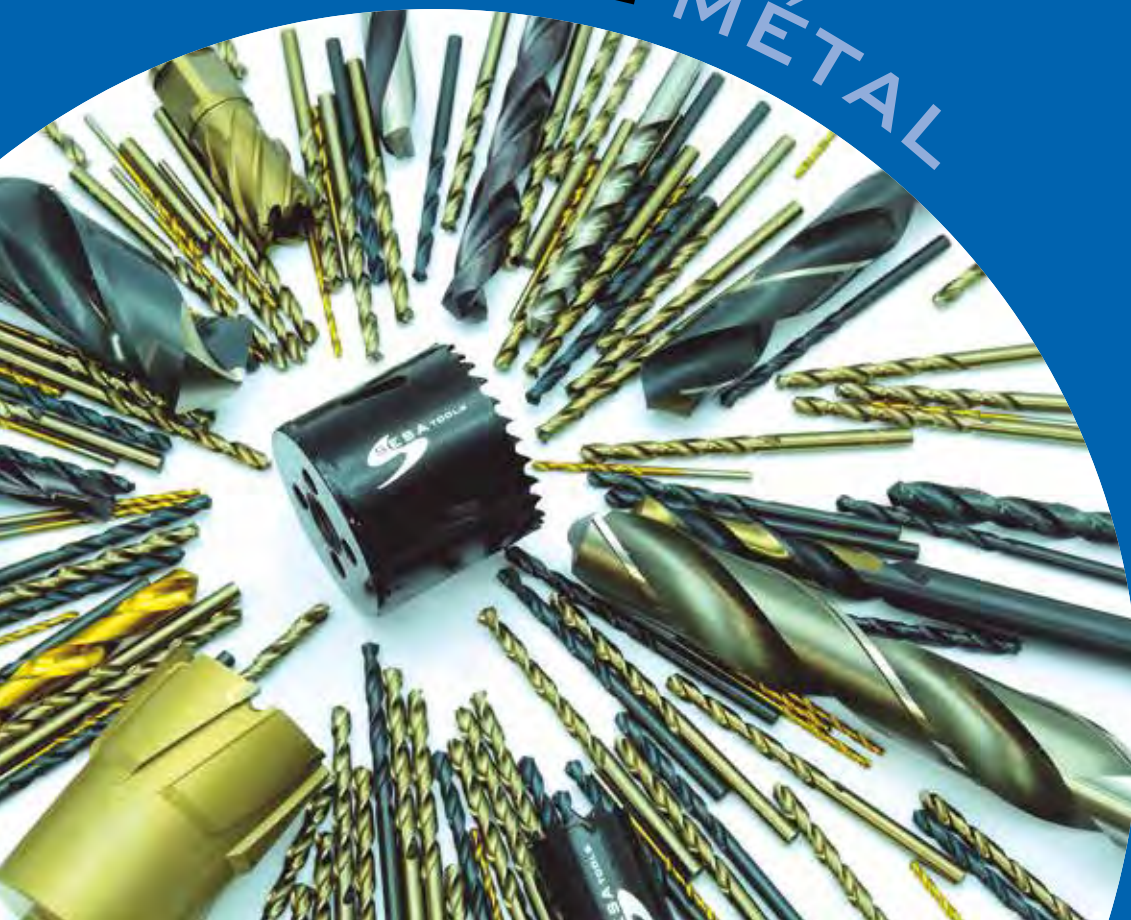
NEW FEATURES

- *SPOTTING drill*
- *ELECTROMAGNETIC core bit SETS*

NOUVEAUTÉS

- *Foret à CENTRER*
- *COFFRETS sciés ELECTROMAGNETIQUES*

METAL-MÉTAL



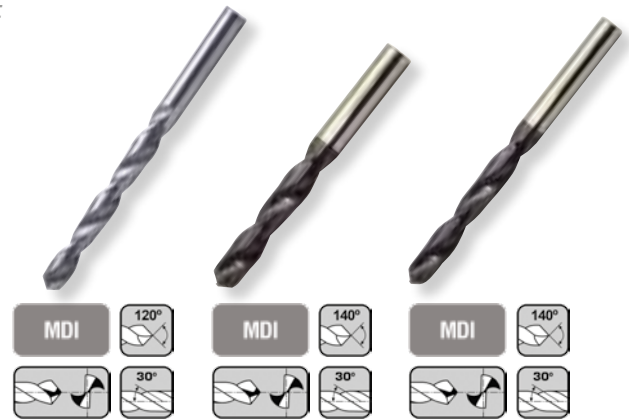


METAL

TABLA DE APLICACIONES Y VELOCIDADES DE CORTE RECOMENDADAS

APPLICATION GUIDE AND CUTTING SPEED

TABLE D'APPLICATIONS ET VITESSE DE COUPE RECOMMANDÉ



MATERIAL / MATERIAL / MATIERE	Resistencia / Resistance Resistance N/mm	DIN 338 MDI Pág. 95	DIN 6537K - 3XØ MD Pág. 96	DIN 6537L - 5XØ MD Pág. 97
ACEROS STEELS • ACIERS	Decoletaje <i>Machining • Décolletage</i>	<500	70-80	80-90
	Carbono <0,4% <i><0,4% Carbon • Carbon <0,4%</i>	<850	55-70	60-80
	Acero para herramientas <i>Steel for tools • Acier pour outils</i>	<1200	50-60	55-70
	Templado - Revenido <i>Tempered - Quenched • Trempé - Revenu</i>	<1400	30-40	34-45
ACEROS INOXIDABLES STAINLESS STEEL ACIER INOXYDABLE	Austeníticos Cr-Ni <i>Cr-Ni Austenitics • Cr-Ni austenitique</i>	<850	22-27	25-30
	Martensíticos Cr-Mo <i>Cr-Mo Martensitics • Cr-Mo martensitique</i>	<1200	22-27	25-30
FUNDICIÓN CAST IRON • FONTE	Fundición gris <i>Grey cast iron • Fonte grise</i>	<700	70-90	80-100
	Fundición dura <i>Hard cast iron • Fonte dur</i>	<1000	-	-
ALUMINIO ALUMINIUM • ALUMINIUM	Puro <i>Pure • Pure</i>	<350	150-180	170-200
	Si < 10%	<600	150-150	170-170
	Si > 10%	<600	120-150	135-170
COBRE COPPER • CUIVRE	Zamak <i>Zamak • Zamak</i>	<600	160-160	180-180
	Bronce <i>Bronze • Bronze</i>	<350		
	Cobre viruta larga <i>Long chip copper • Cuivre coupage long</i>	<700	35-70	50-80
	Cobre viruta corta <i>Short chip copper • Cuivre coupage court</i>	<700	37-70	40-80
	Latón duro <i>Hard Brass • Laiton dur</i>	<700	120-120	135-135
TITANIO TITANIUM • TITANE	Latón tenaz <i>Tough Brass • Laiton tenace</i>	<700	70-70	80-80
	Puro <i>Pure • Pure</i>	<700		
SINTÉTICOS PLASTICS • PLASTIQUES	Aleaciones de Titanio <i>Titanium alloys • Alliages de titane</i>	<1200		
	Termoplásticos <i>Thermoplastics • Thermoplastique</i>	-		
	Duroplásticos <i>Hard-plastics • Duroplastique</i>	-		

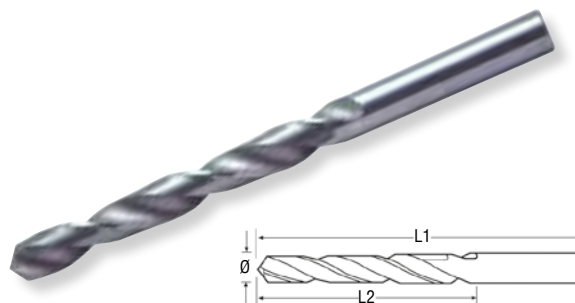
BROCAS PARA METAL MANGO CILÍNDRICO

STRAIGHT SHANK METAL DRILL BITS • FORETS METAL QUEUE CYLINDRIQUE

M/DURO INTEGRAL DIN 338 N

DIN 338 N HM

DIN 338 N HM



Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
2,00	49	24	1	31XMD0200	9,28
2,50	57	30	1	31XMD0250	12,36
3,00	61	33	1	31XMD0300	15,29
3,50	70	39	1	31XMD0350	17,36
4,00	75	43	1	31XMD0400	20,01
4,50	80	47	1	31XMD0450	24,96
5,00	86	52	1	31XMD0500	29,28
5,50	93	57	1	31XMD0550	36,07
6,00	93	57	1	31XMD0600	38,50
6,50	101	63	1	31XMD0650	48,39

Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
7,00	109	69	1	31XMD0700	62,75
7,50	109	69	1	31XMD0750	65,38
8,00	117	75	1	31XMD0800	83,26
8,50	117	75	1	31XMD0850	95,57
9,00	125	81	1	31XMD0900	111,73
9,50	125	81	1	31XMD0950	126,71
10,00	133	87	1	31XMD1000	134,70
11,00	142	94	1	31XMD1100	185,98
12,00	151	101	1	31XMD1200	239,35
13,00	151	101	1	31XMD1300	274,03

*Para otras medidas consultar / Request for other sizes / Pour d'autres dimensions, nous consulter

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

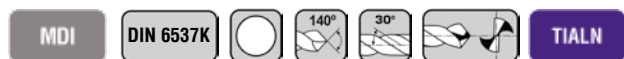
METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

M/DURO INTEGRAL DIN 6537 3XD SIN REFRIGERACIÓN INTERNA

DIN 6537 3XD HM WITHOUT COOLANT FEED

DIN 6537 3XD HM SANS TROUS D'HUILE



Ø (mm)	L1 (mm)	L2 (mm)	D2	Uds. Pcs.	Cod.	€/Unid.
3,00	62	20	6	1	33XMD0300	43,63
3,10	62	20	6	1	33XMD0310	43,63
3,20	62	20	6	1	33XMD0320	43,63
3,30	62	20	6	1	33XMD0330	43,63
3,40	62	20	6	1	33XMD0340	43,63
3,50	62	20	6	1	33XMD0350	43,63
3,60	62	20	6	1	33XMD0360	43,63
3,70	62	20	6	1	33XMD0370	43,63
3,80	66	24	6	1	33XMD0380	46,81
3,90	66	24	6	1	33XMD0390	46,81
4,00	66	24	6	1	33XMD0400	46,81
4,10	66	24	6	1	33XMD0410	47,20
4,20	66	24	6	1	33XMD0420	47,20
4,30	66	24	6	1	33XMD0430	47,20
4,40	66	24	6	1	33XMD0440	47,20
4,50	66	24	6	1	33XMD0450	47,20
4,60	66	24	6	1	33XMD0460	47,20
4,70	66	24	6	1	33XMD0470	47,20
4,80	66	28	6	1	33XMD0480	46,55
4,90	66	28	6	1	33XMD0490	46,55
5,00	66	28	6	1	33XMD0500	46,55
5,10	66	28	6	1	33XMD0510	47,06
5,20	66	28	6	1	33XMD0520	47,06
5,30	66	28	6	1	33XMD0530	47,06
5,40	66	28	6	1	33XMD0540	47,06
5,50	66	28	6	1	33XMD0550	47,06
5,60	66	28	6	1	33XMD0560	47,06
5,70	66	28	6	1	33XMD0570	47,06
5,80	66	28	6	1	33XMD0580	47,06
5,90	66	28	6	1	33XMD0590	47,06
6,00	66	28	6	1	33XMD0600	47,06
6,10	79	34	8	1	33XMD0610	64,59
6,20	79	34	8	1	33XMD0620	64,59
6,30	79	34	8	1	33XMD0630	64,59
6,40	79	34	8	1	33XMD0640	64,59
6,50	79	34	8	1	33XMD0650	64,59
6,60	79	34	8	1	33XMD0660	64,59
6,70	79	34	8	1	33XMD0670	64,59
6,80	79	34	8	1	33XMD0680	64,59
6,90	79	34	8	1	33XMD0690	64,59
7,00	79	34	8	1	33XMD0700	64,59
7,10	79	41	8	1	33XMD0710	65,85
7,20	79	41	8	1	33XMD0720	65,85
7,30	79	41	8	1	33XMD0730	65,85
7,40	79	41	8	1	33XMD0740	65,85
7,50	79	41	8	1	33XMD0750	65,85

Ø (mm)	L1 (mm)	L2 (mm)	D2	Uds. Pcs.	Cod.	€/Unid.
7,60	79	41	8	1	33XMD0760	65,85
7,70	79	41	8	1	33XMD0770	65,85
7,80	79	41	8	1	33XMD0780	65,85
7,90	79	41	8	1	33XMD0790	65,85
8,00	79	41	8	1	33XMD0800	65,85
8,10	89	47	10	1	33XMD0810	92,86
8,20	89	47	10	1	33XMD0820	92,86
8,30	89	47	10	1	33XMD0830	92,86
8,40	89	47	10	1	33XMD0840	92,86
8,50	89	47	10	1	33XMD0850	92,86
8,60	89	47	10	1	33XMD0860	92,86
8,70	89	47	10	1	33XMD0870	92,86
8,80	89	47	10	1	33XMD0880	92,86
8,90	89	47	10	1	33XMD0890	92,86
9,00	89	47	10	1	33XMD0900	92,86
9,10	89	47	10	1	33XMD0910	92,86
9,20	89	47	10	1	33XMD0920	92,86
9,30	89	47	10	1	33XMD0930	92,86
9,40	89	47	10	1	33XMD0940	92,86
9,50	89	47	10	1	33XMD0950	92,86
9,60	89	47	10	1	33XMD0960	92,86
9,70	89	47	10	1	33XMD0970	92,86
9,80	89	47	10	1	33XMD0980	92,86
9,90	89	47	10	1	33XMD0990	92,86
10,00	89	47	10	1	33XMD1000	92,86
10,50	102	55	12	1	33XMD1050	125,69
11,00	102	55	12	1	33XMD1100	125,69
11,50	102	55	12	1	33XMD1150	125,69
12,00	102	55	12	1	33XMD1200	125,69
12,50	107	60	14	1	33XMD1250	170,99
13,00	107	60	14	1	33XMD1300	170,99
13,50	107	60	14	1	33XMD1350	170,99
14,00	107	60	14	1	33XMD1400	170,99
14,50	115	65	16	1	33XMD1450	210,61
15,00	115	65	16	1	33XMD1500	210,61
15,50	115	65	16	1	33XMD1550	210,61
16,00	115	65	16	1	33XMD1600	210,61
16,50	123	73	18	1	33XMD1650	308,10
17,00	123	73	18	1	33XMD1700	308,10
17,50	123	73	18	1	33XMD1750	308,10
18,00	123	73	18	1	33XMD1800	307,93
18,50	131	79	20	1	33XMD1850	382,46
19,00	131	79	20	1	33XMD1900	382,46
19,50	131	79	20	1	33XMD1950	382,46
20,00	131	79	20	1	33XMD2000	382,46

Para otras medidas consultar
Request for other sizes
Pour d'autres dimensions, nous consulter

Para brocas con canales de refrigeración, consúltennos
Request for drill bits with coolant feed
Pour forets avec trous d'huile, nous consulter



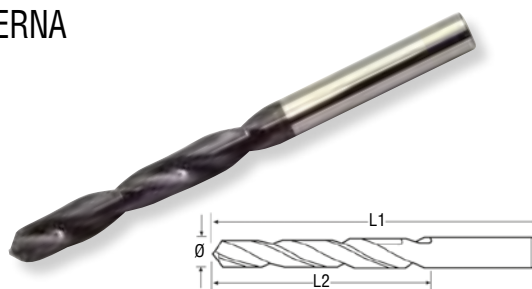
BROCAS PARA METAL MANGO CILÍNDRICO

STRAIGHT SHANK METAL DRILL BITS • FORETS METAL QUEUE CYLINDRIQUE

M/DURO INTEGRAL DIN 6537 5XD SIN REFRIGERACIÓN INTERNA

DIN 6537 5XD HM WITHOUT COOLANT FEED

DIN 6537 5XD HM SANS TROUS D'HUILE



Ø (mm)	L1 (mm)	L2 (mm)	D2	Uds. Pcs.	Cod.	€/Unid.
3,00	66	28	6	1	35XMD0300	56,98
3,10	66	28	6	1	35XMD0310	56,98
3,20	66	28	6	1	35XMD0320	56,98
3,30	66	28	6	1	35XMD0330	56,98
3,40	66	28	6	1	35XMD0340	56,98
3,50	66	28	6	1	35XMD0350	56,98
3,60	66	28	6	1	35XMD0360	56,98
3,70	66	28	6	1	35XMD0370	56,98
3,80	74	36	6	1	35XMD0380	63,70
3,90	74	36	6	1	35XMD0390	63,70
4,00	74	36	6	1	35XMD0400	63,70
4,10	74	36	6	1	35XMD0410	64,43
4,20	74	36	6	1	35XMD0420	64,43
4,30	74	36	6	1	35XMD0430	64,43
4,40	74	36	6	1	35XMD0440	64,43
4,50	74	36	6	1	35XMD0450	64,43
4,60	74	36	6	1	35XMD0460	64,43
4,70	74	36	6	1	35XMD0470	64,43
4,80	82	44	6	1	35XMD0480	61,48
4,90	82	44	6	1	35XMD0490	61,48
5,00	82	44	6	1	35XMD0500	61,48
5,10	82	44	6	1	35XMD0510	62,37
5,20	82	44	6	1	35XMD0520	62,37
5,30	82	44	6	1	35XMD0530	62,37
5,40	82	44	6	1	35XMD0540	62,37
5,50	82	44	6	1	35XMD0550	62,37
5,60	82	44	6	1	35XMD0560	62,37
5,70	82	44	6	1	35XMD0570	62,37
5,80	82	44	6	1	35XMD0580	62,37
5,90	82	44	6	1	35XMD0590	62,37
6,00	82	44	6	1	35XMD0600	62,37
6,10	91	53	8	1	35XMD0610	80,26
6,20	91	53	8	1	35XMD0620	80,26
6,30	91	53	8	1	35XMD0630	80,26
6,40	91	53	8	1	35XMD0640	80,26
6,50	91	53	8	1	35XMD0650	80,26
6,60	91	53	8	1	35XMD0660	80,26
6,70	91	53	8	1	35XMD0670	80,26
6,80	91	53	8	1	35XMD0680	80,26
6,90	91	53	8	1	35XMD0690	80,26
7,00	91	53	8	1	35XMD0700	80,26
7,10	91	53	8	1	35XMD0710	81,36

Ø (mm)	L1 (mm)	L2 (mm)	D2	Uds. Pcs.	Cod.	€/Unid.
7,20	91	53	8	1	35XMD0720	81,36
7,30	91	53	8	1	35XMD0730	81,36
7,40	91	53	8	1	35XMD0740	81,36
7,50	91	53	8	1	35XMD0750	81,36
7,60	91	53	8	1	35XMD0760	81,36
7,70	91	53	8	1	35XMD0770	81,36
7,80	91	53	8	1	35XMD0780	81,36
7,90	91	53	8	1	35XMD0790	81,36
8,00	91	53	8	1	35XMD0800	81,36
8,10	103	61	10	1	35XMD0810	106,74
8,20	103	61	10	1	35XMD0820	106,74
8,30	103	61	10	1	35XMD0830	106,74
8,40	103	61	10	1	35XMD0840	106,74
8,50	103	61	10	1	35XMD0850	106,74
8,60	103	61	10	1	35XMD0860	106,74
8,70	103	61	10	1	35XMD0870	106,74
8,80	103	61	10	1	35XMD0880	106,74
8,90	103	61	10	1	35XMD0890	106,74
9,00	103	61	10	1	35XMD0900	106,74
9,10	103	61	10	1	35XMD0910	106,74
9,20	103	61	10	1	35XMD0920	106,74
9,30	103	61	10	1	35XMD0930	106,74
9,40	103	61	10	1	35XMD0940	106,74
9,50	103	61	10	1	35XMD0950	106,74
9,60	103	61	10	1	35XMD0960	106,74
9,70	103	61	10	1	35XMD0970	106,74
9,80	103	61	10	1	35XMD0980	106,74
9,90	103	61	10	1	35XMD0990	106,74
10,00	103	61	10	1	35XMD1000	106,74
10,50	118	71	12	1	35XMD1050	144,55
11,00	118	71	12	1	35XMD1100	144,55
11,50	118	71	12	1	35XMD1150	144,55
12,00	118	71	12	1	35XMD1200	144,55
12,50	124	77	14	1	35XMD1250	196,78
13,00	124	77	14	1	35XMD1300	196,78
13,50	124	77	14	1	35XMD1350	196,78
14,00	124	77	14	1	35XMD1400	196,78
14,50	133	83	16	1	35XMD1450	243,55
15,00	133	83	16	1	35XMD1500	243,55
15,50	133	83	16	1	35XMD1550	243,55
16,00	133	83	16	1	35XMD1600	243,55

Para otras medidas consultar
Request for other sizes
Pour d'autres dimensions, nous consulter

Para brocas con canales de refrigeración, consúltennos
Request for drill bits with coolant feed
Pour forets avec trous d'huile, nous consulter



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TABLA DE APLICACIONES Y VELOCIDADES DE CORTE RECOMENDADAS

APPLICATION GUIDE AND CUTTING SPEED

TABLE D'APPLICATIONS ET VITESSE DE COUPE RECOMMANDÉ



MATERIAL / MATERIAL / MATIERE		Resistencia / Resistance Resistance N/mm	HSS-G Pág. 102	HSS "white" Pág. 109	HSSCo Pág. 110
ACEROS STEELS • ACIERS	Decoletaje Machining • Décolletage	<500	20 - 25	20 - 25	8 - 12
	Carbono <0,4% <0,4% Carbon • Carbon <0,4%	<850	15 - 20	15 - 20	4 - 6
	Acero para herramientas Steel for tools • Acier pour outils	<1.200			10 - 12
	Templado - Revenido Tempered - Quenched • Trempé - Revenu	<1.400			4 - 5
ACEROS INOXIDABLES STAINLESS STEEL ACIER INOXYDABLE	Austeníticos Cr-Ni Cr-Ni Austenitics • Cr-Ni austenitique	<850			8 - 12
	Martensíticos Cr-Mo Cr-Mo Martensitics • Cr-Mo martensitique	<1.200			4 - 6
FUNDICIÓN CAST IRON • FONTE	Fundición gris Grey cast iron • Fonte grise	<700	20 - 25		30 - 35
	Fundición dura Hard cast iron • Fonte dur	<1.000	20 - 25		20 - 25
ALUMINIO ALUMINIUM • ALUMINIUM	Puro Pure • Pure	<350	40 - 50		50 - 55
	Si < 10%	<600	40 - 50		50 - 60
	Si > 10%	<600	30 - 40	30 - 40	
	Zamak Zamak • Zamak	<600	30 - 35		40 - 45
COBRE COPPER • CUIVRE	Bronce Bronze • Bronze	<350	40 - 60		
	Cobre viruta larga Long chip copper • Cuivre coupage long	<700	40 - 60		22 - 25
	Cobre viruta corta Short chip copper • Cuivre coupage court	<700	25 - 30		22 - 25
	Latón duro Hard Brass • Laiton dur	<700	40 - 60		
	Latón tenaz Tough Brass • Laiton tenace	<700	25 - 30		
TITANIO TITANIUM • TITANE	Puro Pure • Pure	<700			
	Aleaciones de Titanio Titanium alloys • Alliages de titane	<1.200			
SINTÉTICOS PLASTICS • PLASTIQUES	Termoplásticos Thermoplastics • Thermoplastique	-			
	Duroplásticos Hard-plastics • Duroplastique	-			

20 - 25

Broca recomendada por SESATOOLS y velocidad de corte (M/Min)
SESA TOOLS recommendation and cutting speed
Foret recommandé par SESA TOOLS et vitesse de coupe

20 - 25

Buen rendimiento y velocidad de corte (M/Min)
Good performance and cutting speed (M/Min)
Bon rendement et vitesse de coup recommandée (M/Min)

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HSS-G inox Pág. 114	HSSCo inox Pág. 115	HSS -G TiN Pág. 116	HSSCo TiAlN Pág. 118	HSS-G Alu Pág. 117	K20 Pág. 119	Avance / Progression Avance
		35 - 40	35 - 40		26 - 32	D
		35 - 40	35 - 40		26 - 32	C
			18 - 20		6 - 16	B
			8 - 10		4 - 6	A
8 - 12	8 - 12	15 - 20	15 - 20			A
4 - 6	4 - 6	18 - 20	18 - 20			A
		40 - 50	40 - 50			E
		20 - 25	20 - 25			D
				60 - 80		E
				50 - 60		D
				30 - 40		D
		60 - 65		30 - 40		D
				40 - 60		E
		35 - 40		40 - 60		E
				25 - 30		E
		90 - 100		40 - 60		E
		80 - 85		25 - 30		E
	5 - 10				5 - 10	A
	5 - 6				5 - 6	A
		20 - 25			10 - 25	F
		20 - 25			10 - 15	F

**El valor indicado en la tabla es el rango de velocidades de corte recomendadas *Valores recomendados en columna "AVANCES" ver pág. 100.

**The indicated value is the cutting speed range *Recommended progression values, see the guide on 100 page.

**Les valeurs indiquées c'est le classement des vitesses de coupe recommandées *Les valeurs d'avances recommandés, aller a la page 100.

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TABLA DE AVANCES

PROGRESSIONS GUIDE • TABLE D'AVANCES

Ø (mm)	BLOQUE (mm x r) / BLOCK (mm x r) / BLOQUE (mm x r)					
	A	B	C	D	E	F
2,00	0,020	0,025	0,032	0,040	0,050	0,063
2,50	0,025	0,032	0,040	0,050	0,063	0,080
3,00	0,030	0,040	0,050	0,060	0,080	0,100
4,00	0,040	0,050	0,063	0,080	0,100	0,125
5,00	0,040	0,050	0,063	0,080	0,100	0,125
6,50	0,050	0,063	0,080	0,100	0,125	0,160
8,00	0,063	0,080	0,100	0,125	0,160	0,200
10,00	0,080	0,100	0,125	0,160	0,200	0,250
13,00	0,090	0,110	0,130	0,180	0,220	0,270
16,00	0,100	0,125	0,160	0,200	0,250	0,315
20,00	0,125	0,160	0,200	0,250	0,315	0,400
25,00	0,160	0,200	0,250	0,315	0,400	0,500
30,00	0,160	0,200	0,250	0,315	0,400	0,500
40,00	0,200	0,250	0,315	0,400	0,500	0,630
50,00	0,250	0,315	0,400	0,500	0,630	0,800
63,00	0,315	0,400	0,500	0,630	0,800	1,000
80,00	0,400	0,500	0,630	0,800	1,000	1,125

Los valores de la tabla son orientativos y para las siguientes condiciones:

- Normas DIN 338 / 345
- Profundidad hasta 3 mm x Ø
- Refrigeración adecuada del material

Values on the guide are orientatives for the next conditions:

- DIN 338 / 345 rules
- Maximum depth 3 mm x Ø
- Adequate cooling for the material

Les valeurs de la table sont orientatives pour les suivant conditions:

- Normes DIN 338 / 345
- Profondeur maximale 3 mm x Ø
- Réfrigération adéquate pour le matériel

CÁLCULO DE LAS R.P.M. R.P.M. CALCULATION • CALCUL DES R.P.M.

$$R.P.M. = \frac{V_c \times 1.000}{\pi \times \varnothing} \longrightarrow R.P.M. = \frac{20 \times 1.000}{3,1416 \times 10} = \frac{20.000}{31,416} = 641,84$$

PRINCIPALES MATERIALES DE FABRICACIÓN DE BROCAS

DRILL BIT MANUFACTURING MAIN MATERIALS

PRINCIPALES MATÉRIAUX DE FABRICATION DES FORETS

Denominación Name / Nom	N° MATERIAL	COMPOSICIÓN % COMPOSITION % / COMPOSITION %								ID. INTERNACIONAL / ID. IMINTERNATIONAL / ID. INTERNATIONALE					
		C	Si	Mn	Cr	Mo	V	W	Co	USA (AISI)	Alemania (DIN)	Francia (AFNOR. NF)	Italia (UNI)	G. B. (BS)	España (UNE)
HSS-G	1.3343	0,91	0,30	0,30	4,20	5,00	2,00	6,50	-	M2	S6-5-2	Z85WDCV	HS 6-5-2	BM2	F 5603
HSS-CO 5%	1.3243	0,91	0,30	0,30	4,20	5,00	2,00	6,50	4,75	M35	S6-5-2-5	Z85WDKCV	HS 5-2-5	-	F 5613
HSS-CO 8%	1.3247	1,08	0,40	0,30	4,00	9,50	1,20	1,50	8,00	M42	S2-10-1-8	ZII0DKCVV	HS 2-9-1-8	BM42	F 5617
MD		92, 0WC-6,0Co-2,0TiC y TA(Nb)C								-					

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TABLA DE CONVERSIÓN DE DUREZAS Y RESISTENCIA A LA TRACCIÓN

HARDNESS CONVERSION GUIDE • TABLE DE CONVERSION DES DURÉTÉS

VICKERS	BRINELL	ROCKWELL		Resistencia a la tracción <i>Tensile Strength Resistance à la traction</i>	
		HRB	HRC	Rm	
HV 30	HB 30			N/mm ²	KP/mm ²
80	80	36,40	-	270	28
85	85	42,40	-	290	30
90	90	47,40	-	310	32
95	95	52,00	-	320	33
100	100	56,40	-	340	35
105	105	60,00	-	360	37
110	110	63,40	-	380	39
115	115	66,40	-	390	40
120	120	69,40	-	410	42
125	125	72,00	-	420	43
130	130	74,40	-	440	45
135	135	76,40	-	460	47
140	140	78,40	-	470	48
145	145	80,40	-	490	50
150	150	82,20	-	500	51
155	155	83,80	-	520	53
160	160	85,40	-	540	55
165	165	86,80	-	550	56
170	170	88,20	-	570	58
175	175	89,60	-	590	60
180	180	90,80	-	600	62
185	185	91,80	-	620	63
190	190	93,00	-	640	65
195	195	94,00	-	660	67
200	200	95,00	-	670	68
205	205	95,80	-	680	70
210	210	96,60	-	710	72
215	215	97,60	-	720	73
220	220	98,20	-	730	75
225	225	99,00	-	750	77
230	230	-	19,20	760	78
235	235	-	20,20	780	80
240	240	-	21,20	800	82
245	245	-	22,10	820	84
250	250	-	23,00	830	85
255	255	-	23,80	850	87
260	260	-	24,60	870	89
265	265	-	25,40	880	90
270	270	-	26,20	900	92
275	275	-	26,90	920	94
280	280	-	27,60	940	96
285	285	-	28,30	950	97
290	290	-	29,00	970	99
295	295	-	29,60	990	101
300	300	-	30,30	1.010	103
310	310	-	31,50	1.040	106
320	320	-	32,70	1.080	110
330	330	-	33,80	1.110	113

VICKERS	BRINELL	ROCKWELL		Resistencia a la tracción <i>Tensile Strength Resistance à la traction</i>	
		HRB	HRC	Rm	
HV 30	HB 30			N/mm ²	KP/mm ²
340	340	-	34,90	1.140	117
350	350	-	36,00	1.170	120
360	359	-	37,00	1.200	123
370	368	-	38,00	1.230	126
380	376	-	38,90	1.260	129
390	385	-	39,80	1.290	132
400	392	-	40,70	1.320	135
410	400	-	41,50	1.350	138
420	408	-	42,40	1.380	144
440	423	-	44,00	1.430	146
450	430	-	44,80	1.460	149
460	-	-	45,60	-	-
470	-	-	46,30	-	-
480	-	-	47,00	-	-
490	-	-	47,70	-	-
500	-	-	48,30	-	-
510	-	-	49,10	-	-
520	-	-	49,70	-	-
530	-	-	50,40	-	-
540	-	-	51,00	-	-
550	-	-	51,60	-	-
560	-	-	52,20	-	-
570	-	-	52,80	-	-
580	-	-	53,30	-	-
590	-	-	53,90	-	-
600	-	-	54,40	-	-
610	-	-	55,00	-	-
620	-	-	55,50	-	-
630	-	-	56,00	-	-
640	-	-	56,50	-	-
650	-	-	57,00	-	-
660	-	-	57,50	-	-
670	-	-	58,00	-	-
680	-	-	58,50	-	-
690	-	-	59,00	-	-
700	-	-	59,50	-	-
720	-	-	60,40	-	-
740	-	-	61,20	-	-
760	-	-	62,00	-	-
780	-	-	62,80	-	-
800	-	-	63,60	-	-
820	-	-	64,30	-	-
840	-	-	65,00	-	-
860	-	-	65,70	-	-
880	-	-	66,30	-	-
900	-	-	66,90	-	-
920	-	-	67,50	-	-
940	-	-	68,00	-	-

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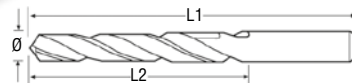
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DIN-338 N HSS-G ALTO RENDIMIENTO: BLISTER RÍGIDO
 DIN 338 N HSS-G HIGH PERFORMANCE: RIGID PLASTIC BLISTER
 DIN 338 N HSS-G GRAND RENDEMENT: BLISTER DE PLASTIQUE RIGIDE



Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
1,00	34	12	2	1460100BL	1,02
1,50	40	18	2	1460150BL	1,01
2,00	49	24	2	1460200BL	1,21
2,50	57	30	2	1460250BL	1,09
3,00	61	33	2	1460300BL	1,18
3,50	70	39	2	1460350BL	1,20
4,00	75	43	2	1460400BL	1,22
4,50	80	47	2	1460450BL	1,54
5,00	86	52	2	1460500BL	1,65
5,50	93	57	2	1460550BL	2,04
6,00	93	57	2	1460600BL	2,14
6,50	101	63	1	1460650BL	2,92
7,00	109	69	1	1460700BL	3,31
7,50	109	69	1	1460750BL	3,63
8,00	117	75	1	1460800BL	4,11
8,50	117	75	1	1460850BL	4,62
9,00	125	81	1	1460900BL	5,13
9,50	125	81	1	1460950BL	6,01
10,00	133	87	1	1461000BL	6,32
10,50	133	87	1	1461050BL	7,14
11,00	142	94	1	1461100BL	7,83
11,50	142	94	1	1461150BL	8,67
12,00	151	101	1	1461200BL	9,39
12,50	151	101	1	1461250BL	11,25
13,00	151	101	1	1461300BL	10,84

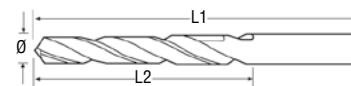
BROCAS PARA METAL MANGO CILÍNDRICO

STRAIGHT SHANK METAL DRILL BITS • FORETS METAL QUEUE CYLINDRIQUE

DIN 338 N HSS-G ALTO RENDIMIENTO

DIN 338 N HSS-G HIGH PERFORMANCE

DIN 338 N HSS-G GRAND RENDEMENT



Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
0,20	19	2,5	10	1450020	2,33
0,25	19	3	10	1450025	2,33
0,30	19	3	10	1450030	2,33
0,35	19	3	10	1450035	2,34
0,40	20	5	10	1450040	2,33
0,45	22	6	10	1450045	2,34
0,50	22	6	10	1450050	1,94
0,55	24	7	10	1450055	2,34
0,60	24	7	10	1450060	2,33
0,65	26	8	10	1450065	2,34
0,70	28	9	10	1450070	2,33
0,75	28	9	10	1450075	2,33
0,80	30	10	10	1450080	2,33
0,85	30	10	10	1450085	2,34
0,90	32	11	10	1450090	2,33
0,95	32	11	10	1450095	2,34
1,00	34	12	10	1450100	0,82
1,05	34	12	10	1450105	0,93
1,10	36	14	10	1450110	0,93
1,15	36	14	10	1450115	0,93
1,20	38	16	10	1450120	0,93
1,25	38	16	10	1450125	0,82
1,30	38	16	10	1450130	0,93
1,35	40	18	10	1450135	0,93
1,40	40	18	10	1450140	0,93
1,45	40	18	10	1450145	0,93
1,50	40	18	10	1450150	0,82
1,55	43	20	10	1450155	0,93
1,60	43	20	10	1450160	0,93
1,65	43	20	10	1450165	0,93
1,70	43	20	10	1450170	0,93
1,75	46	22	10	1450175	0,82
1,80	46	22	10	1450180	0,93
1,85	46	22	10	1450185	0,93
1,90	46	22	10	1450190	0,93
1,95	49	24	10	1450195	0,93
2,00	49	24	10	1450200	0,75
2,05	49	24	10	1450205	0,88
2,10	49	24	10	1450210	0,88
2,15	53	27	10	1450215	0,88
2,20	53	27	10	1450220	0,88
2,25	53	27	10	1450225	0,77
2,30	53	27	10	1450230	0,88

Ø (mm)	Uds. / Pcs.	Cod.	€/Unid.
0,20	-	1460020	-
0,25	-	1460025	-
0,30	-	1460030	-
0,35	-	1460035	-
0,40	-	1460040	-
0,45	-	1460045	-
0,50	-	1460050	-
0,55	-	1460055	-
0,60	-	1460060	-
0,65	-	1460065	-
0,70	-	1460070	-
0,75	-	1460075	-
0,80	-	1460080	-
0,85	-	1460085	-
0,90	-	1460090	-
0,95	-	1460095	-
1,00	2	1460100	0,98
1,05	2	1460105	1,10
1,10	2	1460110	1,10
1,15	2	1460115	1,10
1,20	2	1460120	1,10
1,25	2	1460125	0,98
1,30	2	1460130	1,10
1,35	2	1460135	1,10
1,40	2	1460140	1,10
1,45	2	1460145	1,10
1,50	2	1460150	0,97
1,55	2	1460155	1,10
1,60	2	1460160	1,10
1,65	2	1460165	1,10
1,70	2	1460170	1,10
1,75	2	1460175	1,02
1,80	2	1460180	1,10
1,85	2	1460185	1,10
1,90	2	1460190	1,10
1,95	2	1460195	1,10
2,00	2	1460200	1,10
2,05	2	1460205	1,04
2,10	2	1460210	1,04
2,15	2	1460215	1,04
2,20	2	1460220	1,04
2,25	2	1460225	0,99
2,30	2	1460230	1,04

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

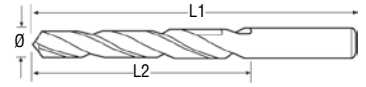
HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

DIN 338 N HSS-G ALTO RENDIMIENTO

DIN 338 N HSS-G HIGH PERFORMANCE
DIN 338 N HSS-G GRAND RENDEMENT



Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
2,35	53	27	10	1450235	0,88
2,40	57	30	10	1450240	0,88
2,45	57	30	10	1450245	0,88
2,50	57	30	10	1450250	0,80
2,55	57	30	10	1450255	0,96
2,60	57	30	10	1450260	0,96
2,65	57	30	10	1450265	0,95
2,70	61	33	10	1450270	0,96
2,75	61	33	10	1450275	0,85
2,80	61	33	10	1450280	0,96
2,85	61	33	10	1450285	0,96
2,90	61	33	10	1450290	0,96
2,95	61	33	10	1450295	0,96
3,00	61	33	10	1450300	0,71
3,10	65	36	10	1450310	0,99
3,20	65	36	10	1450320	0,99
3,25	65	36	10	1450325	0,90
3,30	65	36	10	1450330	0,99
3,40	70	39	10	1450340	1,08
3,50	70	39	10	1450350	0,92
3,60	70	39	10	1450360	1,14
3,70	70	39	10	1450370	1,14
3,75	70	39	10	1450375	1,01
3,80	75	43	10	1450380	1,14
3,90	75	43	10	1450390	1,14
4,00	75	43	10	1450400	0,95
4,10	75	43	10	1450410	1,28
4,20	75	43	10	1450420	1,28
4,25	75	43	10	1450425	1,18
4,30	80	47	10	1450430	1,28
4,40	80	47	10	1450440	1,28
4,50	80	47	10	1450450	1,18
4,60	80	47	10	1450460	1,50
4,70	80	47	10	1450470	1,50
4,75	80	47	10	1450475	1,49
4,80	86	52	10	1450480	1,50
4,90	86	52	10	1450490	1,50
5,00	86	52	10	1450500	1,25
5,10	86	52	10	1450510	1,79
5,20	86	52	10	1450520	1,79
5,25	86	52	10	1450525	1,61
5,30	86	52	10	1450530	1,79
5,40	93	57	10	1450540	1,79

Ø (mm)	Uds. / Pcs.	Cod.	€/Unid.
2,35	2	1460235	1,04
2,40	2	1460240	1,04
2,45	2	1460245	0,99
2,50	2	1460250	0,99
2,55	2	1460255	1,13
2,60	2	1460260	1,14
2,65	2	1460265	1,13
2,70	2	1460270	1,14
2,75	2	1460275	1,00
2,80	2	1460280	1,14
2,85	2	1460285	1,14
2,90	2	1460290	1,14
2,95	2	1460295	1,13
3,00	1	1460300	1,07
3,10	1	1460310	1,17
3,20	1	1460320	1,17
3,25	1	1460325	1,07
3,30	1	1460330	1,17
3,40	1	1460340	1,28
3,50	1	1460350	1,09
3,60	1	1460360	1,35
3,70	1	1460370	1,35
3,75	1	1460375	1,19
3,80	1	1460380	1,35
3,90	1	1460390	1,35
4,00	1	1460400	1,11
4,10	1	1460410	1,50
4,20	1	1460420	1,50
4,25	1	1460425	1,39
4,30	1	1460430	1,50
4,40	1	1460440	1,50
4,50	1	1460450	1,39
4,60	1	1460460	1,78
4,70	1	1460470	1,78
4,75	1	1460475	1,76
4,80	1	1460480	1,78
4,90	1	1460490	1,78
5,00	1	1460500	1,37
5,10	1	1460510	1,97
5,20	1	1460520	1,97
5,25	1	1460525	1,78
5,30	1	1460530	1,97
5,40	1	1460540	1,97

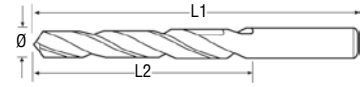
BROCAS PARA METAL MANGO CILÍNDRICO

STRAIGHT SHANK METAL DRILL BITS • FORETS METAL QUEUE CYLINDRIQUE

DIN 338 N HSS-G ALTO RENDIMIENTO

DIN 338 N HSS-G HIGH PERFORMANCE

DIN 338 N HSS-G GRAND RENDEMENT



Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
5,50	93	57	10	1450550	1,68
5,60	93	57	10	1450560	2,05
5,70	93	57	10	1450570	2,05
5,75	93	57	10	1450575	1,99
5,80	93	57	10	1450580	2,05
5,90	93	57	10	1450590	2,05
6,00	93	57	10	1450600	1,74
6,10	101	63	10	1450610	2,35
6,20	101	63	10	1450620	2,35
6,25	101	63	10	1450625	2,06
6,30	101	63	10	1450630	2,35
6,40	101	63	10	1450640	2,35
6,50	101	63	10	1450650	2,13
6,60	101	63	10	1450660	2,83
6,70	101	63	10	1450670	2,83
6,75	109	69	10	1450675	2,58
6,80	109	69	10	1450680	2,83
6,90	109	69	10	1450690	2,83
7,00	109	69	10	1450700	2,50
7,10	109	69	10	1450710	3,51
7,20	109	69	10	1450720	3,51
7,25	109	69	10	1450725	3,08
7,30	109	69	10	1450730	3,37
7,40	109	69	10	1450740	3,37
7,50	109	69	10	1450750	2,87
7,60	117	75	10	1450760	3,74
7,70	117	75	10	1450770	3,74
7,75	117	75	10	1450775	3,62
7,80	117	75	10	1450780	3,84
7,90	117	75	10	1450790	3,84
8,00	117	75	10	1450800	3,07
8,10	117	75	10	1450810	4,37
8,20	117	75	10	1450820	4,37
8,25	117	75	10	1450825	3,92
8,30	117	75	10	1450830	4,30
8,40	117	75	10	1450840	4,30
8,50	117	75	10	1450850	3,82
8,60	125	81	5	1450860	4,87
8,70	125	81	5	1450870	4,87
8,75	125	81	5	1450875	4,50
8,80	125	81	5	1450880	4,87
8,90	125	81	5	1450890	4,87
9,00	125	81	5	1450900	4,23

Ø (mm)	Uds. / Pcs.	Cod.	€/Unid.
5,50	1	1460550	1,85
5,60	1	1460560	2,05
5,70	1	1460570	2,25
5,75	1	1460575	2,19
5,80	1	1460580	2,25
5,90	1	1460590	2,25
6,00	1	1460600	1,91
6,10	1	1460610	2,58
6,20	1	1460620	2,58
6,25	1	1460625	2,27
6,30	1	1460630	2,58
6,40	1	1460640	2,58
6,50	1	1460650	2,34
6,60	1	1460660	3,12
6,70	1	1460670	3,12
6,75	1	1460675	2,84
6,80	1	1460680	3,12
6,90	1	1460690	3,12
7,00	1	1460700	2,76
7,10	1	1460710	3,86
7,20	1	1460720	3,86
7,25	1	1460725	3,39
7,30	1	1460730	3,72
7,40	1	1460740	3,72
7,50	1	1460750	3,16
7,60	1	1460760	4,12
7,70	1	1460770	4,12
7,75	1	1460775	3,98
7,80	1	1460780	4,22
7,90	1	1460790	4,22
8,00	1	1460800	3,38
8,10	1	1460810	4,82
8,20	1	1460820	4,82
8,25	1	1460825	4,31
8,30	1	1460830	4,72
8,40	1	1460840	4,72
8,50	1	1460850	4,20
8,60	1	1460860	5,36
8,70	1	1460870	5,36
8,75	1	1460875	4,94
8,80	1	1460880	5,36
8,90	1	1460890	5,36
9,00	1	1460900	4,65

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

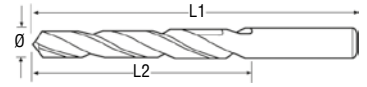
METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

DIN 338 N HSS-G ALTO RENDIMIENTO

DIN 338 N HSS-G HIGH PERFORMANCE

DIN 338 N HSS-G GRAND RENDEMENT



Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
9,10	125	81	5	1450910	5,91
9,20	125	81	5	1450920	5,91
9,25	125	81	5	1450925	5,40
9,30	125	81	5	1450930	5,91
9,40	125	81	5	1450940	5,91
9,50	125	81	5	1450950	4,95
9,60	133	87	5	1450960	6,29
9,70	133	87	5	1450970	6,29
9,75	133	87	5	1450975	5,84
9,80	133	87	5	1450980	6,29
9,90	133	87	5	1450990	6,29
10,00	133	87	5	1451000	5,00
10,10	133	87	5	1451010	8,89
10,20	133	87	5	1451020	8,89
10,25	133	87	5	1451025	6,32
10,30	133	87	5	1451030	9,00
10,40	133	87	5	1451040	9,00
10,50	133	87	5	1451050	6,24
10,60	133	87	5	1451060	9,55
10,70	142	94	5	1451070	9,55
10,75	142	94	5	1451075	7,02
10,80	142	94	5	1451080	10,66
10,90	142	94	5	1451090	10,66
11,00	142	94	5	1451100	6,83
11,10	142	94	5	1451110	10,66
11,20	142	94	5	1451120	10,66
11,25	142	94	5	1451125	7,78
11,30	142	94	5	1451130	10,75
11,40	142	94	5	1451140	10,75
11,50	142	94	5	1451150	7,58
11,60	142	94	5	1451160	10,75
11,70	142	94	5	1451170	10,75
11,75	142	94	5	1451175	8,11
11,80	142	94	5	1451180	10,92
11,90	151	101	5	1451190	10,92
12,00	151	101	5	1451200	7,96
12,10	151	101	5	1451210	11,74
12,20	151	101	5	1451220	11,74
12,25	151	101	5	1451225	9,63
12,30	151	101	5	1451230	11,74
12,40	151	101	5	1451240	11,74
12,50	151	101	5	1451250	9,83
12,60	151	101	5	1451260	12,52

Ø (mm)	Uds. / Pcs.	Cod.	€/Unid.
9,10	1	1460910	6,50
9,20	1	1460920	6,50
9,25	1	1460925	5,95
9,30	1	1460930	6,50
9,40	1	1460940	6,50
9,50	1	1460950	5,45
9,60	1	1460960	6,92
9,70	1	1460970	6,92
9,75	1	1460975	6,43
9,80	1	1460980	6,92
9,90	1	1460990	6,92
10,00	1	1461000	5,20
10,10	1	1461010	9,25
10,20	1	1461020	9,25
10,25	1	1461025	6,58
10,30	1	1461030	9,36
10,40	1	1461040	9,36
10,50	1	1461050	6,49
10,60	1	1461060	9,93
10,70	1	1461070	9,93
10,75	1	1461075	7,30
10,80	1	1461080	11,09
10,90	1	1461090	11,09
11,00	1	1461100	7,11
11,10	1	1461110	11,09
11,20	1	1461120	11,09
11,25	1	1461125	8,09
11,30	1	1461130	11,18
11,40	1	1461140	11,18
11,50	1	1461150	7,88
11,60	1	1461160	11,18
11,70	1	1461170	11,19
11,75	1	1461175	8,44
11,80	1	1461180	11,35
11,90	1	1461190	11,35
12,00	1	1461200	8,28
12,10	1	1461210	12,21
12,20	1	1461220	12,21
12,25	1	1461225	10,02
12,30	1	1461230	12,21
12,40	1	1461240	12,21
12,50	1	1461250	10,22
12,60	1	1461260	13,03

BROCAS PARA METAL MANGO CILÍNDRICO

STRAIGHT SHANK METAL DRILL BITS • FORETS METAL QUEUE CYLINDRIQUE

DIN 338 N HSS-G ALTO RENDIMIENTO

DIN 338 N HSS-G HIGH PERFORMANCE

DIN 338 N HSS-G GRAND RENDEMENT



Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
12,70	151	101	5	1451270	12,52
12,75	151	101	5	1451275	10,15
12,80	151	101	5	1451280	13,01
12,90	151	101	5	1451290	13,01
13,00	151	101	5	1451300	9,47
13,25	160	108	1	111325	14,62
13,50	160	108	1	111350	14,28
13,75	160	108	1	111375	14,71
14,00	160	108	1	111400	14,24
14,25	169	114	1	111425	17,64
14,50	169	114	1	111450	16,59
14,75	169	114	1	111475	17,64
15,00	169	114	1	111500	18,20
15,25	178	120	1	111525	21,84
15,50	178	120	1	111550	20,68
15,75	178	120	1	111575	23,30
16,00	178	120	1	111600	19,78
16,25	184	125	1	111625	26,66
16,50	184	125	1	111650	24,72
16,75	184	125	1	111675	27,97
17,00	184	125	1	111700	24,20
17,25	191	130	1	111725	30,94
17,50	191	130	1	111750	28,18
17,75	191	130	1	111775	30,94
18,00	191	130	1	111800	28,39
18,25	198	135	1	111825	34,58
18,50	198	135	1	111850	31,33
18,75	198	135	1	111875	36,93
19,00	198	135	1	111900	31,61
19,25	205	140	1	111925	41,31
19,50	205	140	1	111950	37,83
19,75	205	140	1	111975	41,31
20,00	205	140	1	112000	39,13

Ø (mm)	Uds. / Pcs.	Cod.	€/Unid.
12,70	1	1461270	13,03
12,75	1	1461275	10,55
12,80	1	1461280	13,01
12,90	1	1461290	13,53
13,00	1	1461300	9,85

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

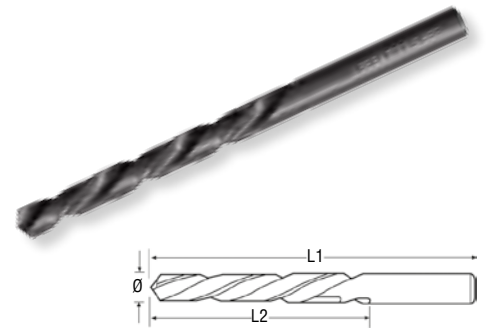
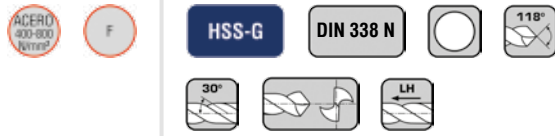
HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

DIN 338 N HSS-G, IZQUIERDAS

DIN 338 N HSS-G, LEFT HAND • DIN 338 N HSS-G, A GAUCHE



Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
2,00	49	24	10	1450200I	3,49
2,50	57	30	10	1450250I	3,61
3,00	61	33	10	1450300I	3,43
3,25	65	36	10	1450325I	4,24
3,50	70	39	10	1450350I	4,52
4,00	75	43	10	1450400I	4,33
4,50	80	47	10	1450450I	5,54
5,00	86	52	10	1450500I	5,65
5,50	93	57	10	1450550I	7,17
6,00	93	57	10	1450600I	7,95
6,50	101	63	10	1450650I	9,03
7,00	109	69	10	1450700I	10,95
7,50	109	69	10	1450750I	13,00
8,00	117	75	10	1450800I	13,90
8,50	117	75	10	1450850I	16,07
9,00	125	81	10	1450900I	18,48
9,50	125	81	10	1450950I	21,00
10,00	133	87	10	1451000I	22,39

Ø (mm)	Uds. / Pcs.	Cod.	€/Unid.
2,00	2	1460200I	4,12
2,50	2	1460250I	4,26
3,00	1	1460300I	4,05
3,25	1	1460325I	5,01
3,50	1	1460350I	5,33
4,00	1	1460400I	5,11
4,50	1	1460450I	6,53
5,00	1	1460500I	6,22
5,50	1	1460550I	7,88
6,00	1	1460600I	8,74
6,50	1	1460650I	9,93
7,00	1	1460700I	12,05
7,50	1	1460750I	14,29
8,00	1	1460800I	15,29
8,50	1	1460850I	17,67
9,00	1	1460900I	20,32
9,50	1	1460950I	22,27
10,00	1	1461000I	23,73

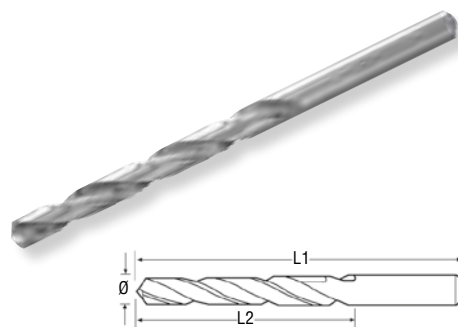
BROCAS PARA METAL MANGO CILÍNDRICO

STRAIGHT SHANK METAL DRILL BITS • FORETS METAL QUEUE CYLINDRIQUE

DIN 338 N HSS WHITE

DIN 338 N HSS WHITE

DIN 338 N HSS WHITE



Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
1.00	34	12	10	1550100	0,32
1.25	38	16	10	1550125	0,33
1.50	40	18	10	1550150	0,32
1.75	46	22	10	1550175	0,33
2.00	49	24	10	1550200	0,32
2.25	53	27	10	1550225	0,33
2.50	57	30	10	1550250	0,32
2.75	61	33	10	1550275	0,40
3.00	61	33	10	1550300	0,40
3.25	65	36	10	1550325	0,44
3.50	70	39	10	1550350	0,44
3.75	70	39	10	1550375	0,50
4.00	75	43	10	1550400	0,50
4.25	75	43	10	1550425	0,63
4.50	80	47	10	1550450	0,63
4.75	80	47	10	1550475	0,76
5.00	86	52	10	1550500	0,76
5.25	86	52	10	1550525	0,97
5.50	93	57	10	1550550	0,97
5.75	93	57	10	1550575	1,11
6.00	93	57	10	1550600	1,11
6.25	101	63	10	1550625	1,28

Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
6.50	101	63	10	1550650	1,28
6.75	109	69	10	1550675	1,49
7.00	109	69	10	1550700	1,49
7.25	109	69	10	1550725	1,68
7.50	109	69	10	1550750	1,68
7.75	117	75	10	1550775	2,16
8.00	117	75	10	1550800	2,16
8.25	117	75	10	1550825	2,33
8.50	117	75	10	1550850	2,33
8.75	125	81	10	1550875	2,77
9.00	125	81	10	1550900	2,77
9.25	125	81	10	1550925	3,02
9.50	125	81	10	1550950	3,02
9.75	133	87	5	1550975	3,55
10.00	133	87	5	1551000	3,55
10.50	133	87	5	1551050	3,88
11.00	142	94	5	1551100	4,51
11.50	142	94	5	1551150	4,93
12.00	151	101	5	1551200	5,65
12.50	151	101	5	1551250	6,17
13.00	151	101	5	1551300	6,63

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

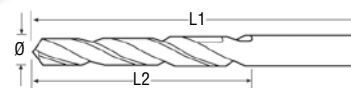
DISPLAYS
DISPLAYS • DISPLAYS

DIN-338 N HSS-CO: BLISTER RÍGIDO
 DIN 338 N HSS-CO: RIGID PLASTIC BLISTER
 DIN 338 N HSS-CO: BLISTER DE PLASTIQUE RIGIDE



HSS-CO 5%

DIN 338 N



Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
1,00	34	12	2	1430100BL	1,87
1,50	40	18	2	1430150BL	1,76
2,00	49	24	2	1430200BL	1,75
2,50	57	30	2	1430250BL	1,82
3,00	61	33	2	1430300BL	1,81
3,50	70	39	2	1430350BL	2,26
4,00	75	43	2	1430400BL	2,35
4,50	80	47	2	1430450BL	2,78
5,00	86	52	2	1430500BL	2,80
5,50	93	57	2	1430550BL	3,51
6,00	93	57	2	1430600BL	3,51
6,50	101	63	1	1430650BL	4,38
7,00	109	69	1	1430700BL	4,76
7,50	109	69	1	1430750BL	5,24
8,00	117	75	1	1430800BL	6,34
8,50	117	75	1	1430850BL	6,72
9,00	125	81	1	1430900BL	8,01
9,50	125	81	1	1430950BL	8,97
10,00	133	87	1	1431000BL	9,35
10,50	133	87	1	1431050BL	12,11
11,00	142	94	1	1431100BL	13,54
11,50	142	94	1	1431150BL	16,95
12,00	151	101	1	1431200BL	17,71
12,50	151	101	1	1431250BL	22,72
13,00	151	101	1	1431300BL	22,79

BROCAS PARA METAL MANGO CILÍNDRICO

STRAIGHT SHANK METAL DRILL BITS • FORETS METAL QUEUE CYLINDRIQUE

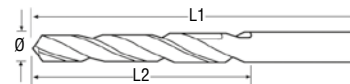
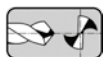
DIN 338 N HSS-CO

DIN 338 N HSS-CO • DIN 338 N HSS-CO



HSS-CO 5%

DIN 338 N



Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
0,30	19	3	10	140030	3,49
0,40	20	5	10	140040	3,49
0,50	22	6	10	140050	2,79
0,60	24	7	10	140060	2,79
0,70	28	9	10	140070	2,79
0,75	28	9	10	140075	2,52
0,80	30	10	10	140080	2,79
0,90	32	11	10	140090	2,79
1,00	34	12	10	140100	1,40
1,10	36	14	10	140110	1,60
1,20	38	16	10	140120	1,60
1,25	38	16	10	140125	1,50
1,30	38	16	10	140130	1,60
1,40	40	18	10	140140	1,60
1,50	40	18	10	140150	1,32
1,60	43	20	10	140160	2,25
1,70	43	20	10	140170	2,25
1,75	46	22	10	140175	1,63
1,80	46	22	10	140180	2,25
1,90	46	22	10	140190	2,25
2,00	49	24	10	140200	1,31
2,10	49	24	10	140210	1,86
2,20	53	27	10	140220	1,86
2,25	53	27	10	140225	1,70
2,30	53	27	10	140230	1,86
2,40	57	30	10	140240	1,86
2,50	57	30	10	140250	1,36
2,60	57	30	10	140260	1,84
2,70	61	33	10	140270	1,84
2,75	61	33	10	140275	1,71
2,80	61	33	10	140280	1,84
2,90	61	33	10	140290	1,84
3,00	61	33	10	140300	1,36
3,10	65	36	10	140310	1,68
3,20	65	36	10	140320	1,68
3,25	65	36	10	140325	1,64
3,30	65	36	10	140330	1,85
3,40	70	39	10	140340	1,85
3,50	70	39	10	140350	1,70
3,60	70	39	10	140360	2,18
3,70	70	39	10	140370	2,18
3,75	70	39	10	140375	1,96
3,80	75	43	10	140380	2,18
3,90	75	43	10	140390	2,18
4,00	75	43	10	140400	1,75
4,10	75	43	10	140410	2,21
4,20	75	43	10	140420	2,21
4,25	75	43	10	140425	2,01

Ø (mm)	Uds. / Pcs.	Cod.	€/Unid.
0,30	-	-	-
0,40	-	-	-
0,50	-	-	-
0,60	-	-	-
0,70	-	-	-
0,75	-	-	-
0,80	-	-	-
0,90	-	-	-
1,00	2	1430100	1,70
1,10	2	1430110	1,89
1,20	2	1430120	1,90
1,25	2	1430125	1,81
1,30	2	1430130	1,89
1,40	2	1430140	1,90
1,50	2	1430150	1,60
1,60	2	1430160	2,65
1,70	2	1430170	2,65
1,75	2	1430175	1,98
1,80	2	1430180	2,65
1,90	2	1430190	2,65
2,00	2	1430200	1,59
2,10	2	1430210	2,20
2,20	2	1430220	2,20
2,25	2	1430225	2,06
2,30	2	1430230	2,20
2,40	2	1430240	2,20
2,50	2	1430250	1,66
2,60	2	1430260	2,17
2,70	2	1430270	2,17
2,75	2	1430275	2,07
2,80	2	1430280	2,17
2,90	2	1430290	2,17
3,00	1	1430300	1,65
3,10	1	1430310	1,98
3,20	1	1430320	1,98
3,25	1	1430325	2,00
3,30	1	1430330	2,18
3,40	1	1430340	2,18
3,50	1	1430350	2,06
3,60	1	1430360	2,59
3,70	1	1430370	2,58
3,75	1	1430375	2,38
3,80	1	1430380	2,58
3,90	1	1430390	2,58
4,00	1	1430400	2,14
4,10	1	1430410	2,62
4,20	1	1430420	2,62
4,25	1	1430425	2,45

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

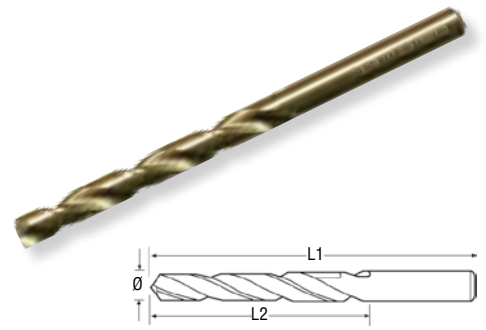
ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

DIN 338 N HSS-CO
 DIN 338 N HSS-CO • DIN 338 N HSS-CO



Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
4,30	80	47	10	140430	2,38
4,40	80	47	10	140440	2,38
4,50	80	47	10	140450	2,08
4,60	80	47	10	140460	2,38
4,70	80	47	10	140470	2,38
4,75	80	47	10	140475	2,22
4,80	86	52	10	140480	2,55
4,90	86	52	10	140490	2,55
5,00	86	52	10	140500	2,10
5,10	86	52	10	140510	2,82
5,20	86	52	10	140520	2,82
5,25	86	52	10	140525	2,53
5,30	86	52	10	140530	3,02
5,40	93	57	10	140540	3,02
5,50	93	57	10	140550	2,80
5,60	93	57	10	140560	3,25
5,70	93	57	10	140570	3,25
5,75	93	57	10	140575	3,07
5,80	93	57	10	140580	3,43
5,90	93	57	10	140590	3,43
6,00	93	57	10	140600	2,82
6,10	101	63	10	140610	3,83
6,20	101	63	10	140620	3,83
6,25	101	63	10	140625	3,49
6,30	101	63	10	140630	4,02
6,40	101	63	10	140640	4,02
6,50	101	63	10	140650	3,51
6,60	101	63	10	140660	4,51
6,70	101	63	10	140670	4,51
6,75	109	69	10	140675	4,10
6,80	109	69	10	140680	4,69
6,90	109	69	10	140690	4,69
7,00	109	69	10	140700	3,83
7,10	109	69	10	140710	5,33
7,20	109	69	10	140720	5,33
7,25	109	69	10	140725	5,05
7,30	109	69	10	140730	5,67
7,40	109	69	10	140740	5,67
7,50	109	69	10	140750	4,21
7,60	117	75	10	140760	6,58
7,70	117	75	10	140770	6,58
7,75	117	75	10	140775	6,13
7,80	117	75	10	140780	7,08
7,90	117	75	10	140790	7,08
8,00	117	75	10	140800	5,09
8,10	117	75	10	140810	7,29
8,20	117	75	10	140820	7,29
8,25	117	75	10	140825	6,11

Ø (mm)	Uds. / Pcs.	Cod.	€/Unid.
4,30	1	1430430	2,82
4,40	1	1430440	2,82
4,50	1	1430450	2,53
4,60	1	1430460	2,82
4,70	1	1430470	2,82
4,75	1	1430475	2,69
4,80	1	1430480	3,01
4,90	1	1430490	3,01
5,00	1	1430500	2,55
5,10	1	1430510	3,10
5,20	1	1430520	3,10
5,25	1	1430525	2,86
5,30	1	1430530	3,32
5,40	1	1430540	3,32
5,50	1	1430550	3,17
5,60	1	1430560	3,57
5,70	1	1430570	3,57
5,75	1	1430575	3,47
5,80	1	1430580	3,77
5,90	1	1430590	3,77
6,00	1	1430600	3,19
6,10	1	1430610	4,21
6,20	1	1430620	4,21
6,25	1	1430625	3,96
6,30	1	1430630	4,42
6,40	1	1430640	4,42
6,50	1	1430650	3,98
6,60	1	1430660	4,96
6,70	1	1430670	4,96
6,75	1	1430675	4,64
6,80	1	1430680	5,15
6,90	1	1430690	5,15
7,00	1	1430700	4,33
7,10	1	1430710	5,86
7,20	1	1430720	5,86
7,25	1	1430725	5,72
7,30	1	1430730	6,23
7,40	1	1430740	6,23
7,50	1	1430750	4,76
7,60	1	1430760	7,24
7,70	1	1430770	7,24
7,75	1	1430775	6,93
7,80	1	1430780	7,79
7,90	1	1430790	7,79
8,00	1	1430800	5,77
8,10	1	1430810	8,02
8,20	1	1430820	8,02
8,25	1	1430825	6,92

BROCAS PARA METAL MANGO CILÍNDRICO

STRAIGHT SHANK METAL DRILL BITS • FORETS METAL QUEUE CYLINDRIQUE

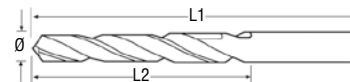
DIN 338 N HSS-CO

DIN 338 N HSS-CO • DIN 338 N HSS-CO



HSS-CO 5%

DIN 338 N



Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
8,30	117	75	10	140830	7,62
8,40	117	75	10	140840	7,62
8,50	117	75	10	140850	5,40
8,60	125	81	5	140860	8,40
8,70	125	81	5	140870	8,40
8,75	125	81	5	140875	7,59
8,80	125	81	5	140880	8,67
8,90	125	81	5	140890	8,67
9,00	125	81	5	140900	6,43
9,10	125	81	5	140910	9,00
9,20	125	81	5	140920	9,00
9,25	125	81	5	140925	8,38
9,30	125	81	5	140930	10,30
9,40	125	81	5	140940	10,30
9,50	125	81	5	140950	7,20
9,60	133	87	5	140960	11,11
9,70	133	87	5	140970	11,11
9,75	133	87	5	140975	9,96
9,80	133	87	5	140980	11,90
9,90	133	87	5	140990	11,90
10,00	133	87	5	141000	7,95
10,25	133	87	5	141025	13,37
10,50	133	87	5	141050	10,29
10,75	142	94	5	141075	15,20
11,00	142	94	5	141100	11,50
11,25	142	94	5	141125	15,63
11,50	142	94	5	141150	14,42
11,75	142	94	5	141175	19,08
12,00	151	101	5	141200	15,04
12,25	151	101	5	141225	21,14
12,50	151	101	5	141250	19,30
12,75	151	101	5	141275	21,91
13,00	151	101	5	141300	19,36
13,25	160	108	1	141325	29,77
13,50	160	108	1	141350	25,68
14,00	160	108	1	141400	23,45
14,50	169	114	1	141450	33,67
15,00	169	114	1	141500	33,94
15,50	178	120	1	141550	40,20
16,00	178	120	1	141600	40,58
16,50	184	125	1	141650	47,78
17,00	184	125	1	141700	47,78
17,50	191	130	1	141750	53,02
18,00	191	130	1	141800	56,80
18,50	198	135	1	141850	63,12
19,00	198	135	1	141900	63,12
19,50	205	140	1	141950	70,70
20,00	205	140	1	142000	73,04

Ø (mm)	Uds. / Pcs.	Cod.	€/Unid.
8,30	1	1430830	7,62
8,40	1	1430840	7,62
8,50	1	1430850	6,11
8,60	1	1430860	9,25
8,70	1	1430870	8,41
8,75	1	1430875	8,59
8,80	1	1430880	8,67
8,90	1	1430890	8,67
9,00	1	1430900	7,29
9,10	1	1430910	9,00
9,20	1	1430920	9,00
9,25	1	1430925	9,49
9,30	1	1430930	10,29
9,40	1	1430940	11,33
9,50	1	1430950	8,16
9,60	1	1430960	11,11
9,70	1	1430970	12,22
9,75	1	1430975	10,06
9,80	1	1430980	11,89
9,90	1	1430990	11,89
10,00	1	1431000	8,50
10,25	1	1431025	14,31
10,50	1	1431050	11,01
10,75	1	1431075	16,26
11,00	1	1431100	12,31
11,25	1	1431125	16,73
11,50	1	1431150	15,43
11,75	1	1431175	20,45
12,00	1	1431200	16,11
12,25	1	1431225	22,63
12,50	1	1431250	20,66
12,75	1	1431275	23,45
13,00	1	1431300	20,72

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

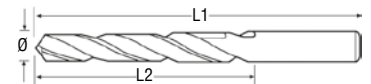
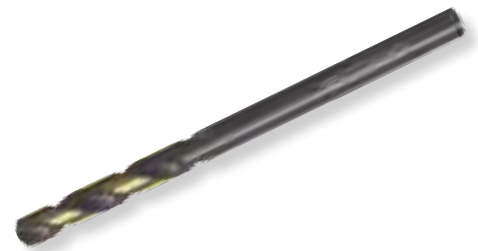
ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

DIN 338 N HSS-G INOX PROGRESIVA
DIN 338 N HSS-G PROGRESSIVE INOX
DIN 338 N HSS-G INOX PROGRESSIVE



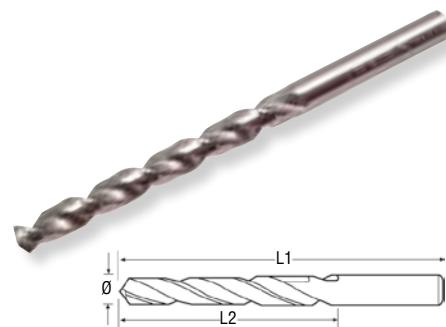
Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
1,00	34	9	10	14P0100	0,94
1,25	38	10	10	14P0125	0,96
1,50	40	11	10	14P0150	0,96
1,75	46	12	10	14P0175	1,14
2,00	49	13	10	14P0200	1,14
2,25	53	14	10	14P0225	1,14
2,50	57	16	10	14P0250	1,14
2,75	61	18	10	14P0275	1,37
3,00	61	18	10	14P0300	1,21
3,25	65	20	10	14P0325	1,69
3,50	70	22	10	14P0350	1,69
3,75	75	25	10	14P0375	1,69
4,00	75	25	10	14P0400	1,59
4,25	80	28	10	14P0425	1,92
4,50	80	28	10	14P0450	1,92
4,75	86	32	10	14P0475	2,30
5,00	86	32	10	14P0500	2,16
5,25	86	32	10	14P0525	3,06
5,50	93	36	10	14P0550	3,06
5,75	93	36	10	14P0575	3,33
6,00	93	36	10	14P0600	2,96
6,25	101	40	10	14P0625	3,79
6,50	101	40	10	14P0650	3,79
6,75	109	45	10	14P0675	4,11
7,00	109	45	10	14P0700	4,13
7,25	109	45	10	14P0725	4,86
7,50	109	45	10	14P0750	4,86
7,75	117	51	10	14P0775	5,95
8,00	117	51	10	14P0800	5,79
8,25	117	51	10	14P0825	7,20
8,50	117	51	10	14P0850	7,20
8,75	125	57	5	14P0875	7,92
9,00	125	57	5	14P0900	7,83
9,25	125	57	5	14P0925	8,74
9,50	125	57	5	14P0950	8,74
9,75	133	63	5	14P0975	9,66
10,00	133	63	5	14P1000	9,32
10,25	133	63	5	14P1025	11,30
10,50	133	63	5	14P1050	11,30
10,75	142	71	5	14P1075	11,73
11,00	142	71	5	14P1100	11,56
11,25	142	71	5	14P1125	12,49
11,50	142	71	5	14P1150	12,49
11,75	142	71	5	14P1175	13,79
12,00	151	78	5	14P1200	13,47
12,25	151	78	5	14P1225	15,45
12,50	151	78	5	14P1250	15,45
12,75	151	78	5	14P1275	17,08
13,00	151	78	5	14P1300	17,18

Ø (mm)	Uds. / Pcs.	Cod.	€/Unid.
1,00	2	14R0100	1,11
1,25	2	14R0125	1,13
1,50	2	14R0150	1,13
1,75	2	14R0175	1,35
2,00	2	14R0200	1,35
2,25	2	14R0225	1,35
2,50	2	14R0250	1,35
2,75	2	14R0275	1,61
3,00	1	14R0300	1,43
3,25	1	14R0325	2,00
3,50	1	14R0350	2,00
3,75	1	14R0375	2,00
4,00	1	14R0400	1,88
4,25	1	14R0425	2,28
4,50	1	14R0450	2,28
4,75	1	14R0475	2,71
5,00	1	14R0500	2,55
5,25	1	14R0525	3,36
5,50	1	14R0550	3,36
5,75	1	14R0575	3,66
6,00	1	14R0600	3,26
6,25	1	14R0625	4,16
6,50	1	14R0650	4,17
6,75	1	14R0675	4,52
7,00	1	14R0700	4,54
7,25	1	14R0725	5,35
7,50	1	14R0750	5,36
7,75	1	14R0775	6,55
8,00	1	14R0800	6,37
8,25	1	14R0825	7,92
8,50	1	14R0850	7,92
8,75	1	14R0875	8,71
9,00	1	14R0900	8,61
9,25	1	14R0925	9,61
9,50	1	14R0950	9,61
9,75	1	14R0975	10,62
10,00	1	14R1000	9,69
10,25	1	14R1025	11,74
10,50	1	14R1050	11,74
10,75	1	14R1075	12,20
11,00	1	14R1100	12,02
11,25	1	14R1125	12,99
11,50	1	14R1150	12,99
11,75	1	14R1175	14,34
12,00	1	14R1200	14,01
12,25	1	14R1225	16,07
12,50	1	14R1250	16,07
12,75	1	14R1275	17,77
13,00	1	14R1300	17,87

BROCAS PARA METAL MANGO CILÍNDRICO

STRAIGHT SHANK METAL DRILL BITS • FORETS METAL QUEUE CYLINDRIQUE

DIN 338 W HSS-CO PARA INOX
 DIN 338 W HSS-CO SPECIAL INOX
 DIN 338 W HSS-CO SPÉCIAL INOX



Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
1,00	34	12	10	130104100	2,44
1,50	40	18	10	130104150	2,53
2,00	49	24	10	130104200	2,57
2,50	57	30	10	130104250	2,52
3,00	61	33	10	130104003	2,67
3,25	65	36	10	130104325	3,08
3,50	70	39	10	130104350	3,12
4,00	75	43	10	130104004	3,45
4,25	75	43	10	130104425	3,93
4,50	80	47	10	130104450	3,93
5,00	86	52	10	130104005	4,29
5,25	86	52	10	130104525	5,19
5,50	93	57	10	130104550	5,24
6,00	93	57	10	130104006	5,82
6,50	101	63	10	130104650	6,92
7,00	109	69	10	130104007	8,01
7,50	109	69	10	130104750	9,39
8,00	117	75	10	130104008	10,22
8,50	117	75	10	130104850	12,42
9,00	125	81	5	130104009	13,77
9,50	125	81	5	130104950	15,25
10,00	133	87	5	130104010	16,42
10,50	133	87	5	130104105	19,14
11,00	142	94	5	130104011	19,79
11,50	142	94	5	130104115	25,33
12,00	151	101	5	130104012	24,82
12,50	151	101	5	130104125	26,07
13,00	151	101	5	130104013	30,62

Ø (mm)	Uds. / Pcs.	Cod.	€ €/Unid.
1,00	2	131104100	2,68
1,50	2	131104150	2,78
2,00	2	131104200	2,83
2,50	2	131104250	2,76
3,00	1	131104003	2,94
3,25	1	131104325	3,39
3,50	1	131104350	3,43
4,00	1	131104004	3,80
4,25	1	131104425	4,33
4,50	1	131104450	4,33
5,00	1	131104005	4,71
5,25	1	131104525	5,71
5,50	1	131104550	5,77
6,00	1	131104006	6,40
6,50	1	131104650	7,61
7,00	1	131104007	8,81
7,50	1	131104750	10,34
8,00	1	131104008	11,23
8,50	1	131104850	13,67
9,00	1	131104009	15,15
9,50	1	131104950	16,77
10,00	1	131104010	17,07
10,50	1	131104105	19,91
11,00	1	131104011	20,58
11,50	1	131104115	26,34
12,00	1	131104012	25,81
12,50	1	131104125	27,11
13,00	1	131104013	31,84

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

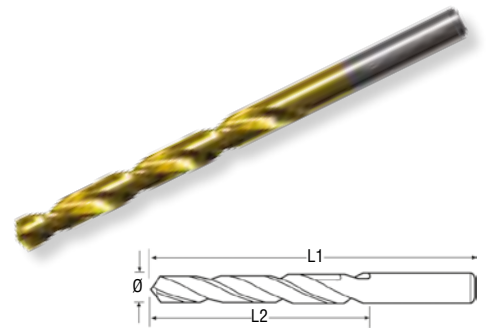
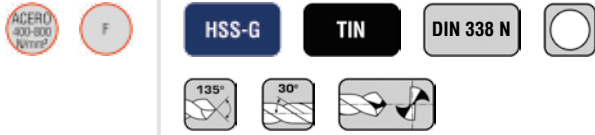
HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

DIN 338 N HSS-G+TIN

DIN 338 N HSS-G+TIN • DIN 338 N HSS-G+TIN



Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
1,00	32	12	10	130100	1,23
1,25	38	16	10	130125	1,36
1,40*	40	18	10	130140	1,36
1,50	40	18	10	130150	1,33
1,75	46	22	10	130175	1,36
1,80*	46	22	10	130180	1,36
2,00	49	24	10	130200	1,29
2,25	53	27	10	130225	1,36
2,50	57	30	10	130250	1,33
2,75	61	33	10	130275	1,36
3,00	61	33	10	130300	1,34
3,25	65	36	10	130325	1,76
3,50	70	39	10	130350	1,76
3,75	70	39	10	130375	1,95
3,80*	75	43	10	130380	1,95
4,00	75	43	10	130400	1,83
4,25	75	43	10	130425	2,19
4,50	80	47	10	130450	2,19
4,75	80	47	10	130475	2,38
5,00	86	52	10	130500	2,25
5,20*	86	52	10	130520	3,17
5,25	86	52	10	130525	3,04
5,50	93	57	10	130550	3,04
5,75	93	57	10	130575	3,42
6,00	93	57	10	130600	3,20
6,25	101	63	10	130625	4,49
6,50	101	63	10	130650	4,40
6,75	109	69	10	130675	5,49
7,00	109	69	10	130700	5,19
7,25	109	69	10	130725	5,65
7,50	109	69	10	130750	5,55
7,75	117	75	10	130775	6,38
8,00	117	75	10	130800	6,03
8,25	117	75	10	130825	7,27
8,50	117	75	10	130850	7,13
8,75	125	81	5	130875	8,36
9,00	125	81	5	130900	7,59
9,25	125	81	5	130925	9,37
9,50	125	81	5	130950	9,19
9,75	133	87	5	130975	10,48
10,00	133	87	5	131000	9,58
10,50	133	87	5	131050	11,81
11,00	142	94	5	131100	12,76
11,50	142	94	5	131150	15,12
12,00	151	101	5	131200	16,88
12,50	151	101	5	131250	18,47
13,00	151	101	5	131300	19,48

Ø (mm)	Uds. / Pcs.	Cod.	€/Unid.
1,00	2	1320100	1,49
1,25	2	1320125	1,60
1,40*	2	1320140	1,60
1,50	2	1320150	1,60
1,75	2	1320175	1,60
1,80*	2	1320180	1,60
2,00	2	1320200	1,55
2,25	2	1320225	1,60
2,50	2	1320250	1,60
2,75	2	1320275	1,60
3,00	1	1320300	1,61
3,25	1	1320325	2,13
3,50	1	1320350	2,13
3,75	1	1320375	2,29
3,80*	1	1320380	2,29
4,00	1	1320400	2,21
4,25	1	1320425	2,64
4,50	1	1320450	2,64
4,75	1	1320475	2,82
5,00	1	1320500	2,53
5,20*	1	1320520	3,49
5,25	1	1320525	3,41
5,50	1	1320550	3,41
5,75	1	1320575	3,76
6,00	1	1320600	3,58
6,25	1	1320625	4,93
6,50	1	1320650	4,93
6,75	1	1320675	6,04
7,00	1	1320700	5,82
7,25	1	1320725	6,22
7,50	1	1320750	6,22
7,75	1	1320775	7,02
8,00	1	1320800	6,76
8,25	1	1320825	7,99
8,50	1	1320850	7,99
8,75	1	1320875	9,19
9,00	1	1320900	8,51
9,25	1	1320925	10,30
9,50	1	1320950	10,31
9,75	1	1320975	11,53
10,00	1	1321000	10,15
10,50	1	1321050	12,52
11,00	1	1321100	13,53
11,50	1	1321150	16,03
12,00	1	1321200	17,90
12,50	1	1321250	19,59
13,00	1	1321300	20,65

*Hasta agotar existencias / Until end of stock / Jusqu'à épuisement des stocks

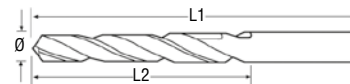
BROCAS PARA METAL MANGO CILÍNDRICO

STRAIGHT SHANK METAL DRILL BITS • FORETS METAL QUEUE CYLINDRIQUE

DIN 338 S HSS-G PARA ALUMINIO

DIN 338 S HSS-G SPECIAL ALUMINIUM

DIN 338 S HSS-G SPÉCIALE ALUMINIUM



Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
2,50	57	30	1	130107250	2,32
3,00	65	33	1	130107003	2,09
3,25	65	36	1	130107325	2,75
3,50	70	39	1	130107350	2,97
4,00	75	43	1	130107004	2,88
4,25	75	43	1	130107425	4,02
4,50	80	47	1	130107450	4,28
5,00	86	52	1	130107005	4,20
5,25	86	52	1	130107525	4,67
5,50	83	57	1	130107550	4,67
6,00	93	57	1	130107006	4,67
6,50	101	63	1	130107650	6,23
7,00	109	69	1	130107007	6,23

Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
7,50	109	69	1	130107750	8,52
8,00	117	75	1	130107008	6,91
8,50	117	75	1	130107850	8,52
9,00	125	81	1	130107009	9,14
9,50	125	81	1	130107950	9,74
10,00	133	87	1	130107010	10,20
10,50	133	87	1	130107105	12,34
11,00	142	94	1	130107011	13,85
11,50	142	94	1	130107115	15,15
12,00	151	101	1	130107012	17,63
12,50	151	101	1	130107125	19,43
13,00	151	101	1	130107013	21,36

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

DIN 338 N HSS-CO + TIALN

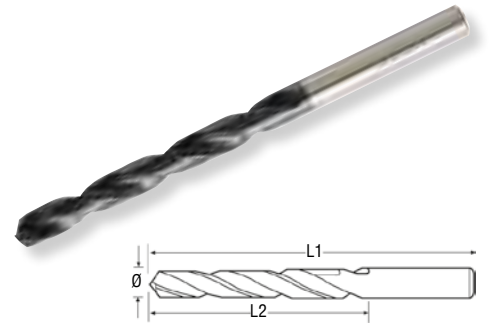
DIN 338 N HSS-CO + TIALN • DIN 338 N HSS-CO + TIALN



HSS-CO 5%

TIALN

DIN 338 N



Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
1,00	34	12	1	130126001	5,23
1,50	40	18	1	130126150	5,51
2,00	49	24	1	130126002	5,82
2,50	57	30	1	130126250	7,46
3,00	61	33	1	130126003	6,93
3,25	65	36	1	130126325	7,46
3,50	70	39	1	130126350	7,83
4,00	75	43	1	130126004	8,78
4,25	75	43	1	130126425	8,33
4,50	80	47	1	130126450	7,64
5,00	86	52	1	130126005	9,65
5,25	86	52	1	130126525	11,78
5,50	93	57	1	130126550	10,67
6,00	93	57	1	130126006	10,21

Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
6,50	101	63	1	130126650	15,21
7,00	109	69	1	130126007	16,70
7,50	109	69	1	130126750	19,62
8,00	117	75	1	130126008	19,45
8,50	117	75	1	130126850	21,79
9,00	125	81	1	130126009	25,44
9,50	125	81	1	130126950	26,90
10,00	133	87	1	130126010	28,68
10,50	133	87	1	130126105	37,49
11,00	142	94	1	130126011	38,28
11,50	142	94	1	130126115	39,77
12,00	151	101	1	130126012	48,40
12,50	151	101	1	130126125	52,37
13,00	151	101	1	130126013	52,20

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

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THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

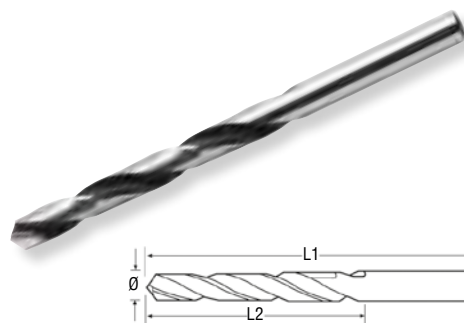
DISPLAYS
DISPLAYS • DISPLAYS

BROCAS PARA METAL MANGO CILÍNDRICO

STRAIGHT SHANK METAL DRILL BITS • FORETS METAL QUEUE CYLINDRIQUE

K20 DIN 338 N HSS-MD

K20 DIN 338 N HSS-HM • K20 DIN N 338 HSS-HM



Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
3,00	61	33	1	16M0300	18,24
3,50	70	39	1	16M0350	18,24
4,00	75	43	1	16M0400	18,24
4,50	80	47	1	16M0450	18,24
5,00	86	52	1	16M0500	18,24
5,50	93	57	1	16M0550	18,24
6,00	93	57	1	16M0600	19,50
6,50	101	63	1	16M0650	21,84
7,00	109	69	1	16M0700	24,18
7,50	109	69	1	16M0750	25,84
8,00	117	75	1	16M0800	27,09

Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
8,50	117	75	1	16M0850	28,84
9,00	125	81	1	16M0900	29,19
9,50	125	81	1	16M0950	32,09
10,00	133	87	1	16M1000	34,69
10,50	133	87	1	16M1050	43,21
11,00	142	94	1	16M1100	46,90
11,50	142	94	1	16M1150	49,69
12,00	151	101	1	16M1200	53,59
12,50	151	101	1	16M1250	57,43
13,00	151	101	1	16M1300	61,53
14,00	160	108	1	16M1400	69,73

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

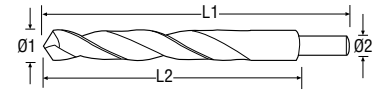
HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

DIN 338 N HSS-G MANGO REDUCIDO

DIN 338 N HSS-G REDUCED SHANK • DIN 338 N HSS-G QUEUE RÉDUITE



Ø1 (mm)	Ø2 (mm)	L1 (mm)	L2 (mm)	Uds. Pcs.	Cod.	€/Unid.
10,00	9,70	133	87	1	181000	9,01
10,50	9,70	133	87	1	181050	9,26
11,00	9,70	142	94	1	181100	9,01
11,50	9,70	142	94	1	181150	9,26
12,00	9,70	151	101	1	181200	10,28
12,25	9,70	151	101	1	181225	13,81
12,50	9,70	151	101	1	181250	11,38
12,75	9,70	151	101	1	181275	15,44
13,00	9,70	151	101	1	181300	11,74
13,25	12,70	160	108	1	181325	14,87
13,50	12,70	160	108	1	181350	15,23
13,75	12,70	160	108	1	181375	17,06
14,00	12,70	160	108	1	181400	14,89
14,25	12,70	169	114	1	181425	20,50
14,50	12,70	169	114	1	181450	17,63
14,75	12,70	169	114	1	181475	22,11
15,00	12,70	169	114	1	181500	17,83
15,25	12,70	178	120	1	181525	26,77
15,50	12,70	178	120	1	181550	22,33
15,75	12,70	178	120	1	181575	30,62
16,00	12,70	178	120	1	181600	20,96
16,25	12,70	184	125	1	181625	33,24
16,50	12,70	184	125	1	181650	24,50

Ø1 (mm)	Ø2 (mm)	L1 (mm)	L2 (mm)	Uds. Pcs.	Cod.	€/Unid.
16,75	12,70	184	125	1	181675	36,39
17,00	12,70	184	125	1	181700	24,53
17,25	12,70	191	130	1	181725	37,62
17,50	12,70	191	130	1	181750	29,09
17,75	12,70	191	130	1	181775	38,49
18,00	12,70	191	130	1	181800	27,71
18,25	12,70	198	135	1	181825	41,12
18,50	12,70	198	135	1	181850	35,05
18,75	12,70	198	135	1	181875	39,97
19,00	12,70	198	135	1	181900	33,15
19,50	12,70	205	140	1	181950	36,67
20,00	12,70	205	140	1	182000	39,38
20,50	12,70	213	145	1	182050	45,62
21,00	12,70	213	145	1	182100	47,47
21,50	12,70	221	150	1	182150	51,62
22,00	12,70	221	150	1	182200	51,05
22,50	12,70	221	150	1	182250	54,42
23,00	12,70	229	155	1	182300	54,96
23,50	12,70	229	155	1	182350	58,11
24,00	12,70	236	160	1	182400	59,07
24,50	12,70	236	160	1	182450	63,34
25,00	12,70	236	160	1	182500	63,47
26,00	12,70	243	165	1	182600	80,32

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

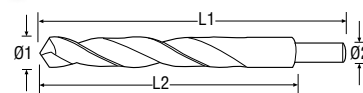
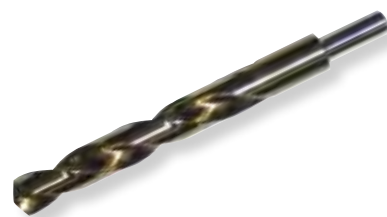
DISPLAYS
DISPLAYS • DISPLAYS

BROCAS PARA METAL MANGO REDUCIDO

REDUCED SHANK METAL DRILL BITS • FORETS METAL QUEUE CYLINDRIQUE

DIN 338 N HSS-CO MANGO REDUCIDO

DIN 338 N HSS-CO REDUCED SHANK • DIN338 N HSS-CO QUEUE RÉDUITE



HSS-CO 5%

DIN 338 N



Ø1 (mm)	Ø2 (mm)	L1 (mm)	L2 (mm)	Uds. Pcs.	Cod.	€/Unid.
12,00	9,70	151	101	1	1841200	20,54
13,00	9,70	151	101	1	1841300	25,41
13,50	12,70	160	108	1	1841350	28,68
14,00	12,70	160	108	1	1841400	27,01
14,50	12,70	169	114	1	1841450	34,33
15,00	12,70	169	114	1	1841500	34,86
15,50	12,70	178	120	1	1841550	43,98
16,00	12,70	178	120	1	1841600	41,63

Ø1 (mm)	Ø2 (mm)	L1 (mm)	L2 (mm)	Uds. Pcs.	Cod.	€/Unid.
16,50	12,70	184	125	1	1841650	50,55
17,00	12,70	184	125	1	1841700	50,56
17,50	12,70	191	130	1	1841750	58,05
18,00	12,70	191	130	1	1841800	57,20
18,50	12,70	198	135	1	1841850	62,85
19,00	12,70	198	135	1	1841900	64,32
19,50	12,70	205	140	1	1841950	70,13
20,00	12,70	205	140	1	1842000	71,97

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

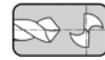
ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

DIN 340 N HSS-G SERIE LARGA
 DIN 340 N HSS-G LONG SERIES
 DIN 340 N HSS-G SÉRIE LONGUE



Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
1,00	56	33	1	100100	2,74
1,25	65	41	1	100125	2,97
1,50	70	45	1	100150	2,97
1,75	80	53	1	100175	2,97
2,00	85	56	1	100200	2,40
2,10	85	56	1	100210	3,96
2,25	90	59	1	100225	2,46
2,50	95	62	1	100250	2,33
2,60	95	62	1	100260	3,30
2,75	100	66	1	100275	2,61
2,80	100	66	1	100280	3,30
3,00	100	66	1	100300	2,28
3,10	106	69	1	100310	4,20
3,25	106	69	1	100325	2,74
3,30	112	73	1	100330	2,84
3,40	112	73	1	100340	4,20
3,50	112	73	1	100350	2,61
3,60	112	73	1	100360	3,23
3,75	112	73	1	100375	3,23
4,00	119	78	1	100400	2,72
4,10	119	78	1	100410	3,83
4,20	119	78	1	100420	3,83
4,25	119	78	1	100425	3,79
4,50	126	82	1	100450	3,45
4,60	126	82	1	100460	4,07
4,75	126	82	1	100475	4,11
4,80	132	87	1	100480	4,29
4,90	132	87	1	100490	4,29
5,00	132	87	1	100500	3,57
5,10	132	87	1	100510	4,90
5,25	132	87	1	100525	4,85
5,50	139	91	1	100550	4,73
5,60	139	91	1	100560	5,37
5,70	139	91	1	100570	5,37
5,75	139	91	1	100575	5,20
5,80	139	91	1	100580	6,28
6,00	139	91	1	100600	4,37

Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
6,10	148	97	1	100610	6,69
6,25	148	97	1	100625	6,85
6,40	148	97	1	100640	6,86
6,50	148	97	1	100650	5,76
6,75	156	102	1	100675	6,67
7,00	156	102	1	100700	5,95
7,10	156	102	1	100710	7,17
7,25	156	102	1	100725	7,17
7,50	156	102	1	100750	7,06
7,75	165	109	1	100775	7,47
8,00	165	109	1	100800	7,65
8,25	165	109	1	100825	9,03
8,50	165	109	1	100850	8,92
8,75	175	115	1	100875	10,43
9,00	175	115	1	100900	9,31
9,25	175	115	1	100925	11,77
9,50	175	121	1	100950	10,28
9,75	184	121	1	100975	12,33
10,00	184	121	1	101000	10,89
10,25	184	121	1	101025	13,06
10,50	184	121	1	101050	13,49
10,75	195	128	1	101075	14,44
11,00	195	128	1	101100	15,01
11,25	195	128	1	101125	18,01
11,50	195	128	1	101150	16,41
11,75	205	134	1	101175	19,69
12,00	205	134	1	101200	17,84
12,25	205	134	1	101225	20,55
12,50	205	134	1	101250	19,49
12,75	205	134	1	101275	24,29
13,00	205	134	1	101300	21,02
13,50	214	140	1	101350	25,30
14,00	214	140	1	101400	27,34
14,50	220	144	1	101450	29,90
15,00	220	144	1	101500	29,54
16,00	227	149	1	101600	36,10

BROCAS PARA METAL MANGO CILÍNDRICO

STRAIGHT SHANK METAL DRILL BITS • FORETS METAL QUEUE CYLINDRIQUE

DIN 340 N HSS-CO SERIE LARGA

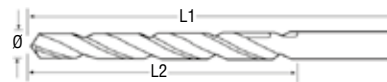
DIN 340 N HSS-CO LONG SERIES

DIN 340 N HSS-CO SÉRIE LONGUE



HSS-CO 5%

DIN 340 N



Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
2,00	85	56	1	14L0200	6,66
2,50	95	62	1	14L0250	6,66
3,00	100	66	1	14L0300	6,66
3,20	106	69	1	14L0320	8,17
3,25	106	69	1	14L0325	6,25
3,50	112	73	1	14L0350	7,89
3,75	112	73	1	14L0375	7,13
4,00	119	78	1	14L0400	7,89
4,25	119	78	1	14L0425	7,41
4,50	126	82	1	14L0450	10,08
4,75	126	82	1	14L0475	9,21
5,00	132	87	1	14L0500	10,08
5,50	139	91	1	14L0550	11,04
6,00	139	91	1	14L0600	11,04

Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
6,50	148	97	1	14L0650	14,02
7,00	156	102	1	14L0700	15,22
7,50	156	102	1	14L0750	18,63
8,00	165	109	1	14L0800	17,16
8,50	165	109	1	14L0850	21,17
9,00	175	115	1	14L0900	21,17
9,50	175	115	1	14L0950	24,63
10,00	184	121	1	14L1000	33,22
10,50	184	121	1	14L1050	41,68
11,00	195	128	1	14L1100	43,41
11,50	195	128	1	14L1150	56,28
12,00	205	134	1	14L1200	46,62
12,50	205	134	1	14L1250	59,48
13,00	205	134	1	14L1300	59,48

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

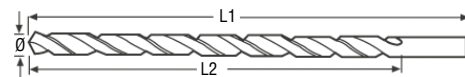
HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

DIN 1869 N HSS-G SERIE EXTRALARGA

DIN 1869 N HSS-G EXTRA LONG SERIES
 DIN 1869 N HSS-G EXTRA LONG



Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
2,00	125	85	1	1002125	8,96
2,50	140	95	1	1002514	9,56
3,00	150	100	1	1003150	10,61
3,00	190	130	1	1003190	12,07
3,50	165	115	1	1003516	11,43
3,50	210	145	1	1003521	14,78
3,50	265	180	1	1003526	19,94
4,00	175	120	1	1004175	12,02
4,00	220	150	1	1004220	15,58
4,00	280	190	1	1004280	22,14
4,50	185	125	1	1004518	13,47
4,50	235	160	1	1004523	16,31
4,50	295	200	1	1004529	24,02
5,00	195	135	1	1005195	13,69
5,00	245	170	1	1005245	16,81
5,00	315	210	1	1005315	24,53
5,50	205	140	1	1005520	16,78
5,50	260	180	1	1005526	22,38
5,50	330	235	1	1005533	28,68
6,00	205	140	1	1006205	16,78
6,00	260	180	1	1006260	26,55
6,00	330	225	1	1006330	30,34
6,50	215	150	1	1006521	17,67
6,50	275	190	1	1006527	27,08

Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
6,50	350	235	1	1006535	36,03
7,00	225	155	1	1007225	21,92
7,00	290	200	1	1007290	30,03
7,00	370	250	1	1007370	41,33
7,50	225	155	1	1007522	26,86
7,50	305	210	1	1007530	36,33
7,50	370	250	1	1007537	48,70
8,00	240	165	1	1008240	28,97
8,00	305	210	1	1008305	36,70
8,00	390	265	1	1008390	53,25
8,50	240	165	1	1008524	38,18
8,50	305	210	1	1008530	43,31
8,50	390	265	1	1008539	68,23
9,00	250	175	1	1009250	41,17
9,00	320	220	1	1009320	47,32
9,00	410	280	1	1009410	76,67
9,50	250	175	1	1009525	45,36
9,50	320	220	1	1009532	55,84
9,50	410	280	1	1009541	78,17
10,00	265	185	1	1010265	47,64
10,00	340	235	1	1010340	61,68
10,00	430	295	1	1010430	82,59
12,00	295	205	1	1012295	66,03
12,00	375	260	1	1012375	80,27

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

BROCAS PARA METAL MANGO CILÍNDRICO

STRAIGHT SHANK METAL DRILL BITS • FORETS METAL QUEUE CYLINDRIQUE

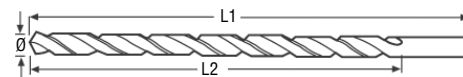
DIN 1869 S HSS-CO SERIE EXTRALARGA

DIN 1869 S HSS-CO EXTRA LONG SERIES
DIN 1869 S HSS-CO EXTRA LONG



HSS-CO 5%

DIN 1869 S



Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
2,00	125	85	1	130127020125	17,69
2,50	140	95	1	130127250140	18,13
3,00	150	100	1	130127030150	19,30
3,20	155	105	1	130127320155	23,75
3,50	210	145	1	130127350210	25,88
4,00	175	120	1	130127040175	19,71
4,00	220	150	1	130127040220	25,74
4,25	220	150	1	130127425220	39,67
4,50	235	160	1	130127450235	30,12
5,00	195	135	1	130127050195	25,17
5,00	245	170	1	130127205245	32,63
5,50	260	180	1	130127550260	36,77
6,00	205	140	1	130127060205	23,39

Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
6,00	260	180	1	130127060260	32,00
6,50	275	190	1	130127650275	40,83
7,00	295	200	1	130127070295	44,00
8,00	240	165	1	130127080290	41,46
8,00	305	210	1	130127080305	50,30
8,50	305	210	1	130127850305	60,39
9,00	320	220	1	130127090320	66,69
10,00	265	185	1	130127100265	59,13
10,00	340	235	1	130127100340	82,47
11,00	360	250	1	130127110360	100,44
12,00	380	260	1	130127120380	119,35

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

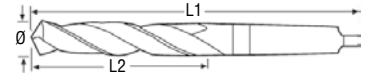
HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

DIN 345 N HSS-G

DIN 345 N HSS-G • DIN 345 N HSS-G



Ø (mm)	Cono Morse Tapper Shank	L1 (mm)	L2 (mm)	Uds. Pcs.	Cod.	€/Unid.
4,00	1	124	43	1	150400	17,88
4,50	1	128	47	1	150450	19,32
5,00	1	133	52	1	150500	15,20
5,50	1	138	57	1	150550	16,46
5,75	1	138	57	1	150575	16,99
6,00	1	138	57	1	150600	14,78
6,25	1	144	63	1	150625	16,07
6,50	1	144	63	1	150650	16,27
6,75	1	150	69	1	150675	16,28
7,00	1	150	69	1	150700	15,71
7,50	1	150	69	1	150750	17,28
7,75	1	156	75	1	150775	20,43
8,00	1	156	75	1	150800	16,11
8,25	1	156	75	1	150825	21,37
8,50	1	156	75	1	150850	17,65
8,75	1	162	81	1	150875	21,74
9,00	1	162	81	1	150900	17,31
9,50	1	162	81	1	150950	17,92
9,75	1	168	87	1	150975	22,15
10,00	1	168	87	1	151000	16,85
10,25	1	168	87	1	151025	22,73
10,50	1	168	87	1	151050	18,49
10,75	1	175	94	1	151075	20,80
11,00	1	175	94	1	151100	18,25
11,25	1	175	94	1	151125	24,65
11,50	1	175	94	1	151150	20,42
11,75	1	175	94	1	151175	24,08
12,00	1	182	101	1	151200	19,07
12,25	1	182	101	1	151225	24,65
12,50	1	182	101	1	151250	22,73
12,75	1	182	101	1	151275	26,97
13,00	1	182	101	1	151300	20,37
13,25	1	189	108	1	151325	27,93
13,50	1	189	108	1	151350	22,54
13,75	1	189	108	1	151375	27,86
14,00	1	189	108	1	151400	22,35
14,25	2	212	114	1	151425	29,72
14,50	2	212	114	1	151450	25,58
14,75	2	212	114	1	151475	31,20
15,00	2	212	114	1	151500	23,98
15,25	2	218	120	1	151525	31,58
15,50	2	218	120	1	151550	25,75
15,75	2	218	120	1	151575	32,51
16,00	2	218	120	1	151600	26,07
16,25	2	223	125	1	151625	35,29
16,50	2	223	125	1	151650	29,34

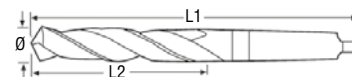
Ø (mm)	Cono Morse Tapper Shank	L1 (mm)	L2 (mm)	Uds. Pcs.	Cod.	€/Unid.
16,75	2	223	125	1	151675	39,52
17,00	2	223	125	1	151700	28,92
17,25	2	228	130	1	151725	39,59
17,50	2	228	130	1	151750	31,19
17,75	2	228	130	1	151775	39,68
18,00	2	228	130	1	151800	29,63
18,25	2	233	135	1	151825	44,38
18,50	2	233	135	1	151850	34,88
18,75	2	233	135	1	151875	45,18
19,00	2	233	135	1	151900	33,39
19,25	2	238	140	1	151925	47,00
19,50	2	238	140	1	151950	37,56
19,75	2	238	140	1	151975	47,39
20,00	2	238	140	1	152000	37,00
20,25	2	243	145	1	152025	51,83
20,50	2	243	145	1	152050	45,08
20,75	2	243	145	1	152075	52,59
21,00	2	243	145	1	152100	40,76
21,25	2	248	150	1	152125	56,47
21,50	2	248	150	1	152150	47,22
21,75	2	248	150	1	152175	55,91
22,00	2	248	150	1	152200	42,69
22,25	2	253	155	1	152225	62,21
22,50	2	253	155	1	152250	46,44
22,75	2	253	155	1	152275	63,96
23,00	2	253	155	1	152300	51,21
23,25	3	276	155	1	152325	67,62
23,50	3	276	155	1	152350	55,36
23,75	3	281	160	1	152375	69,09
24,00	3	281	160	1	152400	52,83
24,25	3	281	160	1	152425	73,01
24,50	3	281	160	1	152450	61,49
24,75	3	281	160	1	152475	76,52
25,00	3	281	160	1	152500	58,57
25,25	3	286	165	1	152525	83,22
25,50	3	286	165	1	152550	65,38
25,75	3	286	165	1	152575	86,18
26,00	3	286	165	1	152600	64,73
26,25	3	286	165	1	152625	89,72
26,50	3	286	165	1	152650	74,50
26,75	3	291	170	1	152675	93,61
27,00	3	291	170	1	152700	69,19
27,25	3	291	170	1	152725	96,96
27,50	3	291	170	1	152750	77,10
27,75	3	291	170	1	152775	96,59

BROCAS PARA METAL MANGO CÓNICO

TAPPER SHANK METAL DRILLS • FORETS METAL QUEUE CONIQUE

DIN 345 N HSS-G

DIN 345 N HSS-G • DIN 345 N HSS-G



Ø (mm)	Cono Morse Tapper Shank	L1 (mm)	L2 (mm)	Uds. Pcs.	Cod.	€/Unid.
28,00	3	291	170	1	152800	75,12
28,25	3	296	175	1	152825	105,56
28,50	3	296	175	1	152850	86,38
28,75	3	296	175	1	152875	106,52
29,00	3	296	175	1	152900	83,23
29,25	3	296	175	1	152925	120,01
29,50	3	296	175	1	152950	95,48
29,75	3	296	175	1	152975	121,55
30,00	3	296	175	1	153000	96,60
30,25	3	301	180	1	153025	129,44
30,50	3	301	180	1	153050	108,67
30,75	3	301	180	1	153075	132,33
31,00	3	301	180	1	153100	103,34
31,25	3	301	180	1	153125	137,92
31,50	3	301	180	1	153150	119,25
31,75	3	306	185	1	153175	143,70
32,00	4	334	185	1	153200	113,09
32,25	4	334	185	1	153225	146,43
32,50	4	334	185	1	153250	141,38
32,75	4	334	185	1	153275	160,61
33,00	4	334	185	1	153300	127,18
33,25	4	334	185	1	153325	165,19
33,50	4	334	185	1	153350	151,43
33,75	4	339	190	1	153375	172,38
34,00	4	339	190	1	153400	134,44
34,25	4	339	190	1	153425	177,37
34,50	4	339	190	1	153450	160,61
34,75	4	339	190	1	153475	186,34
35,00	4	339	190	1	153500	143,49
35,25	4	339	190	1	153525	186,34
35,50	4	339	190	1	153550	177,37
35,75	4	344	195	1	153575	197,91
36,00	4	344	195	1	153600	159,17
36,50	4	344	195	1	153650	189,93
37,00	4	344	195	1	153700	173,92
37,50	4	344	195	1	153750	197,91
38,00	4	349	200	1	153800	182,86
38,50	4	349	200	1	153850	208,10
39,00	4	349	200	1	153900	187,89
39,50	4	349	200	1	153950	216,66
40,00	4	349	200	1	154000	201,67
40,50	4	354	205	1	154050	225,85
41,00	4	354	205	1	154100	208,74
41,50	4	354	205	1	154150	249,59
42,00	4	354	205	1	154200	227,73

Ø (mm)	Cono Morse Tapper Shank	L1 (mm)	L2 (mm)	Uds. Pcs.	Cod.	€/Unid.
42,50	4	354	205	1	154250	259,76
43,00	4	359	210	1	154300	239,84
43,50	4	359	210	1	154350	275,72
44,00	4	359	210	1	154400	255,16
44,50	4	359	210	1	154450	289,89
45,00	4	359	210	1	154500	266,12
45,50	4	364	215	1	154550	304,26
46,00	4	364	215	1	154600	281,04
46,50	4	364	215	1	154650	318,23
47,00	4	364	215	1	154700	292,37
47,50	4	364	215	1	154750	324,21
48,00	4	369	220	1	154800	302,37
48,50	4	369	220	1	154850	350,34
49,00	4	369	220	1	154900	306,54
49,50	4	369	220	1	154950	354,73
50,00	4	369	220	1	155000	316,72
50,50	4	369	220	1	155050	413,18
51,00	5	412	225	1	155100	371,98
52,00	5	412	225	1	155200	419,17
53,00	5	412	225	1	155300	429,96
54,00	5	417	230	1	155400	457,76
55,00	5	417	230	1	155500	480,61
56,00	5	417	230	1	155600	534,37
57,00	5	422	235	1	155700	565,71
58,00	5	422	235	1	155800	574,94
59,00	5	422	235	1	155900	596,87
60,00	5	422	235	1	156000	580,02
61,00	5	427	240	1	156100	689,78
62,00	5	427	240	1	156200	679,22
63,00	5	427	240	1	156300	708,62
64,00	5	432	245	1	156400	743,89
65,00	5	432	245	1	156500	780,54
66,00	5	432	245	1	156600	870,20
67,00	5	432	245	1	156700	887,95
68,00	5	437	250	1	156800	919,84
69,00	5	437	250	1	156900	960,77
70,00	5	437	250	1	157000	970,56
71,00	5	437	250	1	157100	982,75
72,00	5	442	255	1	157200	1.018,46
75,00	5	442	255	1	157500	1.066,74
78,00	6	514	260	1	157800	1.486,27
80,00	6	519	265	1	158000	1.692,22
85,00	6	519	265	1	158500	1.782,97
90,00	6	524	270	1	159000	1.999,26
95,00	6	529	275	1	159500	2.281,84

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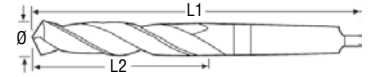
METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
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BROCAS PARA METAL MANGO CÓNICO
 TAPPER SHANK METAL DRILLS • FORETS METAL QUEUE CONIQUE

DIN 345 N HSS-CO

DIN 345 N HSS-CO • DIN 345 N HSS-CO



HSS-CO 5%

DIN 345 N



Ø (mm)	Cono Morse Tapper Shank	L1 (mm)	L2 (mm)	Uds. Pcs.	Cod.	€/Unid.
10,00	1	168	87	1	14C1000	65,61
11,00	1	175	94	1	14C1100	66,30
11,50	1	175	94	1	14C1150	70,85
12,00	1	182	101	1	14C1200	66,16
12,50	1	182	101	1	14C1250	70,85
13,00	1	182	101	1	14C1300	63,47
13,50	1	189	102	1	14C1350	79,42
14,00	1	189	102	1	14C1400	74,18
14,50	2	212	114	1	14C1450	108,78
15,00	2	212	114	1	14C1500	88,80
15,50	2	218	120	1	14C1550	114,50
16,00	2	218	120	1	14C1600	98,14
16,50	2	223	125	1	14C1650	117,44
17,00	2	223	125	1	14C1700	100,09
17,50	2	228	130	1	14C1750	123,41
18,00	2	228	130	1	14C1800	102,77
18,50	2	233	135	1	14C1850	127,33
19,00	2	233	135	1	14C1900	117,03
19,50	2	238	140	1	14C1950	134,60
20,00	2	238	140	1	14C2000	122,78
20,50	2	243	145	1	14C2050	131,91
21,00	2	243	145	1	14C2100	143,00

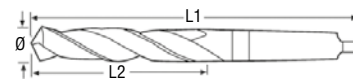
Ø (mm)	Cono Morse Tapper Shank	L1 (mm)	L2 (mm)	Uds. Pcs.	Cod.	€/Unid.
21,50	2	248	150	1	14C2150	154,15
22,00	2	248	150	1	14C2200	155,07
22,50	2	253	155	1	14C2250	159,16
23,00	2	253	155	1	14C2300	161,28
24,00	3	281	160	1	14C2400	165,75
25,00	3	281	160	1	14C2500	184,97
26,00	3	286	165	1	14C2600	211,29
27,00	3	291	170	1	14C2700	231,21
28,00	3	291	170	1	14C2800	250,55
29,00	3	296	175	1	14C2900	258,18
30,00	3	296	175	1	14C3000	275,37
31,00	3	301	180	1	14C3100	294,85
32,00	4	334	185	1	14C3200	301,34
33,00	4	334	185	1	14C3300	343,44
34,00	4	339	190	1	14C3400	360,53
35,00	4	339	190	1	14C3500	385,33
36,00	4	344	195	1	14C3600	400,95
37,00	4	344	195	1	14C3700	411,46
38,00	4	349	200	1	14C3800	478,14
39,00	4	349	200	1	14C3900	536,89
40,00	4	349	200	1	14C4000	566,96

BROCAS PARA METAL MANGO CÓNICO

TAPPER SHANK METAL DRILLS • FORETS METAL QUEUE CONIQUE

DIN 345 N HSS-G+TIN

DIN 345 N HSS-G+TIN • DIN 345 N HSS-G+TIN



HSS-G
TIN
DIN 345 N

Ø (mm)	Cono Morse Tapper Shank	L1 (mm)	L2 (mm)	Uds. Pcs.	Cod.	€/Unid.
13,50	1	189	108	1	1351350	69,55
14,00	1	189	108	1	1351400	69,63
14,50	2	212	114	1	1351450	86,30
15,00	2	212	114	1	1351500	86,30
15,50	2	218	120	1	1351550	89,62
16,00	2	218	120	1	1351600	87,18
16,50	2	223	125	1	1351650	93,35
17,00	2	223	125	1	1351700	92,45
17,50	2	228	130	1	1351750	106,84
18,00	2	228	130	1	1351800	95,73
18,50	2	233	135	1	1351850	111,79
19,00	2	233	135	1	1351900	109,95
19,50	2	238	140	1	1351950	126,45
20,00	2	238	140	1	1352000	126,49
20,50	2	243	145	1	1352050	129,76

Ø (mm)	Cono Morse Tapper Shank	L1 (mm)	L2 (mm)	Uds. Pcs.	Cod.	€/Unid.
21,00	2	243	145	1	1352100	128,69
21,50	2	248	150	1	1352150	141,70
22,00	2	248	150	1	1352200	147,38
22,50	2	253	155	1	1352250	162,65
23,00	2	253	155	1	1352300	160,77
23,50	3	276	155	1	1352350	175,50
24,00	3	281	160	1	1352400	176,68
24,50	3	281	160	1	1352450	192,82
25,00	3	281	160	1	1352500	189,24
26,00	3	286	165	1	1352600	201,42
27,00	3	291	170	1	1352700	213,92
28,00	3	291	170	1	1352800	231,35
29,00	3	296	175	1	1352900	249,46
30,00	3	296	175	1	1353000	267,51

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METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

DIN 341 N HSS-G SERIE LARGA

DIN 341 N HSS-G LONG SERIES • DIN 341 N HSS-G SERIE LONGUE



Ø (mm)	Cono Morse Tapper Shank	L1 (mm)	L2 (mm)	Uds. Pcs.	Cod.	€/Unid.
14,00	2	223	142	1	15A1400	67,24
15,00	2	245	147	1	15A1500	77,32
15,50	2	251	153	1	15A1550	79,06
16,00	2	251	153	1	15A1600	85,17
16,50	2	257	159	1	15A1650	82,47
17,00	2	257	159	1	15A1700	90,46
17,50	2	263	165	1	15A1750	83,35
18,00	2	263	165	1	15A1800	98,07
18,50	2	269	171	1	15A1850	95,13
19,00	2	269	171	1	15A1900	104,02
19,50	2	275	177	1	15A1950	103,07
20,00	2	275	177	1	15A2000	110,53
20,50	2	282	184	1	15A2050	119,59
21,00	2	282	184	1	15A2100	122,81
21,50	2	289	191	1	15A2150	141,11
22,00	2	289	191	1	15A2200	142,65
22,50	2	296	198	1	15A2250	146,80
23,00	2	296	198	1	15A2300	139,91
23,50	3	319	198	1	15A2350	184,38
24,00	3	327	206	1	15A2400	181,57
24,50	3	327	206	1	15A2450	175,12

Ø (mm)	Cono Morse Tapper Shank	L1 (mm)	L2 (mm)	Uds. Pcs.	Cod.	€/Unid.
25,00	3	327	206	1	15A2500	184,82
25,50	3	333	214	1	15A2550	189,88
26,00	3	333	214	1	15A2600	206,82
26,50	3	333	214	1	15A2650	201,40
27,00	3	343	222	1	15A2700	207,77
27,50	3	343	222	1	15A2750	248,22
28,00	3	343	222	1	15A2800	241,79
28,50	3	351	230	1	15A2850	250,57
29,00	3	351	230	1	15A2900	243,77
29,50	3	351	230	1	15A2950	281,53
30,00	3	351	230	1	15A3000	274,72
31,00	3	360	239	1	15A3100	314,96
32,00	4	397	248	1	15A3200	326,57
33,00	4	397	248	1	15A3300	365,30
34,00	4	406	257	1	15A3400	450,55
35,00	4	406	257	1	15A3500	446,13
36,00	4	416	267	1	15A3600	516,74
37,00	4	416	267	1	15A3700	536,91
38,00	4	426	277	1	15A3800	575,02
39,00	4	426	277	1	15A3900	583,97
40,00	4	426	277	1	15A4000	631,78

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DISPLAYS
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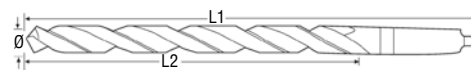
BROCAS PARA METAL MANGO CÓNICO

TAPPER SHANK METAL DRILLS • FORETS METAL QUEUE CONIQUE

DIN 1870 N HSS-G SERIE EXTRALARGA

DIN 1870 N HSS-G EXTRALONG SERIE

DIN 1870 N HSS-G SERIE EXTRALONGUE



Ø (mm)	Cono Morse Tapper Shank	L1 (mm)	L2 (mm)	Uds. Pcs.	Cod.	€/Unid.
10,00	1	285	185	1	15B1000	143,10
10,50	1	285	185	1	15B1050	126,72
11,00	1	300	195	1	15B1100	158,40
11,50	1	300	195	1	15B1150	166,95
12,00	1	310	205	1	15B1200	176,68
12,50	1	310	205	1	15B1250	183,20
13,00	1	310	205	1	15B1300	183,20
13,50	1	325	220	1	15B1350	195,78
14,00	1	325	220	1	15B1400	204,64
14,50	2	340	220	1	15B1450	221,10
15,00	2	340	220	1	15B1500	228,97
15,50	2	355	230	1	15B1550	302,68
16,00	2	355	230	1	15B1600	299,11
16,50	2	355	230	1	15B1650	238,47
17,00	2	355	230	1	15B1700	268,45
17,50	2	370	245	1	15B1750	290,54
18,00	2	370	245	1	15B1800	303,58
18,50	2	370	245	1	15B1850	287,42
19,00	2	370	245	1	15B1900	300,06
19,50	2	385	260	1	15B1950	318,99
20,00	2	385	260	1	15B2000	361,54

Ø (mm)	Cono Morse Tapper Shank	L1 (mm)	L2 (mm)	Uds. Pcs.	Cod.	€/Unid.
20,50	2	385	260	1	15B2050	395,89
21,00	2	385	260	1	15B2100	384,19
21,50	2	405	270	1	15B2150	420,16
22,00	2	405	270	1	15B2200	414,17
22,50	2	405	270	1	15B2250	472,13
23,00	2	405	270	1	15B2300	476,90
23,50	3	425	270	1	15B2350	518,84
24,00	3	440	290	1	15B2400	573,06
24,50	3	440	290	1	15B2450	678,63
25,00	3	440	290	1	15B2500	542,07
25,50	3	440	290	1	15B2550	765,66
26,00	3	440	290	1	15B2600	571,86
26,50	3	440	290	1	15B2650	765,66
27,00	3	460	305	1	15B2700	584,70
27,50	3	460	305	1	15B2750	809,04
28,00	3	460	305	1	15B2800	609,04
28,50	3	460	305	1	15B2850	858,96
29,00	3	460	305	1	15B2900	638,16
29,50	3	460	305	1	15B2950	688,32
30,00	3	460	305	1	15B3000	657,59

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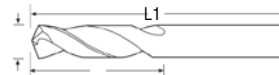
HEXAGONAL
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METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

EXTRACORTA DIN 1897 N HSS-G

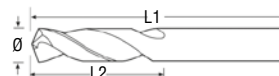
STUB SERIES DIN 1897 N HSS-G • EXTRA COURTE DIN 1897 N HSS-G



Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.	Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
3,00	46	16	10	104300	1,10	7,50	74	34	10	104750	3,43
3,25	49	18	10	104325	1,18	7,75	79	37	10	104775	3,77
3,50	52	20	10	104350	1,18	8,00	79	37	10	104800	3,77
3,75	52	20	10	104375	1,30	8,25	79	37	10	104825	4,50
4,00	55	22	10	104400	1,30	8,50	79	37	10	104850	4,50
4,25	55	22	10	104425	1,55	8,75	84	40	10	104875	4,88
4,50	58	24	10	104450	1,55	9,00	84	40	10	104900	4,88
4,75	58	24	10	104475	1,74	9,50	84	40	10	104950	5,48
5,00	62	26	10	104500	1,74	10,00	89	43	10	104101	6,13
5,25	62	26	10	104525	1,91	10,50	89	43	5	104105	6,90
5,50	66	28	10	104550	1,91	11,00	95	47	5	104110	7,71
5,75	66	28	10	104575	2,18	11,50	95	47	5	104115	8,56
6,00	66	28	10	104600	2,18	12,00	102	51	5	104120	9,03
6,25	66	28	10	104625	2,62	12,50	102	51	5	104126	11,01
6,50	70	31	10	104650	2,62	13,00	102	51	5	104130	11,09
6,75	74	34	10	104675	3,04	14,00	107	54	1	104140	19,28
7,00	74	34	10	104700	3,04	15,00	111	56	1	104155	20,28
7,25	74	34	10	104725	3,43						

EXTRACORTA DIN 1897 N HSS-CO

STUB SERIES DIN 1897 N HSS-CO • EXTRA COURTE DIN 1897 N HSS-CO



Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.	Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
3,00	46	16	10	14E300	2,19	7,50	74	34	10	14E750	7,22
3,25	49	18	10	14E325	2,24	7,75	79	37	10	14E775	8,26
3,50	52	20	10	14E350	2,36	8,00	79	37	10	14E800	7,01
3,75	52	20	10	14E375	2,78	8,25	79	37	10	14E825	9,16
4,00	55	22	10	14E400	2,62	8,50	79	37	10	14E850	8,31
4,25	55	22	10	14E425	2,88	8,75	84	40	10	14E875	11,43
4,50	58	24	10	14E450	3,00	9,00	84	40	10	14E900	9,10
4,75	58	24	10	14E475	3,21	9,25	84	40	10	14E925	12,87
5,00	62	26	10	14E500	3,40	9,50	84	40	10	14E950	10,21
5,25	62	26	10	14E525	3,58	9,75	89	43	10	14E975	14,31
5,50	66	28	10	14E550	3,58	10,00	89	43	10	14E100	11,38
5,75	66	28	10	14E575	4,30	10,50	89	43	5	14E105	14,82
6,00	66	28	10	14E600	4,08	11,00	95	47	5	14E110	14,20
6,25	66	28	10	14E625	6,22	11,50	95	47	5	14E115	15,75
6,50	70	31	10	14E650	4,85	12,00	102	51	5	14E120	18,86
6,75	74	34	10	14E675	7,79	12,50	102	51	5	14E125	19,77
7,00	74	34	10	14E700	5,60	13,00	102	51	5	14E130	25,85
7,25	74	34	10	14E725	8,26						

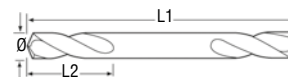
BROCAS CILÍNDRICAS CORTAS

EXTRA SHORT STRAIGHT SHANK DRILL BITS • FORETS CYLINDRIQUES EXTRA COURTES

EXTRACORTA DOBLE PUNTA DIN 1897 N HSS-G

STUB SERIES DOUBLE POINT DIN 1897 N HSS-G

EXTRA COURTE DOUBLE POINT DIN 1897 N HSS-G



Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
2,00	38	10	10	104D200	2,52
2,25	40	10	10	104D225	2,89
2,50	43	10	10	104D250	2,51
2,75	46	10	10	104D275	3,00
3,00	49	10	10	104D300	2,21
3,20	49	10	10	104D320	2,21
3,25	49	10	10	104D325	2,21
3,50	52	13	10	104D350	2,45
3,75	55	13	10	104D375	2,70
4,00	55	13	10	104D400	2,51
4,25	55	13	10	104D425	2,70
4,50	58	13	10	104D450	2,80

Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
4,75	62	13	10	104D475	4,52
5,00	62	13	10	104D500	3,20
5,25	62	13	10	104D525	4,52
5,50	66	16	10	104D550	3,87
5,75	66	16	10	104D575	5,33
6,00	66	16	10	104D600	4,32
6,50	70	19	10	104D650	4,78
7,00	74	19	10	104D700	5,69
7,50	74	19	10	104D750	5,82
8,00	79	19	10	104D800	6,97
9,00	84	20	10	104D900	9,30
10,00	89	22	10	104D100	10,04

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ROSCADO
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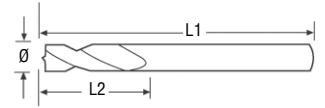
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BROCA CILÍNDRICA PARA PUNTO DE SOLDADURA
STRAIGHT SHANK WELD POINT DRILL BITS
FORETS DEPOINTEUR QUEUE CYLINDRIQUE



Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
6,00	66,00	28,00	1,00	TS0600	12,05
7,00	73,00	28,00	1,00	TS0700	15,55
8,00	79,00	37,00	1,00	TS0800	12,82
10,00	89,00	43,00	1,00	TS1000	18,06



Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
6,00	66	28	1	TT0600	21,94
7,00	73	28	1	TT0700	24,14
8,00	79	37	1	TT0800	25,06

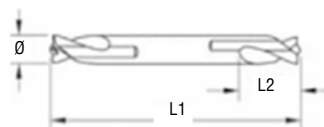


Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
6,00	66	28	1	TF0600	26,61
7,00	73	28	1	TF0700	34,06
8,00	79	37	1	TF0800	30,64
10,00	89	43	1	TF1000	37,69

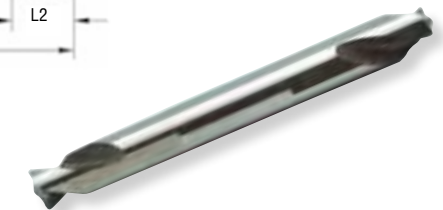


Recomendado para uso en aceros al Boro / Recommended for Boron steel / Recommandé pour aciers au Bore

BROCA PARA PUNTO DE SOLDADURA - DOBLE PUNTA
WELD POINT DRILL BITS - DOUBLE POINT
FORETS DEPOINTEUR - DOUBLE POINT



Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
8,00	70,00	16,30	1,00	TSD0800	32,79



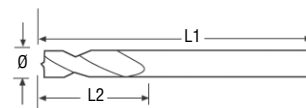
BROCAS PARA PUNTOS DE SOLDADURA

WELD POINT DRILLS • FORET DEPOINTEUR

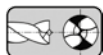
BROCA CON CHAVETERO PARA MÁQUINA NEUMÁTICA

WELD POINT DRILL BITS PNEUMATIC TOOLS

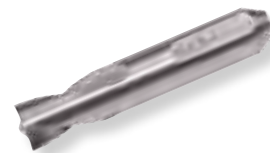
FORETS DEPOINTEUR QUEUE CYLINDRIQUE MACHINES NEUMATIQUES



HSS-CO 5%

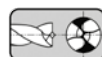


Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
6,00	44,00	16,00	1,00	TSN600	15,23
8,00	44,00	18,00	1,00	TSN800	19,13

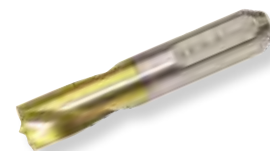


HSS-CO 5%

TIN



Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
6,00	44,00	16,00	1,00	TTN600	20,45
8,00	44,00	18,00	1,00	TTN800	24,44



HSS-CO 5%

TIALN



Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
8,00	44,00	18,00	1,00	TFN800	40,02



Recomendado para uso en aceros al Boro / Recommended for Boron steel / Recommandé pour aciers au Bore

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METAL • MÉTAL

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ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

SESA BOX



	COLGADOR	HANGER	CINTRE
	Herramienta siempre ordenada	Tools always organized	Outils toujours bien organisés
	CALIDAD HERRAMIENTA	TOOL QUALITY	QUALITÉ DES OUTILS
	Herramienta SESATOOLS, máximo rendimiento	SESATOOLS drill bits, maximum performance	Outils SESA TOOLS, maximum rendement
	APERTURA	OPENING	OUVERTURE
	Sistema de cierre, herramienta siempre bien guardada	Closing system, well kept tools	Système de fermeture, outils toujours bien gardés
	ACCESO A LA HERRAMIENTA	ACCES TO THE TOOLS	ACCÈS AUX OUTILS
	Bastidor móvil, acceso fácil y rápido a la herramienta	Moving frame, fast and easy tool fitting	Chassis mobile, accès facile et rapide
	RESISTENCIA CAÍDAS	RESISTENCE TO THE FALLS	RÉSISTENCE AUX CHUTE
	Plástico flexible y ultrasensible	Ultra resistant and flexible plastic	Plastique flexible et ultrarésistant

ESTUCHE COMBINADO METAL-CONSTRUCCIÓN-MADERA COMBINED SET METAL-CONSTRUCTION-WOOD COFFRET COMBINÉ MÉTAL-CONSTRUCTION-BOIS

BASIC BOX (9 UDS. / PCS.)

Composición / Contains / Composition				Medidas / Sizes	Cod.	€/Unid.		
HSS WHITE	HSS	+	BASIC	+	MADERA	5 - 6 - 8 mm	19CB339	15,98



19CB339

STANDARD BOX (9 UDS. / PCS.)

Composición / Contains / Composition				Medidas / Sizes	Cod.	€/Unid.		
HSS G	HSS-G	+	GRANITO	+	MADERA	5 - 6 - 8 mm	19CM339	22,08



19CM339

ADVANCE BOX (9 UDS. / PCS.)



Composición / Contains / Composition				Medidas / Sizes	Cod.	€/Unid.		
HSS CO	HSS-CO 5%	+	TORNADO	+	MADERA	5 - 6 - 8 mm	19CA339	30,58



19CA339

ESTUCHES DE BROCAS

DRILL BIT SETS • COFFRETS DE FORETS

ESTUCHE MODELO 314 - COMPOSICIÓN: 3-4-5-6-8 mm

SET MOD.: 314 - CONTAINS: 3-4-5-6-8 mm

COFFRET MOD.: 314 - COMPOSITION: 3-4-5-6-8 mm

DIN 338



1915314



155P314



194314



194P314



195P314



192314

Calidad / Quality		Uds. Pcs.	Cod.	€/Unid.
HSS-G	ALTO RENDIMIENTO HIGH PERFORMANCE	1	1915314	12,91
HSS	WHITE WHITE	1	155P314	10,31
HSS-CO 5%		1	194314	18,87

Calidad / Quality		Uds. Pcs.	Cod.	€/Unid.
INOX	HSS-G INOX PROGRESIVA PROGRESSIVE INOX	1	194P314	20,89
INOX	HSS-CO 5%	1	195P314	27,77
	TIN	1	192314	19,81

ESTUCHE MODELO 333 - COMPOSICIÓN: 3-4-5-6-7-8-9-10 mm

SET MOD.: 333- CONTAINS: 3-4-5-6-7-8-9-10 mm

COFFRET MOD.: 333 - COMPOSITION: 3-4-5-6-7-8-9-10 mm

DIN 338



1915333



155P333



194333



194P333



195P333



192333

Calidad / Quality		Uds. Pcs.	Cod.	€/Unid.
HSS-G	ALTO RENDIMIENTO HIGH PERFORMANCE	1	1915333	26,66
HSS	WHITE WHITE	1	155P333	20,99
HSS-CO 5%		1	194333	41,13

Calidad / Quality		Uds. Pcs.	Cod.	€/Unid.
INOX	HSS-G INOX PROGRESIVA PROGRESSIVE INOX	1	194P333	42,92
INOX	HSS-CO 5%	1	195P333	61,16
	TIN	1	192333	42,85

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
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METAL
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FRESADO
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ROSCADO
THREADING • FILETAGE

ACCESORIOS
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HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

ESTUCHE **CRT19** PLÁSTICO - COMPOSICIÓN: 19 PIEZAS, 1-10 x 0,5 mm

SET MOD.: CRT19 PLASTIC - 19 PIECES, 1-10 x 0,5 mm
COFFRET MOD.: CRT19 PLASTIQUE - 19 PIÈCES, 1-10 x 0,5 mm

DIN 338



1915019T



194019T



194P019T



1935019T



192119T

Calidad / Quality		Uds. Pcs.	Cod.	€/Unid.
HSS-G	ALTO RENDIMIENTO HIGH PERFORMANCE	1	1915019T	48,14
HSS-CO 5%		1	194019T	74,01
INOX HSS-G	INOX PROGRESIVA PROGRESSIVE INOX	1	194P019T	88,26

Calidad / Quality		Uds. Pcs.	Cod.	€/Unid.
INOX HSS-CO 5%		1	1935019T	133,45
TIN		1	192119T	85,46
ESTUCHE VACÍO / EMPTY SET		1	19R2008	18,95

ESTUCHE **DRT25** PLÁSTICO - COMPOSICIÓN: 25 PIEZAS, 1-13 x 0,5 mm

SET MOD.: DRT25 PLASTIC - 25 PIECES, 1-13 x 0,5 mm
COFFRET MOD.: DRT25 PLASTIQUE - 25 PIÈCES, 1-13 x 0,5 mm

DIN 338



1915025T



194025T



192025T



1935025T



194P025T

Calidad / Quality		Uds. Pcs.	Cod.	€/Unid.
HSS-G	ALTO RENDIMIENTO HIGH PERFORMANCE	1	1915025T	95,73
HSS-CO 5%		1	194025T	170,44
INOX HSS-G	INOX PROGRESIVA PROGRESSIVE INOX	1	194P025T	194,89

Calidad / Quality		Uds. Pcs.	Cod.	€/Unid.
INOX HSS-CO 5%		1	1935025T	243,74
TIN		1	192025T	130,63
ESTUCHE VACÍO / EMPTY SET		1	19R2007	22,26

ESTUCHES DE BROCAS

DRILL BIT SETS • COFFRETS DE FORETS

ESTUCHE CR19 METAL - COMPOSICIÓN: 19 PIEZAS, 1-10 x 0,5 mm

SET MOD.: CR19 METAL - 19 PIECES, 1-10 x 0,5 mm

COFFRET MOD.: CR19 MÉTAL - 19 PIÈCES, 1-10 x 0,5 mm



1915119 1935519 194019

	Calidad / Quality	Uds. Pcs.	Cod.	€/Unid.
	ALTO RENDIMIENTO HIGH PERFORMANCE	1	1915119	45,59
	WHITE WHITE	1	1935519	36,47
		1	194019	71,90
	HSS-G INOX PROGRESIVA PROGRESSIVE INOX	1	194P019	85,84
	HSS-CO 5%	1	1931019	129,16



194P019 1931019 192119

	Calidad / Quality	Uds. Pcs.	Cod.	€/Unid.
		1	192119	84,20
		1	1935119	36,47
		1	193119	27,35
	ESTUCHE VACÍO / EMPTY SET	1	19CR19	16,12

ESTUCHE DR25 METAL - COMPOSICIÓN: 25 PIEZAS, 1-13 x 0,5 mm

SET MOD.: DR25 METAL - 25 PIECES, 1-13 x 0,5 mm

COFFRET MOD.: DR25 MÉTAL - 25 PIÈCES, 1-13 x 0,5 mm



1915025 1935525 194025

	Calidad / Quality	Uds. Pcs.	Cod.	€/Unid.
	ALTO RENDIMIENTO HIGH PERFORMANCE	1	1915025	94,80
	WHITE WHITE	1	1935525	74,52
		1	194025	168,95
	HSS-G INOX PROGRESIVA PROGRESSIVE INOX	1	194P025	189,37
	HSS-CO 5%	1	1931025	240,69



194P025 1931025 192025

	Calidad / Quality	Uds. Pcs.	Cod.	€/Unid.
		1	192025	128,50
		1	1935025	74,52
		1	193025	62,44
	ESTUCHE VACÍO / EMPTY SET	1	19DR25	20,17

CONSTRUCCIÓN
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DISPLAYS
DISPLAYS • DISPLAYS

ESTUCHE FR37 METAL - COMPOSICIÓN: 37 PIEZAS, 1-10 x 0,25 mm
 SET MOD.: FR37 METAL - 37 PIECES, 1-10 x 0,25 mm
 COFFRET MOD.: FR37 METAL - 37 PIÈCES, 1-10 x 0,25 mm



Calidad / Quality	Uds. Pcs.	Cod.	€/Unid.
HSS-G ALTO RENDIMIENTO HIGH PERFORMANCE	1	1915037	118,86
HSS-CO 5%	1	194037	178,17
TIN	1	192037	203,16

Calidad / Quality	Uds. Pcs.	Cod.	€/Unid.
INOX HSS-G INOX PROGRESIVA PROGRESSIVE INOX	1	194P037	187,22
ESTUCHE VACÍO / EMPTY SET	1	19R037	43,51

ESTUCHE LR49 METAL - COMPOSICIÓN: 49 PIEZAS 1-13 x 0,25 mm
 SET MOD.: LR49 METAL - 49 PIECES 1-13 x 0,25 mm
 COFFRET MOD.: LR49 METAL - 49 PIÈCES 1-13 x 0,25 mm



Calidad / Quality	Uds. Pcs.	Cod.	€/Unid.
HSS-G ALTO RENDIMIENTO HIGH PERFORMANCE	1	1915049	217,64
HSS-CO 5%	1	194049	401,20
TIN	1	192049	421,88

Calidad / Quality	Uds. Pcs.	Cod.	€/Unid.
INOX HSS-G INOX PROGRESIVA PROGRESSIVE INOX	1	194P049	421,22
ESTUCHE VACÍO / EMPTY SET	1	19R049	46,50

ESTUCHES DE BROCAS

DRILL BIT SETS • COFFRETS DE FORETS

ESTUCHE M.014 METAL - COMPOSICIÓN: 51 PIEZAS 1-6,0 x 0,1 mm

SET MOD.: M.014 METAL - 51 PIECES 1-6,0 x 0,1 mm

COFFRET MOD.: M.014 METAL - 51 PIÈCES 1-6,0 x 0,1 mm



DIN 338



Calidad / Quality	Uds. Pcs.	Cod.	€/Unid.
HSS-G ALTO RENDIMIENTO HIGH PERFORMANCE	1	1915014	90,62
HSS-CO 5%	1	194014	142,54

Calidad / Quality	Uds. Pcs.	Cod.	€/Unid.
ESTUCHE VACÍO / EMPTY SET	1	19R0014	46,50

ESTUCHE M.015 METAL - COMPOSICIÓN: 41 PIEZAS 6-10 x 0,1 mm

SET MOD.: M.015 METAL - 41 PIECES 6-10 x 0,1 mm

COFFRET MOD.: M.015 METAL - 41 PIÈCES 6-10 x 0,1 mm



DIN 338



Calidad / Quality	Uds. Pcs.	Cod.	€/Unid.
HSS-G ALTO RENDIMIENTO HIGH PERFORMANCE	1	1915015	228,86
HSS-CO 5%	1	1940015	373,62

Calidad / Quality	Uds. Pcs.	Cod.	€/Unid.
ESTUCHE VACÍO / EMPTY SET	1	19R0015	85,00

ESTUCHE M.9965 PLÁSTICO - COMPOSICIÓN: 91 PIEZAS 1-10 x 0,1 mm

SET MOD.: M.9965 METAL - 91 PIECES 1-10 x 0,1 mm

COFFRET MOD.: M.9965 METAL - 91 PIÈCES 1-10 x 0,1 mm



DIN 338



Calidad / Quality	Uds. Pcs.	Cod.	€/Unid.
HSS-G ALTO RENDIMIENTO HIGH PERFORMANCE	1	19159965	259,64
HSS-CO 5%	1	1949965	443,70

Calidad / Quality	Uds. Pcs.	Cod.	€/Unid.
ESTUCHE VACÍO / EMPTY SET	1	19R9965	59,76

CONSTRUCCIÓN
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METROLOGÍA
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DISPLAYS
DISPLAYS • DISPLAYS

ESTUCHE M.880 PLÁSTICO - COMPOSICIÓN: 292 PIEZAS 1-10 x 0.5 mm

SET MOD.: M.880 METAL
292 PIECES 1-10 x 0,5 mm
COFFRET MOD.: M.880 METAL
292 PIÈCES 1-10 x 0,1 mm



DIN 338



Calidad / Quality	Uds. Pcs.	Cod.	€/Unid.
HSS-G ALTO RENDIMIENTO HIGH PERFORMANCE	1	145R880	479,08
HSS WHITE WHITE	1	155R880	288,80
HSS-CO 5%	1	14R880	774,75
INOX HSS-G INOX PROGRESIVA PROGRESSIVE INOX	1	14PR880	806,39

Calidad / Quality	Uds. Pcs.	Cod.	€/Unid.
INOX HSS-CO 5%	1	193R880	1511,92
TIN	1	13R880	874,53
ESTUCHE VACÍO / EMPTY SET	1	19R880	38,33

Contenido / Contains / Contenu

Ø (mm)	Uds. / Pcs.	Ø (mm)	Uds. / Pcs.	Ø (mm)	Uds. / Pcs.	Ø (mm)	Uds. / Pcs.
1,00	20	3,50	20	6,00	20	8,50	8
1,50	20	4,00	15	6,50	15	9,00	8
2,00	20	4,50	15	7,00	15	9,50	8
2,50	20	5,00	15	7,50	15	10,00	8
3,00	20	5,50	15	8,00	15		

ESTUCHES DE BROCAS

DRILL BIT SETS • COFFRETS DE FORETS

ESTUCHE **M.881** METAL - COMPOSICIÓN: 774 PIEZAS 1-13 x 0,5 mm + 3,25 mm + 4,25 mm

SET MOD.: M.881 METAL

774 PIECES 1-13 x 0,5 mm + 3,25 mm + 4,25 mm

COFFRET MOD.: 881 METAL

774 PIÈCES 1-13 x 0,5mm + 3,25 mm + 4,25 mm



Calidad / Quality	Uds. Pcs.	Cod.	€/Unid.
HSS-G ALTO RENDIMIENTO HIGH PERFORMANCE	1	145R881	1.565,65
HSS WHITE WHITE	1	155R881	1.193,30
HSS-CO 5%	1	14R881	2.773,37
INOX HSS-G INOX PROGRESIVA PROGRESSIVE INOX	1	14PR881	2.223,36

Calidad / Quality	Uds. Pcs.	Cod.	€/Unid.
INOX HSS-CO 5%	1	193R881	4.566,17
TIN	1	13R881	2.868,74
ESTUCHE VACÍO / EMPTY SET	1	19R881	170,04

Contenido / Contains / Contenu

Ø (mm)	Uds. / Pcs.	Ø (mm)	Uds. / Pcs.	Ø (mm)	Uds. / Pcs.	Ø (mm)	Uds. / Pcs.
1,00	50	4,00	50	7,00	20	10,50	10
1,50	50	4,25	50	7,50	20	11,00	10
2,00	50	4,50	40	8,00	20	11,50	10
2,50	50	5,00	40	8,50	10	12,00	8
3,00	50	5,50	30	9,00	10	12,50	8
3,25	50	6,00	30	9,50	10	13,00	8
3,50	50	6,50	30	10,00	10		

Hasta agotar existencias / Until end of stock / Jusqu'à épuisement des stocks

CONSTRUCCIÓN
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HEXAGONAL • HEXAGONAL

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METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

BROCA BIDIAMETRAL PARA ASIENTOS DE TORNILLO 180°
SUBLAND DRILL BITS 180° • FORETS ÉTAGÉS À VIS 180°

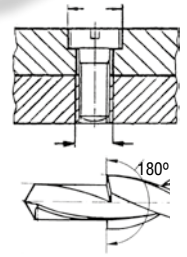
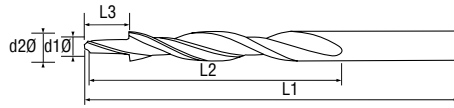


HSS-G

DIN 8376



180°



Ø (mm)	L1 (mm)	L2 (mm)	L3 (mm)	d1 (mm)	d2 (mm)	Cod.	€/Unid.
M 3	93	57	9	3,4	6	16B0300	74,85
M 4	117	75	11	4,5	8	16B0400	78,44
M 5	133	87	13	5,5	10	16B0500	94,16
M 6	142	94	15	6,5	11	16B0600	105,35
M 8	169	114	19	9,0	15	16B0800	129,36
M 10	191	130	23	11,0	18	16B1000	257,34

BROCA BIDIAMETRAL PARA ASIENTOS DE TORNILLO 90°
SUBLAND DRILL BITS 90° • FORETS ÉTAGÉS À VIS 90°

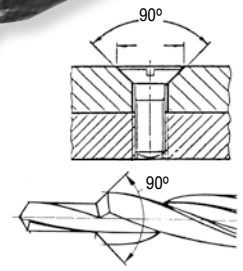
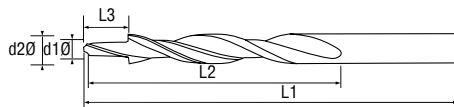


HSS-G

DIN 8374



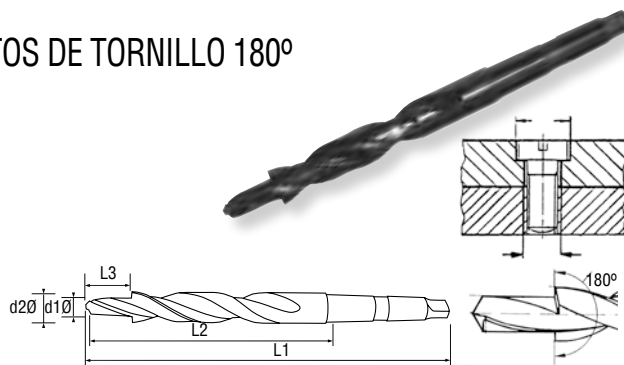
90°



Ø (mm)	L1 (mm)	L2 (mm)	L3 (mm)	d1 (mm)	d2 (mm)	Cod.	€/Unid.
M 3	93	57	9	3,2	6,0	16C0300	87,35
M 4	117	75	11	4,3	8,0	16C0400	91,56
M 5	133	87	13	5,3	10,0	16C0500	108,94
M 6	142	94	15	6,4	11,5	16C0600	124,28
M 8	169	114	19	8,4	15,0	16C0800	170,24
M 10	198	135	23	10,5	19,0	16C1000	262,48

BROCAS BIDIAMETRALES
SUBLAND DRILL BITS • FORETS ETAGÉS

BROCA BIDIAMETRAL MANGO CÓNICO PARA ASIENTOS DE TORNILLO 180°
TAPPER SHANK SUBLAND DRILL BITS 180°
FORETS ÉTAGÉS Á VIS 180° QUEUE CONIQUE



Ø (mm)	L1	L2	L3	d1	d2	Cono Morse / Tapper Shank	Cod.	€/Unid.
M 8	212	114	19	9,0	15	2	16D0800	189,48
M 10	228	130	23	11,0	18	2	16D1000	213,97
M 12	238	140	27	13,5	20	2	16D1200	239,47
M 14	281	160	31	15,5	24	3	16D1400	340,24
M 16	286	165	35	17,5	26	3	16D1600	485,00
M 18	296	175	39	20,0	30	3	16D1800	539,99
M 20	334	185	43	22,0	33	4	16D2000	608,72

BROCA BIDIAMETRAL MANGO CÓNICO PARA ASIENTOS DE TORNILLO 90°
TAPPER SHANK SUBLAND DRILL BITS 90°
FORETS ÉTAGÉS Á VIS 90° QUEUE CONIQUE



Ø (mm)	L1	L2	L3	d1	d2	Cono Morse / Tapper Shank	Cod.	€/Unid.
M 5	175	94	13	5,5	11,0	1	16E0500	183,11
M 6	182	101	15	6,6	13,0	1	16E0600	186,88
M 8	228	130	19	9,0	17,2	2	16E0800	222,70
M 10	248	150	23	11,0	21,5	2	16E1000	263,84

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

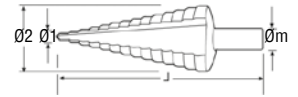
METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

BROCAS ESCALONADAS RECTAS
STEP DRILL-BITS • FRAISES ÉTAGÉES



HSS-G

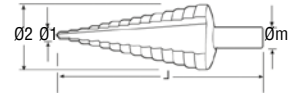
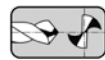


Ø 1 (mm)	L1 (mm)	Ø Mango / Ø Shank (mm)	Uds. / Pcs.	Cod.	€/Unid.
4 a 12 / 1	66	6	1	109401	32,19
4 a 20 / 2	75	8	1	109402	50,04
4 a 30 / 2	101	10	1	109403	75,55
6 a 38 / 2	101	10	1	109632	155,11

BROCAS ESCALONADAS CANAL HELICOIDAL
SPIRAL STEP DRILL-BITS • FRAISES ÉTAGÉES SPIRAL



HSS-G



Ø 1 a Ø 2 (mm)	L1 (mm)	Ø Mango / Ø Shank (mm)	Uds. / Pcs.	Cod.	€/Unid.
4-12	65	6	1	110401	46,13
4-20	75	8	1	110402	75,76
4-30	100	10	1	110403	110,14
6-38	100	10	1	110632	166,86

ESTUCHE DE BROCAS ESCALONADAS
STEP DRILL BITS SET
COFFRETS FRAISES ÉTAGÉES



Medidas / Sizes			
4 a 12 / 1 - 4 a 20 / 2 - 4 a 30 / 2 mm			
Tipo / Type	Uds. Pcs.	Cod.	€/Unid.
RECTA STEP	3	109169	176,47



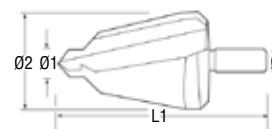
Medidas / Sizes			
4 a 12 / 1 - 4 a 20 / 2 - 4 a 30 / 2 mm			
Tipo / Type	Uds. Pcs.	Cod.	€/Unid.
HELICOIDAL 35° SPIRAL STEP	3	109170	246,07

BROCAS ESCALONADAS Y CÓNICAS

STEP DRILL BITS • FORETS ETAGEÉS

BROCAS CÓNICA PARA TUBO Y CHAPA

SHEET METAL DRILL-BITS • FORETS CONIQUES



Ø 1 a Ø 2 (mm)	L1 (mm)	Ø Mango / Ø Shank (mm)	Uds. / Pcs.	Cod.	€/Unid.
3 a 14,0	58	6	1	108031	21,60
8 a 20,0	73	8	1	108062	29,23
16 a 30,5	77	9	1	108163	55,30
26 a 40,0	87	10	1	108264	112,20

ESTUCHE BROCA CÓNICA PARA TUBO Y CHAPA

SHEET DRILL BITS SET
COFFRET FORETS CONIQUES



Medidas / Sizes

3 a 14 - 8 a 20 - 16 a 30,5 - 26 a 40 mm

Uds. / Pcs.	Cod.	€/Unid.
4	108199	176,58

Hasta agotar existencias / Until end of stock
Jusqu'à épuisement des stocks

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

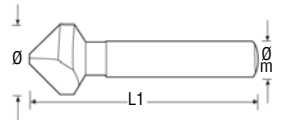
ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

AVELLANADOR HSS-G 90°
90° HSS-G COUNTERSINK CUTTERS • FRAISES CONIQUE 90° HSS-G



HSS-G

DIN 335C



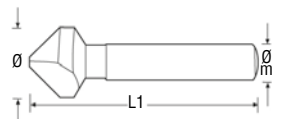
3Z

90°

Ø (mm)	L1 (mm)	Mango / Shank Ø (mm)	Uds. Pcs.	Cod.	€/Unid.
4,30	44	4	1	T04344	12,87
6,30	45	5	1	T06344	11,15
8,30	50	6	1	T08350	13,31
10,40	50	6	1	T10454	15,47
12,40	54	8	1	T12454	17,07

Ø (mm)	L1 (mm)	Mango / Shank Ø (mm)	Uds. Pcs.	Cod.	€/Unid.
16,50	60	10	1	T16560	23,47
20,50	63	10	1	T20563	34,55
25,00	66	10	1	T25066	43,56
31,00	72	12	1	T31071	69,74

AVELLANADOR HSS-CO 90°
90° HSS-CO COUNTERSINK CUTTERS • FRAISES CONIQUE 90° HSS-CO



HSS-CO 5%

DIN 335C



3Z

90°

Ø (mm)	L1 (mm)	Mango / Shank Ø (mm)	Uds. Pcs.	Cod.	€/Unid.
4,30	40	4	1	3AE0430	22,54
6,30	45	5	1	3AE0630	14,46
8,30	50	6	1	3AE0830	20,48
10,40	50	6	1	3AE1040	23,92
12,40	56	8	1	3AE1250	25,99

Ø (mm)	L1 (mm)	Mango / Shank Ø (mm)	Uds. Pcs.	Cod.	€/Unid.
16,50	60	10	1	3AE1650	34,95
20,50	63	10	1	3AE2050	52,15
25,00	67	10	1	3AE2500	67,99
31,00	71	12	1	3AE3100	109,64
40,00	80	15	1	3AE4000	123,28

ESTUCHE AVELLANADORES 90°
90° COUNTERSINKS SETS • COFFRETS FRAISES À CHANFREINER 90°

Medidas / Sizes

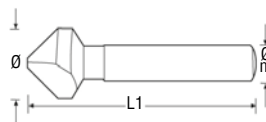
6,3 - 8,3 - 10,4 - 12,4 - 16,5 - 20,5 mm

Calidad Quality	Uds. Pcs.	Cod.	€/Unid.
HSS-G	6	T40757	144,95
HSS-CO 5%	6	T40757C	194,78



AVELLANADORES
COUNTERSINKS • FRAISES CONIQUES

AVELLANADOR HSS-G 90° MANGO CÓNICO
90° TAPER SHANK HSS-G COUNTERSINK CUTTERS
FRAISE CONIQUE QUEUE CONIQUE 90° HSS-G



HSS-G

DIN 335D



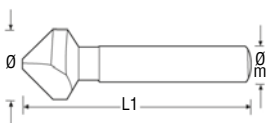
3Z

90°

Ø (mm)	L1 (mm)	Mango / Shank Ø (mm)	Uds, Pcs,	Cod,	€/Unid.
16,50	85	12,065 (CM 1)	1	3AM1650	90,03
20,50	100	17,780 (CM 2)	1	3AM2050	106,78
25,00	106	17,780 (CM 2)	1	3AM2500	107,77
31,00	112	17,780 (CM 2)	1	3AM3100	119,88

Ø (mm)	L1 (mm)	Mango / Shank Ø (mm)	Uds, Pcs,	Cod,	€/Unid.
40,00	140	23,825 (CM 3)	1	3AM4000	182,89
50,00	150	23,825 (CM 3)	1	3AM5000	223,01
63,00	180	31,267 (CM 4)	1	3AM6300	332,44
80,00	190	31,267 (CM 4)	1	3AM8000	573,20

AVELLANADOR HSS-G 60°
60° HSS-G COUNTERSINK CUTTERS
FRAISES CONIQUE 60° HSS-G



HSS-G

DIN 334C



3Z

60°

Ø (mm)	L1 (mm)	Mango / Shank Ø (mm)	Uds, Pcs,	Cod,	€/Unid.
6,30	45	5	1	3AS0630	20,03
8,30	50	6	1	3AS0800	21,75
10,00	53	6	1	3AS1000	23,36

Ø (mm)	L1 (mm)	Mango / Shank Ø (mm)	Uds, Pcs,	Cod,	€/Unid.
12,50	56	8	1	3AS1250	25,32
16,00	63	10	1	3AS1600	33,02
20,50	67	10	1	3AS2050	41,84

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

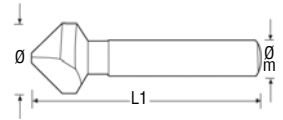
AVELLANADORES HSS-G 90° HEXAGONAL
90° HSS-G HEXAGONAL COUNTERSINK
FRAISE CONIQUE 90° HSS-G HEXAGONALE



HSS-G



90°



Ø (mm)	L1 (mm)	Uds. / Pcs.	Cod.	€/Unid.
6,30	31	1	3R67306	17,53
8,30	31	1	3R67308	17,53
10,40	34	1	3R67310	18,88
12,40	35	1	3R67312	19,87
16,50	40	1	3R67316	22,30
20,50	41	1	3R67320	25,26

MANGO SILICONA ENTRADA HEXAGONAL
SILICONE HEXAGONAL SHANK HOLDER, INLET 1/4"
MANCHE À SILICONE, ENTRÉE 1/4"

Uds. / Pcs.	Cod.	€/Unid.
1	NZBD14	19,23

CJTO. AVELLANADORES C/ADAPTADOR Y MANGO
COUNTERSINKS SETS
COFFRET FRAISES
À CHANFREINER

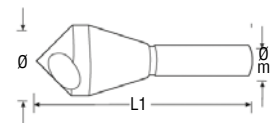


Medidas / Sizes

6,3 - 8,3 - 10,4 - 12,4,
16,5 - 20,5 mm

Uds. / Pcs.	Cod.	€/Unid.
8	3R67423	82,58

AVELLANADOR 90° HSS-G CON AGUJERO
90° HSS-G COUNTERSINK CUTTERS WITH HOLE
FRAISES À TROU ET À CHANFREINER 90° HSS-G



HSS-G

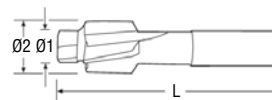
90°

Ø (mm)	L1 (mm)	Mango / Shank Ø (mm)	Uds. Pcs.	Cod.	€/Unid.
2-5	45	6	1	T50001	17,51
5-10	48	8	1	T50002	19,13
10-15	65	10	1	T50003	39,16

Ø (mm)	L1 (mm)	Mango / Shank Ø (mm)	Uds. Pcs.	Cod.	€/Unid.
15-20	85	12	1	T50004	67,95
20-25	100	15	1	T50005	139,57

AVELLANADORES
COUNTERSINKS • FRAISES CONIQUES

AVELLANADOR HSS-G PARA ASIENTO DE TORNILLOS "ALLEN"
FLAT COUNTERSINK • FRAISES À LAMER



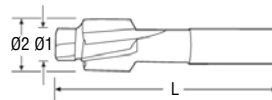
HSS-G

DIN 373



Ø (mm)	Ø 1 (mm)	Ø 2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
3,00	3,2	6,0	1	TAAM03	22,90
4,00	4,3	8,0	1	TAAM04	22,90
5,00	5,3	10,0	1	TAAM05	23,90
6,00	6,4	11,0	1	TAAM06	25,16
8,00	8,4	15,0	1	TAAM08	41,59
10,00	10,5	18,0	1	TAAM10	51,34
12,00	13,0	20,0	1	TAAM12	53,55
14,00	15,0	24,0	1	TAAM14	99,18
16,00	17,0	26,0	1	TAAM16	110,16

AVELLANADOR HSS-G PARA ASIENTO DE TORNILLOS "ALLEN"
FLAT COUNTERSINK • FRAISES À LAMER



HSS-G

DIN 375



Ø (mm)	Ø 1 (mm)	Ø 2 (mm)	Cono Morse / Tapper Shank	Uds. / Pcs.	Cod.	€/Unid.
8,00	8,4	15,0	2	1	TABM08	84,43
10,00	10,5	18,0	2	1	TABM10	86,88
12,00	13,0	20,0	2	1	TABM12	91,63
14,00	15,0	24,0	2	1	TABM14	107,15
16,00	17,0	26,0	3	1	TABM16	120,03
18,00	19,0	30,0	3	1	TABM18	151,41
20,00	21,0	33,0	3	1	TABM20	167,08
22,00	23,0	36,0	3	1	TABM22	191,50
24,00	25,0	40,0	3	1	TABM24	218,24

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

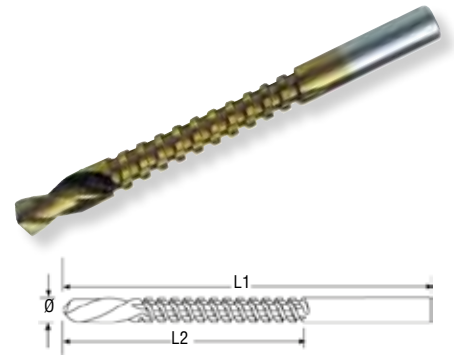
ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

BROCA FRESA CUTTING DRILL BITS • FORETS FRAISEUR



HSS-G

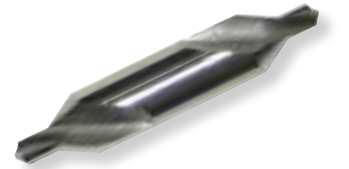
TIN



Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
6,00	90	60	1	1360600	21,81
8,00	90	60	1	1360800	25,37

BROCAS DE CENTRAR
CENTER DRILLS • FORETS À CENTRER

BROCA HSS DE CENTRAR 60°
HSS 60° CENTER DRILLS • FORETS À CENTRER HSS 60°



HSS-G

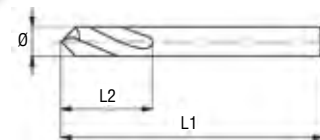


Ø 1 (mm)	Ø 2 (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
1,00	3,15	31,5	1,6	1	106100	6,65
1,25	3,15	33,5	1,9	1	106125	6,65
1,60	4,00	37,5	2,4	1	106160	6,65
2,00	5,00	42,0	2,9	1	106200	7,09
2,50	6,30	47,0	3,6	1	106250	7,84
3,15	8,00	52,0	4,4	1	106315	8,65
4,00	10,00	59,0	5,6	1	106400	11,29
5,00	12,50	66,0	6,9	1	106500	18,95
6,30	16,00	74,0	8,6	1	106630	30,41
10,00	25,00	100,0	31,5	1	106102	82,42
12,50	31,50	125,0	33,5	1	1061250	196,72

BROCAS DE CENTRAR
CENTER DRILLS • FORETS À CENTRER

BROCA DE PUNTEAR 90°
90° NC SPOTTING DRILLS • FORETS À CENTRER 90°

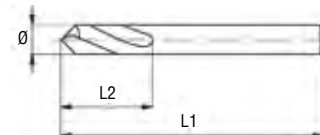
NEW



Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
3,00	46,00	12,00	1	11590030	10,77
4,00	55,00	12,00	1	11590040	4,42
5,00	62,00	14,00	1	11590050	5,30
6,00	66,00	16,00	1	11590060	5,48
8,00	79,00	21,00	1	11590080	7,08
10,00	89,00	25,00	1	11590100	9,02
12,00	102,00	30,00	1	11590120	12,17
14,00	107,00	34,00	1	11590140	17,71
16,00	115,00	38,00	1	11590160	30,54

BROCA DE PUNTEAR 120°
120° NC SPOTTING DRILLS • FORETS À CENTRER 120°

NEW



Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
3,00	46,00	12,00	1	115128030	10,77
4,00	55,00	12,00	1	115128040	4,42
5,00	62,00	14,00	1	115128050	5,30
6,00	66,00	16,00	1	115128060	5,48
8,00	79,00	21,00	1	115128080	7,08
10,00	89,00	25,00	1	115128100	9,02
12,00	102,00	30,00	1	115128120	12,17
14,00	107,00	34,00	1	115128140	17,71
16,00	115,00	38,00	1	115128160	30,54

CONSTRUCCIÓN
 CONSTRUCTION • CONSTRUCTION

MADERA
 WOOD • BOIS

METAL
 METAL • MÉTAL

FRESADO
 MILLING • FRAISAGE

ROSCADO
 THREADING • FILETAGE

ACCESORIOS
 ACCESSORIES • ACCESSOIRES

HEXAGONAL
 HEXAGONAL • HEXAGONAL

METROLOGÍA
 METROLOGY • MÉTROLOGIE

DISPLAYS
 DISPLAYS • DISPLAYS

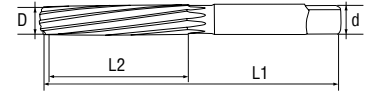
ESCARIADOR HELICOIDAL DE MANO
HAND REAMER • ALÉSOIR À MAIN



HSS-G

DIN 206 B

TOL
7H

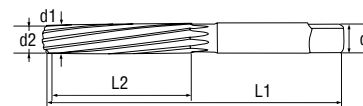


D Ø (mm)	d Ø (mm)	L1 (mm)	L2 (mm)	Z	Uds. / Pcs.	Cod.	€/Unid.
3,00	3,00	62	31	4	1	N10300	26,09
3,50	3,50	71	35	4	1	N10350	26,09
4,00	4,00	76	38	6	1	N10400	26,09
4,50	4,50	81	41	6	1	N10450	28,88
5,00	5,00	87	44	6	1	N10500	29,73
5,50	5,50	93	47	6	1	N10550	29,90
6,00	6,00	93	47	6	1	N10600	29,90
6,50	6,50	107	54	6	1	N10650	29,90
7,00	7,00	107	54	6	1	N10700	29,90
7,50	7,50	115	58	6	1	N10750	31,55
8,00	8,00	115	58	6	1	N10800	31,55
8,50	8,50	124	62	6	1	N10850	31,55
9,00	9,00	124	62	6	1	N10900	31,55
9,50	9,50	133	66	6	1	N10950	34,50
10,00	10,00	133	66	6	1	N11000	34,50
10,50	10,50	142	71	6	1	N11050	39,54
11,00	11,00	142	71	6	1	N11100	39,54
11,50	11,50	152	76	6	1	N11150	40,94
12,00	12,00	152	76	6	1	N11200	40,94
12,50	12,50	152	76	6	1	N11250	54,28
13,00	13,00	152	76	6	1	N11300	54,28
13,50	13,50	163	81	8	1	N11350	57,97
14,00	14,00	163	81	8	1	N11400	57,97
14,50	14,50	163	81	8	1	N11450	59,36
15,00	15,00	163	81	8	1	N11500	63,34
15,50	15,50	175	87	8	1	N11550	69,58
16,00	16,00	175	87	8	1	N11600	69,58
16,50	16,50	175	87	8	1	N11650	72,51
17,00	17,00	175	87	8	1	N11700	72,51
17,50	17,50	188	93	8	1	N11750	78,40
18,00	18,00	188	93	8	1	N11800	78,40
18,50	18,50	188	93	8	1	N11850	98,58
19,00	19,00	188	93	8	1	N11900	98,58
20,00	20,00	201	100	8	1	N12000	100,95
21,00	21,00	215	107	8	1	N12100	113,30
22,00	22,00	215	107	8	1	N12200	118,85
23,00	23,00	231	115	8	1	N12300	124,32
24,00	24,00	231	115	8	1	N12400	152,37
25,00	25,00	231	115	10	1	N12500	164,38
26,00	26,00	231	115	10	1	N12600	169,93
27,00	27,00	247	124	10	1	N12700	177,30
28,00	28,00	247	124	10	1	N12800	188,10
29,00	29,00	247	124	10	1	N12900	193,47
30,00	30,00	265	133	10	1	N13000	194,17
32,00	32,00	265	133	10	1	N13200	243,93

Para medidas no tarifcadas consultar. / For measurements not listed, request / Pour des mesures non cotées consulter

ESCARIADORES
REAMERS • ALÉSOIRS

ESCARIADOR HELICOIDAL CÓNICO DE MANO - CONICIDAD 2:100
TAPPER SHANK REAMER - 2 IN 100 TAPPER
ALÉSOIR CONIQUE À MAIN - CONICITÉ 2:100



HSS-G

DIN 9 B



D Ø NOMINAL (mm)	d1 Ø (mm)	d2 Ø (mm)	L1 (mm)	L2 (mm)	Z	Uds. / Pcs.	Cod.	€/Unid.
2,00	1,90	2,86	68	48	4	1	N20200	53,25
2,50	2,40	3,36	68	48	4	1	N20250	54,21
3,00	2,90	4,06	80	58	4	1	N20300	55,32
4,00	3,90	5,26	93	68	4	1	N20400	46,49
5,00	4,90	6,36	100	73	4	1	N20500	47,24
6,00	5,90	8,00	135	105	6	1	N20600	57,59
8,00	7,90	10,80	180	145	6	1	N20800	88,57
10,00	9,90	13,40	215	175	6	1	N21000	109,25
12,00	11,80	16,00	255	210	8	1	N21200	149,11
13,00	12,80	17,00	255	210	8	1	N21300	168,92
14,00	13,80	18,00	255	210	8	1	N21400	231,48
16,00	15,80	20,40	280	230	8	1	N21600	228,13
20,00	19,80	24,80	310	250	8	1	N22000	317,50

Consultar medidas no tarifadas y disponibilidad en tipo A / Request measurements not listed and availability in type A / Consulter les mesures non tarifaires et la disponibilité dans le type A

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

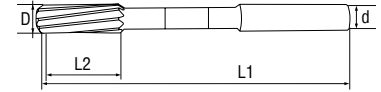
ESCARIADOR HELICOIDAL DE MÁQUINA
MACHINE REAMER • ALÉSOIR MACHINE



HSS-CO 5%

DIN 212 D

TOL
7H



D Ø (mm)	d Ø (mm)	L1 (mm)	L2 (mm)	Z	Uds. / Pcs.	Cod.	€/Unid.
3,00	3,00	61	15	6	1	N70300	32,88
3,50	3,50	70	18	6	1	N70350	32,88
4,00	4,00	75	19	6	1	N70400	32,25
4,50	4,50	80	21	6	1	N70450	36,46
5,00	5,00	86	23	6	1	N70500	35,75
5,50	5,60	93	26	6	1	N70550	37,44
6,00	5,60	93	26	6	1	N70600	36,72
7,00	7,10	109	31	6	1	N70700	38,27
8,00	8,00	117	33	6	1	N70800	41,59
9,00	9,00	125	36	6	1	N70900	47,05
10,00	10,00	133	38	6	1	N71000	50,66
11,00	10,00	142	41	6	1	N71100	54,03
12,00	10,00	151	44	6	1	N71200	56,94
13,00	10,00	151	44	6	1	N71300	73,46
14,00	12,50	160	47	8	1	N71400	75,50
15,00	12,50	162	50	8	1	N71500	79,50
16,00	12,50	170	52	8	1	N71600	80,15

Para medidas no tarifcadas consultar. / For measurements not listed, request / Pour des mesures non cotées consulter

ESCARIADORES
REAMERS • ALÉSOIRS

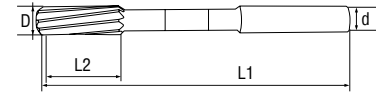
ESCARIADOR HELICOIDAL DE MÁQUINA TIPO "GAMMON"
"GAMMON TYPE" MACHINE REAMER
ALÉSOIR MACHINE TIPE "GAMMON"



HSS-CO 5%

DIN 212 E

TOL 7H



D Ø (mm)	d Ø (mm)	L1 (mm)	L2 (mm)	Z	Uds. / Pcs.	Cod.	€/Unid.
3,00	3,00	61	15	4	1	N80300	37,76
3,50	3,50	70	18	4	1	N80350	40,79
4,00	4,00	75	19	4	1	N80400	35,91
4,50	4,50	80	21	4	1	N80450	41,48
5,00	5,00	86	23	4	1	N80500	40,24
5,50	5,60	93	26	4	1	N80550	41,42
6,00	5,60	93	26	4	1	N80600	40,49
7,00	7,10	109	31	4	1	N80700	42,16
8,00	8,00	117	33	4	1	N80800	42,59
9,00	9,00	125	36	4	1	N80900	45,38
10,00	10,00	133	38	4	1	N81000	47,37
11,00	10,00	142	41	4	1	N81100	59,44
12,00	10,00	151	44	4	1	N81200	62,03
13,00	10,00	151	44	4	1	N81300	79,43
14,00	12,50	160	47	4	1	N81400	85,57
15,00	12,50	162	50	4	1	N81500	92,25
16,00	12,50	170	52	6	1	N81600	100,29
17,00	14,00	175	54	6	1	N81700	141,15
18,00	14,00	182	56	6	1	N81800	158,49
19,00	16,00	189	58	6	1	N81900	152,92
20,00	16,00	195	60	6	1	N82000	146,11

Para medidas no tarifcadas consultar. / For measurements not listed, request / Pour des mesures non cotées consulter

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

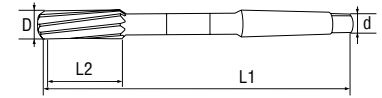
ESCARIADOR HELICOIDAL DE MÁQUINA ANCLAJE CÓNICO
TAPPER SHANK MACHINE REAMER
ALÉSOIR MACHINE QUEUE CONIQUE



HSS-CO 5%

DIN 208 B

TOL
7H

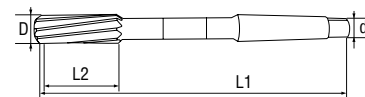


D Ø (mm)	Cono Morse / Tapper Shank	L1 (mm)	L2 (mm)	Z	Uds. / Pcs.	Cod.	€/Unid.
5,00	1	133	23	4	1	N30500	52,58
6,00	1	138	26	4	1	N30600	44,33
7,00	1	150	31	4	1	N30700	47,47
8,00	1	156	33	4	1	N30800	46,41
9,00	1	162	36	4	1	N30900	51,82
10,00	1	168	38	4	1	N31000	48,62
11,00	1	175	41	4	1	N31100	52,31
12,00	1	182	44	4	1	N31200	49,93
13,00	1	182	44	4	1	N31300	57,96
14,00	1	189	47	4	1	N31400	64,22
15,00	2	204	50	4	1	N31500	69,46
16,00	2	210	52	6	1	N31600	72,15
17,00	2	214	54	6	1	N31700	84,44
18,00	2	219	56	6	1	N31800	89,89
19,00	2	223	58	6	1	N31900	93,84
20,00	2	228	60	6	1	N32000	92,48
21,00	2	232	62	6	1	N32100	107,05
22,00	2	237	64	6	1	N32200	104,06
23,00	2	241	66	6	1	N32300	128,71
24,00	3	268	68	6	1	N32400	121,90
25,00	3	268	68	6	1	N32500	140,22
26,00	3	273	70	6	1	N32600	174,07
27,00	3	277	71	6	1	N32700	200,36
28,00	3	277	71	6	1	N32800	174,21
29,00	3	281	73	6	1	N32900	191,51
30,00	3	281	73	6	1	N33000	181,42

Para medidas no tarifcadas consultar. / For measurements not listed, request / Pour des mesures non cotées consulter

ESCARIADORES
REAMERS • ALÉSOIRS

ESCARIADOR HELICOIDAL DE MÁQUINA "GAMMON" ANCLAJE CÓNICO
TAPPER SHANK "GAMMON TYPE" MACHINE REAMER
ALÉSOIR MACHINE TIPE "GAMMON" QUEUE CONIQUE



HSS-CO 5%

DIN 208 C

TOL 7H



D Ø (mm)	Cono Morse / Tapper Shank	L1 (mm)	L2 (mm)	Z	Uds. / Pcs.	Cod.	€/Unid.
5,00	1	133	23	4	1	N40500	87,62
6,00	1	138	26	4	1	N40600	92,61
7,00	1	150	31	4	1	N40700	100,43
8,00	1	156	33	4	1	N40800	100,43
9,00	1	162	36	4	1	N40900	100,43
10,00	1	168	38	4	1	N41000	83,24
11,00	1	175	41	4	1	N41100	94,01
12,00	1	182	44	4	1	N41200	89,67
13,00	1	182	44	4	1	N41300	117,86
14,00	1	189	47	4	1	N41400	117,86
15,00	2	204	50	4	1	N41500	128,54
16,00	2	210	52	6	1	N41600	128,54
17,00	2	214	54	6	1	N41700	138,14
18,00	2	219	56	6	1	N41800	139,84
19,00	2	223	58	6	1	N41900	155,24
20,00	2	228	60	6	1	N42000	144,10
21,00	2	232	62	6	1	N42100	176,76
22,00	2	237	64	6	1	N42200	178,61
23,00	2	241	66	6	1	N42300	204,31
24,00	3	268	68	6	1	N42400	207,48
25,00	3	268	68	6	1	N42500	212,19
26,00	3	273	70	6	1	N42600	218,24
27,00	3	277	71	6	1	N42700	255,70
28,00	3	277	71	6	1	N42800	252,36
29,00	3	281	73	6	1	N42900	284,01
30,00	3	281	73	6	1	N43000	273,96
32,00	4	317	77	8	1	N43200	366,83

Para medidas no tarifcadas consultar. / For measurements not listed, request / Pour des mesures non cotées consulter

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

ESCARIADOR EXTENSIBLE CON GUÍA DE AJUSTE RÁPIDO
EXTENDABLE REAMERS • ALÉSOIR EXTENSIBLE



HSS-G

S./859

Ø MIN. (mm)	Ø MAX. (mm)	L1 (mm)	L2 (mm)	Z	Uds. / Pcs.	Cod.	€/Unid.
8,00	9,00	175	36	5	1	N508009	135,82
9,00	10,00	185	36	5	1	N509010	135,82
10,00	11,00	200	40	5	1	N510011	135,82
11,00	12,00	210	42	5	1	N511012	135,82
12,00	13,50	220	43	5	1	N5121350	138,52
13,50	15,50	245	52	5	1	N513515	144,03
15,50	18,00	275	61	5	1	N515518	149,40
18,00	21,00	300	66	5	1	N518021	160,40
21,00	24,00	320	70	5	1	N521024	173,92
24,00	27,50	350	78	5	1	N524275	195,18
27,50	31,50	380	83	6	1	N527531	227,07
31,50	37,00	430	97	6	1	N531537	305,63
37,00	45,00	500	108	6	1	N537045	425,52
45,00	55,00	600	126	6	1	N545055	612,60
55,00	67,00	750	151	6	1	N555067	990,52
67,00	80,00	830	167	10	1	N567080	1415,09

Para medidas no tarifcadas consultar. / For measurements not listed, request / Pour des mesures non cotées consulter

SET ESCARIADORES EXTENSIBLES
EXTENDABLE REAMERS SET • COFFRET ALÉSOIR EXTENSIBLE

Ref.	Medidas / Sizes	Uds. / Pcs.	Cod.	€/Unid.
184	De 8 a 31,5 mm	11	N500184	1.874,99

Hasta fin de existencias / Until end of stock / Jusqu'à épuisement des stocks



ESCARIADORES
REAMERS • ALÉSOIRS

ESCARIADOR EXTENSIBLE REFORZADO DE AJUSTE RÁPIDO
REINFORCED EXTENDABLE REAMERS
ALÉSOIR EXTENSIBLE RENFORCÉ



HSS-G

S./859

Ø MIN. (mm)	Ø MAX. (mm)	L1 (mm)	L2 (mm)	Z	Uds. / Pcs.	Cod.	€/Unid.
8,00	9,00	115	36	5	1	N608009	101,76
9,00	10,00	115	36	5	1	N609010	101,76
10,00	11,00	115	42	5	1	N610011	101,76
11,00	12,00	135	44	5	1	N611012	101,76
12,00	13,50	135	45	5	1	N612135	102,71
13,50	15,50	145	48	5	1	N613515	102,71
15,50	18,00	170	61	5	1	N615518	115,27
18,00	21,00	180	66	5	1	N618021	119,15
21,00	24,00	195	70	5	1	N621024	138,14
24,00	27,50	218	78	5	1	N624275	153,25
27,50	31,50	245	83	6	1	N627531	164,41
31,50	37,00	280	97	6	1	N631537	213,70
37,00	45,00	325	108	6	1	N637045	319,94
45,00	55,00	385	126	6	1	N645055	469,65
55,00	67,00	450	151	8	1	N655067	854,38
67,00	80,00	545	182	10	1	N667080	1.311,73

Para medidas no tarifcadas consultar. / For measurements not listed, request / Pour des mesures non cotées consulter

CONJUNTO DE ESCARIADORES EXTENSIBLES TIPO REFORZADO
REINFORCED EXTENDABLE REAMERS SET
COFFRET ALÉSOIR EXTENSIBLE RENFORCÉS

Ref.	Medidas / Sizes	Uds. / Pcs.	Cod.	€/Unid.
187	De 12 a 26,98 mm	8	N600187	832,22
189	De 10 a 45,00 mm	11	N600189	1.776,05

Hasta fin de existencias / Until end of stock / Jusqu'à épuisement des stocks



CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

RECOMENDACIONES TÉCNICAS
TECHNICAL RECOMMENDATIONS • RECOMMANDATIONS TECHNIQUES



TABLA DE VELOCIDADES RECOMENDADAS / RECOMMENDED SPEED / VITESSES RECOMMANDÉES

Ø (mm)	ACERO 800-1100	ACERO 400-800	F	LT	AL
	Acero / Steel	Acero / Steel	Fundición / Cast Iron	Latón / Brass	Aluminio / Aluminium
14	580	300	400	790	790
16	550	275	365	730	730
17	500	250	330	665	665
19	460	230	300	600	600
20	435	240	290	570	570
21	425	210	280	560	560
22	390	195	260	520	520
24	370	185	245	495	495
25	350	175	235	470	470
27	325	160	215	435	435
29	300	150	200	400	400
30	285	145	190	380	380
32	275	140	180	360	360
33	260	135	175	345	345
35	250	125	165	330	330
37	240	120	160	315	315
38	230	115	150	300	300
40	220	110	145	290	290
41	210	105	140	280	280
43	205	100	135	270	270
44	195	95	130	260	260
46	190	95	125	250	250
48	180	90	120	240	240
51	170	85	115	230	230
52	165	80	110	220	220
54	160	80	105	210	210
57	150	75	100	200	200
59	145	75	100	195	195
60	140	70	95	190	190
64	135	65	90	180	180
65	130	65	85	175	175
67	130	65	85	170	170
70	125	60	80	160	160
73	120	60	80	160	160
76	115	55	75	150	150
79	110	55	70	140	140
83	105	50	70	140	140
86	100	50	65	130	130
89	95	45	65	130	130
92	95	45	60	120	120
95	90	45	60	120	120
98	90	45	60	120	120
102	85	40	55	110	110
105	80	40	55	110	110
108	80	40	55	110	110
111	80	40	50	100	100
114	75	35	50	100	100
121	70	35	45	90	90
127	65	30	45	90	90
133	65	30	45	85	85
140	60	25	40	85	85
146	60	25	40	85	85
152	55	25	35	75	75

CORONAS
HOLE SAWS • SCIES TRÉPANS

CORONAS BIMETAL M42
BIMETAL HOLE SAWS M42 • SCIES TRÉPAN BIMETAL M42



Ø (mm)	Profundidad de Corte Depth of the Cut (mm)	Equivalencia P.G. Equivalence P.G.	Uds. / Pcs.	Cod.	€/Unid.
14	32	7	1	UC20014	11,94
16	32	9	1	UC20016	11,94
17	32	-	1	UC20017	11,94
19	32	11	1	UC20019	11,94
20	32	-	1	UC20020	11,94
21	32	13,5	1	UC20021	11,94
22	32	-	1	UC20022	11,94
24	32	16	1	UC20024	12,29
25	32	-	1	UC20025	12,29
27	32	-	1	UC20027	13,07
29	32	21	1	UC20029	13,07
30	32	-	1	UC20030	13,62
32	32	-	1	UC20032	13,62
33	32	-	1	UC20033	13,62
35	32	-	1	UC20035	14,48
37	32	-	1	UC20037	14,48
38	32	29	1	UC20038	14,48
40	32	-	1	UC20040	14,48
41	32	-	1	UC20041	14,48
43	32	-	1	UC20043	14,48
44	32	-	1	UC20044	17,41
46	32	-	1	UC20046	17,41
48	32	36	1	UC20048	17,95
50	32	-	1	UC20050	17,95
51	32	-	1	UC20051	17,95
52	32	-	1	UC20052	20,00
54	32	42	1	UC20054	20,00
56	32	-	1	UC20056	20,00
57	32	-	1	UC20057	20,00
59	32	-	1	UC20059	20,55
60	32	48	1	UC20060	20,55
63	32	-	1	UC20063	20,55
64	32	-	1	UC20064	21,27
65	32	-	1	UC20065	22,02
67	32	-	1	UC20067	22,75
68	32	-	1	UC20068	23,11
70	32	-	1	UC20070	23,11
73	32	-	1	UC20073	23,11
76	32	-	1	UC20076	23,63
79	32	-	1	UC20079	23,63
83	32	-	1	UC20083	23,63
86	32	-	1	UC20086	23,63
89	32	-	1	UC20089	23,63
92	32	-	1	UC20092	27,24

CONSTRUCCIÓN
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MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

CORONAS BIMETAL M42
BIMETAL HOLE SAWS M42 • SCIES TRÉPAN BIMETAL M42



Ø (mm)	Profundidad de Corte Depth of the Cut (mm)	Equivalencia P.G. Equivalence P.G.	Uds. / Pcs.	Cod.	€/Unid.
95,00	32	-	1	UC20095	31,07
98,00	32	-	1	UC20098	33,33
102,00	32	-	1	UC20102	35,10
105,00	32	-	1	UC20105	38,15
108,00	32	-	1	UC20108	42,56
111,00	32	-	1	UC20111	46,84
114,00	32	-	1	UC20114	50,00
121,00	32	-	1	UC20121	53,42
127,00	32	-	1	UC20127	56,26
140,00	32	-	1	UC20140	62,60
146,00	32	-	1	UC20146	69,82
152,00	32	-	1	UC20152	76,51
160,00	32	-	1	UC20160	94,73
168,00	32	-	1	UC20168	109,30
178,00	32	-	1	UC20178	127,52
200,00	32	-	1	UC20200	145,74
210,00	32	-	1	UC20210	163,96

ACEITE DE CORTE Y ROSCADO
CUTTING AND TAPPING FLUID
FLUIDE POUR FILETAGE ET DE COUP



Contenido / Content	Uds.	Cod	€/Unid.
400 ml	1	1AC4000	18,19

Metales duros y blandos. Alto poder refrigerante y anticorrosivo.
Suitable for hard and soft metals. High refrigerating and anti-corrosion capacity.
Métaux doux et durs. Haut pouvoir anticorrosion.

ACCESORIOS PARA CORONAS BIMETAL

ACCESSORIES • ACCESSOIRES

HUSILLOS PARA CORONAS BIMETAL

ARBORS FOR BIMETAL HOLE SAWS
ARBRES POUR SCIÉS TRÉPAN BIMÉTAL



Tipo Amarre Shank	Para Coronas For Hole Saws (mm)	Rosca del Husillo Arbor Thread	Uds. Pcs.	Cod.	€/Unid.
CILÍNDRICA / STRAIGHT	14 a 30	1/2 x 20h UNF	1	UH20A0N	8,51



Tipo Amarre Shank (mm)	Para Coronas For Hole Saws (mm)	Rosca del Husillo Arbor Thread	Uds. Pcs.	Cod.	€/Unid.
HEXAGONAL 11,00	14 a 30	1/2 x 20h UNF	1	UH200A1	12,38
HEXAGONAL 9,50	14 a 30	1/2 x 20h UNF	1	UH200A0	12,38
HEXAGONAL 11,00	32 a 210	5/8 x 18h UNF	1	UH20A2T	22,33
HEXAGONAL 9,50	32 a 210	5/8 x 18h UNF	1	UH20A3T	22,33



Tipo Amarre Shank	Para Coronas For Hole Saws (mm)	Rosca del Husillo Arbor Thread	Uds. Pcs.	Cod.	€/Unid.
SDS-PLUS	14 a 30	1/2 x 20h UNF	1	UH20A1N	15,31
SDS-PLUS	32 a 210	5/8 x 18h UNF	1	UH200A4	25,51



BROCAS PILOTO Y MUELLE EXPULSOR UNIVERSAL

CENTER DRILL & SPRING EJECTORS
FORET CENTRAGE ET RESSORT À EXPULSER

Tipo Amarre / Shank (mm)	Para husillos / For Arbors	Uds. / Pcs.	Cod.	€/Unid.
6,35 x 105*	A0N	1	UB1014C	4,40
6,35 x 85	A0-A1-A2T-A3-A1N-A4	1	UB1014B	4,40
MUELLE EXPULSOR UNIVERSAL SPRING EJECTOR		1	UM0000	1,90

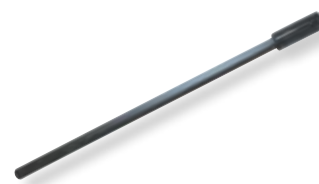
* Las brocas piloto de 6,35 x 105 también se recomiendan para taladrado de difícil acceso. / * 6.35 x 105 pilot bits are also recommended for drilling in difficult to access locations. / * Les forets pilote de 6,35 x 105 sont aussi recommandés pour le perçage à des endroits d'accès difficile



ALARGADORES PARA HUSILLOS 330 MM

EXTENSION 330 MM • EXTENSION 330 MM

Husillo / Arbor	Para husillos / For Arbors	Uds. / Pcs.	Cod.	€/Unid.
HEXAGONAL 11,00 mm	A1 - A2T	1	UL00330	17,69
HEXAGONAL 9,50 mm	A0 - A3T	1	UL00331	17,69
SDS-PLUS	A1 - A2T	1	UL00332	22,13
SDS-PLUS	A0 - A3T	1	UL00333	22,13



CONJUNTOS DE CORONAS BIMETÁLICAS
HOLE SAWS SETS
COFFRETS SCIES TRÉPANS



Contenido / Contains / Contenu

Cod.	Modelo / Model / Modèle	Coronas Hole Saws / Scies Trépan	Diámetros / Diameters Diametres (mm)	Husillos Arbors / Arbres	€/Unid.
UT20EK2A	ELECTRICISTA PG. ELECTRICIAN PG. ÉLECTRICITÉ PG.	6	16 - 21 - 24 - 29 - 38 - 48 PG. 9 - 3,5 - 16 - 21 - 29 - 36	A1 + A2T	168,47
UT20EK4	ELECTRICISTA- 3 ELECTRICIAN -3 ÉLECTRICITÉ-3	6	22 - 29 - 35 - 38 - 44 - 51	A1 + A2T	177,11
UT20EK5	ELECTRICISTA- 4 ELECTRICIAN-4 ÉLECTRICITÉ-4	6	19 - 21 - 24 - 29 - 38 - 48	A1 + A2T	168,47
UT20EK5A	ELECTRICISTA- 5 ELECTRICIAN-5 ÉLECTRICITÉ-5	6	19 - 21 - 25 - 30 - 37 - 46	A1 + A2T	168,47
UT20EK5B	ELECTRICISTA-6 ELECTRICIAN-6 ÉLECTRICITÉ-6	6	17 - 21 - 24 - 29 - 35 - 46	A1 + A2T	167,84
UT20EK6	FONTANERÍA- 1 PLUMBING-1 PLOMBERIE-1	6	19 - 22 - 29 - 38 - 44 - 51	A1 + A2T	174,26
UT20EK7	FONTANERÍA- 2 PLUMBING-2 PLOMBERIE-2	6	22 - 25 - 33 - 35 - 41 - 51	A1 + A2T	171,98
UT20EK8	REFRIGERACIÓN COOLING RÉFRIGÉRATION	6	16 - 22 - 29 - 35 - 41 - 52	A1 + A2T	173,26
UT20EK9	CERRAJERÍA HARDWARE SERRURERIE	6	22 - 25 - 32 - 38 - 44 - 52	A1 + A2T	177,60
UT20EK10	INSTALACIÓN AUTOMÓVIL VEHICLE INSTALLATION INSTALLATION AUTOMOBILE	6	19 - 22 - 32 - 38 - 44 - 52	A1 + A2T	177,21
UT20EK11	BÁSICO BASIC BASIQUE	6	22 - 29 - 33 - 38 - 43 - 51	A1 + A2T	172,88

CORONAS
HOLE SAWS • SCIES TRÉPANS

CONJUNTOS DE CORONAS BIMETÁLICAS
HOLE SAWS SETS
COFFRETS SCIES TRÉPANS



Contenido / Contains / Contenu					
Cod.	Modelo / Model / Modèle	Coronas Hole Saws / Scies Trépan	Diámetros / Diameters Diametres (mm)	Husillos Arbors / Arbres	€/Unid.
UT20EK0	MANTENIMIENTO INDUSTRIAL INDUSTRIAL MAINTENANCE MAINTENANCE INDUSTRIELLE	11	21 - 25 - 27 - 33 - 37 - 38 - 44 - 51 60 - 65 - 73	A1 + A2T + PROLONGADOR EXTENSION EXTENSION	302,97
UT20EK1	UNIVERSAL UNIVERSAL UNIVERSALE	11	19 - 22 - 25 - 29 - 35 - 38 44 - 51 57 - 64 - 70	A1 + A2T	302,53
UT20EK2	ELECTRICISTA PG. ELECTRICIAN PG. ÉLECTRICITÉ PG.	10	14 - 16 - 19 - 21 - 24 - 29 - 38 - 48 - 54 - 60 PG. 7 - 11 - 13,5 - 16 - 21 - 29 - 36 - 42 - 48	A1 + A2T	254,60
UT20EK3	ELECTRICISTA-2. ELECTRICIAN-2. ÉLECTRICITÉ-2	10	16 - 19 - 21 - 24 - 29 - 38 43 - 48 - 60 - 65	A 1 + A2T	259,32
UT20EK12	CARPINTERÍA CARPENTRY MENUISERIE	11	14 - 16 - 19 - 22 - 24 - 25 - 30 - 35 40 - 51 - 59	A1 + A2T + PROLONGADOR EXTENSION EXTENSION	277,03

CONJUNTOS DE CORONAS BIMETÁLICAS
MALETÍN ALUMINIO
HOLE SAWS SETS - ALUMINIUM CASE
COFFRETS SCIES TRÉPANS - COFFRET ALUMINIUM



Contenido / Contains / Contenu					
Cod.	Modelo / Model / Modèle	Coronas Hole Saws / Scies Trépan	Diámetros / Diameters Diametres (mm)	Husillos Arbors / Arbres	€/Unid.
UT20EK13	ALUMINIO - MANTENIMIENTO INDUSTRIAL ALUMINIUM - INDUSTRIAL MAINTENANCE ALUMINIUM - MAINTENANCE INDUSTRIELLE	11	21 - 25 - 27 - 33 - 37 - 38 - 44 - 51 60 - 65 - 73	A1 + A2T	324,18
UT20EK14	ALUMINIO - UNIVERSAL ALUMINIUM - UNIVERSAL ALUMINIUM - UNIVERSALE	11	19 - 22 - 25 - 29 - 35 - 38 44 - 51 57 - 64 - 70	A1 + A2T	323,71
UT20EK15	ALUMINIO - ELECTRICISTA PG. ALUMINIUM - ELECTRICIAN PG. ALUMINIUM - ÉLECTRICITÉ PG.	10	14 - 16 - 19 - 21 - 24 - 29 - 38 - 48 - 54 - 60 PG. 7 - 11 - 13,5 - 16 - 21 - 29 - 36 - 42 - 48	A1 + A2T	272,42
UT20EK16	ALUMINIO - ELECTRICISTA - 2 ALUMINIUM - ELECTRICIAN - 2 ALUMINIUM - ÉLECTRICITÉ - 2	10	16 - 19 - 21 - 24 - 29 - 38 43 - 48 - 60 - 65	A1 + A2T	277,48
UT20EK17	ALUMINIO - CARPINTERÍA ALUMINIUM - CARPENTRY ALUMINIUM - MENUISERIE	11	14 - 16 - 19 - 22 - 24 - 25 - 30 - 35 40 - 51 - 59	A1 + A2T	296,43

CONSTRUCCIÓN
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THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

PERFORADORES DE CHAPA
CIRCULAR PUNCHES • EMPORTE PIÈCES



CAPACIDAD DE CORTE: 2 mm en chapa de acero; 1,5 mm en chapa inox.
CUTTING LENGTH: 2 mm on steel sheet; 1,5 mm on Stainless steel
PROFONDEUR DE COUPAGE: 2 mm en plaque d'acier; 1,5 mm en plaque d'INOX



Ø (mm)	Tornillo / Screw	Uds. / Pcs.	advance		Basic	
			Cod.	€/Unid.	Cod.	€/Unid.
12,7 (1/2")	M 8	1	P0013	60,96	PS013	35,65
14,00		1	P0014	60,96	PS014	35,65
15,00		1	P0015	60,96	PS015	35,65
16 (5/8")		1	P0016	60,96	PS016	35,65
17,00		1	P0017	66,62	-	-
18,00		1	P0018	66,62	PS018	38,44
19 (3/4")		1	P0019	66,62	PS019	38,44
20,00		1	P0020	76,42	PS020	40,40
21,00		1	P0021	76,42	-	-
22 (7/8")		1	P0022	76,42	PS022	44,13
23,00	M 10	1	P0023	89,59	-	-
24,00		1	P0024	89,59	-	-
25 (1")		1	P0025	89,59	PS025	48,88
26,00		1	P0026	89,59	-	-
27,00		1	P0027	89,59	-	-
28 (1.3/32")		1	P0028	105,23	PS028	54,53
29,00		1	P0029	105,23	-	-
30,00		1	P0030	105,23	PS030	54,53
31,00		1	P0031	105,23	-	-
32 (1.1/4")		1	P0032	105,23	PS032	54,53
33,00	M 12	1	P0033	116,32	-	-
34 (1.11/32")		1	P0034	116,32	PS034	61,93
35,00		1	P0035	116,32	PS035	61,93
36,00		1	P0036	116,32	-	-
37,00		1	P0037	116,32	PS037	61,93
38 (1.1/2")		1	P0038	116,32	PS038	61,93
39,00		1	P0039	116,32	-	-
40,00		1	P0040	128,84	PS040	85,16
41,00		1	P0041	128,84	-	-
42,00		1	P0042	140,53	-	-
43,00	M 14	1	P0043	140,53	-	-
44,00		1	P0044	140,53	-	-
45,00		1	P0045	140,53	PS045	101,24
46,00		1	P0046	140,53	-	-
47,00		1	P0047	151,57	PS047	115,57
48,00		1	P0048	151,57	-	-
49,00		1	P0049	151,57	-	-
50,00		1	P0050	151,57	PS050	117,13
51 (2")		1	P0051	159,51	-	-
52,00		1	P0052	159,51	PS052	114,20
55,00	M 20	1	P0055	277,69	PS055	137,72
60 (2.3/8")		1	P0060	333,45	PS060	155,30
63,00		1	P0063	377,90	PS063	175,96
65,00		1	P0065	390,42	-	-
70,00		1	P0070	419,65	-	-
72,00		1	P0072	430,09	-	-
75,00		1	P0075	446,80	-	-
80,00		1	P0080	455,15	-	-
85,00		1	P0085	471,85	-	-
90,00		1	P0090	485,01	-	-
95,00	1	P0095	511,73	-	-	
100,00	1	P0100	578,33	-	-	
105,00	1	P0105	615,91	-	-	
110,00	1	P0110	668,11	-	-	
115,00	1	P0115	701,51	-	-	

CORONAS
HOLE SAWS • SCIES TRÉPANS

TORNILLOS DE REPUESTO
SPARE CREWS • VIS DE REMPLACEMENT



Ø (mm)	Uds. / Pcs.	Cod.	€/Unid.
M 8 x 125	1	PT001	10,74
M 10 x 125	1	PT002	14,03
M 12 x 150	1	PT003	15,78
M 14 x 150	1	PT004	23,67
M 20 x 150	1	PT005	49,33

JUEGOS PERFORADORES
CIRCULAR PUNCHES SETS • COFFRETS EMPORTE PIECES



Ø	Tornillo Screw	advance MAXIMUM RESISTANCE	€/Unid.	Basic	€/Unid.
		Cod.		Cod.	
18 - 22 - 25 - 32 mm		PJ003	335,12	PSJ001	183,12
15 - 20 - 22 - 28 mm		PJ006	316,33	PSJ002	172,50
5/8" - 3/4" - 1" - 1/4"		PJ007	323,43	PSJ003	176,35
1/2" - 3/4" - 1" - 1/4"		PJ008	323,43	PSJ004	176,35

CONSTRUCCIÓN
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METAL • MÉTAL

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THREADING • FILETAGE

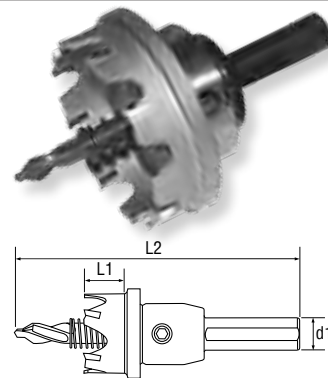
ACCESORIOS
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HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

CORONAS CON DIENTE METAL DURO SERIE CORTA
TUNGSTEN CARBIDE TIPED HOLE SAWS SHORT SERIES
SCIES TRÉPANS AU CARBURE DE TUNGSTENE SERIE COURTE



Ø (mm)	Z	D1 (mm)	L1 (mm)	L2 (mm)	Espesor máximo de corte Max. Cutting Thickness (mm)	Uds. / Pcs.	Cod.	€/Unid.
16,00	4	10	12	65	04	1	UI00016	52,85
18,00	4	10	12	65	04	1	UI00018	52,85
20,00	5	10	12	65	04	1	UI00020	54,73
22,00	5	10	12	65	04	1	UI00022	56,86
23,00	5	10	12	65	04	1	UI00023	57,58
25,00	5	10	12	65	04	1	UI00025	57,58
30,00	5	10	12	65	04	1	UI00030	62,15
32,00	6	10	12	65	04	1	UI00032	66,82
33,00	7	10	12	65	04	1	UI00033	70,59
35,00	7	10	12	65	04	1	UI00035	72,65
40,00	7	10	12	65	04	1	UI00040	85,10
50,00	9	10	12	65	04	1	UI00050	99,68
60,00	10	13	12	65	04	1	UI00060	130,73
63,00	11	13	12	65	04	1	UI00063	132,06
65,00	11	13	12	65	04	1	UI00065	134,26

Junto con la corona se incluye el husillo y la broca centradora / *The spindle and central bit come together with the core bit* / *La couronne est accompagnée de la broche et du foret de centrage*

BROCA PILOTO / PILOT DRILL / FORET DE CENTRAGE

Tipo Broca / Drill Bit Type	Uds. / Pcs.	Cod.	€/Unid.
Para Corona Serie Corta <i>For short series</i>	1	UIB0660	5,28

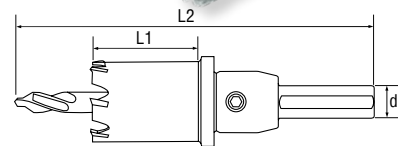
TABLA DE VELOCIDADES RECOMENDADAS / RECOMMENDED SPEED / VITESSES RECOMMANDÉES

Ø (mm)	VELOCIDAD DE CORTE RECOMENDADAS (R.P.M.) CUTTING SPEED / VITESSE DE COUP		
	INOX	ACERO 800-800 15mm Acero / Steel	F
20,00	400	600	800
30,00	280	400	550
40,00	200	300	400
50,00	160	250	320
60,00	130	200	260
80,00	100	150	200
100,00	80	120	160

Coronas reomendadas para espesores de hasta 4 mm. En caso de aceros inoxidables se recomienda no sobrepasar los 2 mm. de espesor. / *Recommended maximum cutting depth of 4 mm, for stainless steel 2 mm* / *Profondeur de coupage maximum recommandée 4 mm, pour INOX 2 mm*

CORONAS
HOLE SAWS • SCIES TRÉPANS

CORONAS CON DIENTE METAL DURO SERIE LARGA
TUNGSTEN CARBIDE TIPPED HOLE SAWS LONG SERIES
SCIES TRÉPANS AU CARBURE DE TUNGSTENE SERIE LONGUE



Ø (mm)	Z	D1 (mm)	L1 (mm)	L2 (mm)	Espesor máximo de corte Max. Cutting Thickness (mm)	Uds. / Pcs.	Cod.	€/Unid.
20,00	5	10	35	90	04	1	UIL0020	84,75
22,00	5	10	35	90	04	1	UIL0022	86,60
23,00	5	10	35	90	04	1	UIL0023	87,13
25,00	6	10	35	90	04	1	UIL0025	79,55
30,00	6	10	35	90	04	1	UIL0030	94,51
32,00	8	10	35	90	04	1	UIL0032	110,85
33,00	8	10	35	90	04	1	UIL0033	111,11
35,00	8	10	35	90	04	1	UIL0035	111,38
40,00	10	10	35	90	04	1	UIL0040	125,22
45,00	10	10	35	90	04	1	UIL0045	146,70
50,00	12	10	35	90	04	1	UIL0050	163,71
54,00	12	13	35	90	04	1	UIL0054	185,20
60,00	14	13	60	90	04	1	UIL0060	223,55
65,00	14	13	60	90	04	1	UIL0065	267,58

Junto con la corona se incluye el husillo y la broca centradora / The spindle and central bit come together with the core bit / La couronne est accompagnée de la broche et du foret de centrage

BROCA PILOTO / PILOT DRILL / FORET DE CENTRAGE

Tipo Broca / Drill Bit Type	Uds. / Pcs.	Cod.	€/Unid.
Para Corona Serie Larga (Ø 20 a Ø 30) For long series	1	UILB680	8,60
Para Corona Serie Larga (Ø 32 a Ø 54) For long series	1	UILB880	10,91
Para Corona Serie Larga (Ø 60 a Ø 65) For long series	1	UILB8100	12,40

TABLA DE VELOCIDADES RECOMENDADAS / RECOMMENDED SPEED / VITESSES RECOMMANDÉES

Ø (mm)	VELOCIDAD DE CORTE RECOMENDADAS (R.P.M.) CUTTING SPEED / VITESSE DE COUP		
	INOX Inox	ACERO 500-800 Acero / Steel	F Fundición / Cast Iron
20,00	400	600	800
30,00	280	400	550
40,00	200	300	400
50,00	160	250	320
60,00	130	200	260
80,00	100	150	200
100,00	80	120	160

Coronas recomendadas para espesores de hasta 4 mm. En caso de aceros inoxidables se recomienda no sobrepasar los 2 mm. de espesor. / Recommended maximum cutting depth of 4 mm, for stainless steel 2 mm / Profondeur de coupage maximum recommandée 4 mm, pour INOX 2 mm

CONSTRUCCIÓN
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MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

CORONAS PARA MÁQUINAS CON BASE ELECTROMAGNÉTICA HSS-CO
HSS-CO ELECTROMAGNETIC CORE BITS
SCIÉS ELECTROMAGNETIQUES HSS-CO



Ø (mm)	Profundidad de Corte Depth of the cut (mm)	Ø Mango / Shank (mm)	Uds. / Pcs.	Cod.	€/Unid.
12,00	30	19	1	1907012030	42,99
13,00	30	19	1	1907013030	43,18
14,00	30	19	1	1907014030	43,31
15,00	30	19	1	1907015030	50,24
16,00	30	19	1	1907016030	52,09
17,00	30	19	1	1907017030	53,87
18,00	30	19	1	1907018030	54,95
19,00	30	19	1	1907019030	58,64
20,00	30	19	1	1907020030	61,37
21,00	30	19	1	1907021030	65,06
22,00	30	19	1	1907022030	66,14
23,00	30	19	1	1907023030	68,62
24,00	30	19	1	1907024030	72,06
25,00	30	19	1	1907025030	75,56
26,00	30	19	1	1907026030	76,51
27,00	30	19	1	1907027030	80,20
28,00	30	19	1	1907028030	82,11
29,00	30	19	1	1907029030	85,73
30,00	30	19	1	1907030030	87,07
31,00	30	19	1	1907031030	96,16
32,00	30	19	1	1907032030	102,96
35,00	30	19	1	1907035030	127,20
40,00	30	19	1	1907040030	149,20
45,00	30	19	1	1907045030	168,12
50,00	30	19	1	1907050030	188,30
52,00	30	19	1	1907052030	196,30
55,00	30	19	1	1907055030	205,30
60,00	30	19	1	1907060030	222,12

PUNZON EXPULSOR / PUNCHER / POINÇON

Ø (mm)	L1 (mm)	Uds. / Pcs.	Cod.	€/Unid.
6,35	77	1	1926500	23,85



ESTUCHE DE CORONAS PARA MAQUINAS CON BASE ELECTROMAGNÉTICA HSS-CO
HSS-CO ELECTROMAGNETIC CORE BITS SET
COFFRET SCIÉS ELECTROMAGNETIQUES HSS-CO



Medidas mm / Sizes mm	Uds. / Pcs.	Cod.	€/Unid.
12x30, 14x30, 16x30, 18x30, 20x30, 22x30, punzón expulsor 6.35x77	7	19CW01	344,70



CORONAS
HOLE SAWS • SCIÉS TRÉPANS

CORONAS PARA MÁQUINAS CON BASE ELECTROMAGNÉTICA HSS-CO
HSS-CO ELECTROMAGNETIC CORE BITS
SCIÉS ELECTROMAGNETIQUES HSS-CO



Ø (mm)	Profundidad de Corte Depth of the cut (mm)	Ø Mango / Shank (mm)	Uds. / Pcs.	Cod.	€/Unid.
12,00	50	19	1	1907012050	58,13
13,00	50	19	1	1907013050	58,32
14,00	50	19	1	1907014050	58,63
15,00	50	19	1	1907015050	69,41
16,00	50	19	1	1907016050	74,80
17,00	50	19	1	1907017050	80,25
18,00	50	19	1	1907018050	82,77
19,00	50	19	1	1907019050	89,01
20,00	50	19	1	1907020050	89,32
21,00	50	19	1	1907021050	96,98
22,00	50	19	1	1907022050	98,14
23,00	50	19	1	1907023050	99,55
24,00	50	19	1	1907024050	102,73
25,00	50	19	1	1907025050	109,05
26,00	50	19	1	1907026050	109,23
27,00	50	19	1	1907027050	115,79
28,00	50	19	1	1907028050	119,15
29,00	50	19	1	1907029050	125,70
30,00	50	19	1	1907030050	132,32
31,00	50	19	1	1907031050	138,94
32,00	50	19	1	1907032050	147,46
35,00	50	19	1	1907035050	165,89
36,00	50	19	1	1907036050	170,57
40,00	50	19	1	1907040050	187,22
45,00	50	19	1	1907045050	212,94
50,00	50	19	1	1907050050	236,57
52,00	50	19	1	1907052050	245,83
55,00	50	19	1	1907055050	260,19
60,00	50	19	1	1907060050	284,03

PUNZON EXPULSOR / PUNCHER / POINÇON

Ø (mm)	L1 (mm)	Uds. / Pcs.	Cod.	€/Unid.
6,35	102	1	1950500	26,46



ESTUCHE DE CORONAS PARA MAQUINAS CON BASE ELECTROMAGNÉTICA HSS-CO
HSS-CO ELECTROMAGNETIC CORE BITS SET
COFFRET SCIÉS ELECTROMAGNETIQUES HSS-CO



Medidas mm / Sizes mm	Uds. / Pcs.	Cod.	€/Unid.
12x50, 14x50, 16x50, 18x50, 20x50, 22x50, punzón expulsor 6.35x102	7	19CW02	488,24



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METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

CORONAS PARA MÁQUINAS CON BASE ELECTROMAGNÉTICA MD
HM ELECTROMAGNETIC CORE BITS
SCIÉS ELECTROMAGNETIQUES MD



Ø (mm)	Profundidad de Corte Depth of the cut (mm)	Ø Mango / Shank (mm)	Uds. / Pcs.	Cod.	€/Unid.
18,00	35	19	1	2003018035	152,31
19,00	35	19	1	2003019035	152,87
20,00	35	19	1	2003020035	153,25
21,00	35	19	1	2003021035	153,37
22,00	35	19	1	2003022035	155,84
23,00	35	19	1	2003023035	155,90
24,00	35	19	1	2003024035	156,03
25,00	35	19	1	2003025035	159,81
26,00	35	19	1	2003026035	160,49
27,00	35	19	1	2003027035	160,61
28,00	35	19	1	2003028035	161,04
29,00	35	19	1	2003029035	161,30
30,00	35	19	1	2003030035	163,46
31,00	35	19	1	2003031035	164,14
32,00	35	19	1	2003032035	164,38
33,00	35	19	1	2003033035	164,45
34,00	35	19	1	2003034035	164,64
35,00	35	19	1	2003035035	177,33

PUNZON EXPULSOR / PUNCHER / POINÇON

Ø (mm)	L1 (mm)	Uds. / Pcs.	Cod.	€/Unid.
8	87	1	2001500	26,71



ESTUCHE DE CORONAS PARA MAQUINAS CON BASE ELECTROMAGNÉTICA MD NEW
MD ELECTROMAGNETIC CORE BITS SET
COFFRET SCIÉS ELECTROMAGNETIQUES MD

Medidas mm / Sizes mm	Uds. / Pcs.	Cod.	€/Unid.
18x35, 20x35, 22x35, 24x35, 26x35, 28x35, punzón expulsor 8x87	7	19CW03	965,67



PORTAFRESAS CONO MORSE / MORSE TAPER / QUEUE CONIQUE

Ø (mm)	Uds. / Pcs.	Cod.	€/Unid.
C.M. 2 + accesorios / C.M. 2 + accessories	1	18003	343,24
C.M. 3 + accesorios / C.M. 2 + accessories	1	18025	343,24

Portafresas con entrada para refrigerante para máquinas con base electromagnética SIN AMARRES WELDON. Permite el uso de estas fresas en tornos, fresadoras y taladros. / Tool holders with internal cooling system for electromagnetic drilling machines without WELDON SHANK. It allows the use of WELDON SHANK milling cutters on lathes, milling machines and drill machines. / Porte-fraises à réfrigération interne pour machines à base électromagnétique SANS ANCRAGE WELDON. Pour l'utilisation de fraises à ancrage Weldon sur des tours, fraiseuses ou perceuses.



CORONAS
HOLE SAWS • SCIÉS TRÉPANS

CORONAS PARA MÁQUINAS CON BASE ELECTROMAGNÉTICA MD
HM ELECTROMAGNETIC CORE BITS
SCIÉS ELECTROMAGNETIQUES MD



Ø (mm)	Profundidad de Corte Depth of the cut (mm)	Ø Mango / Shank (mm)	Uds. / Pcs.	Cod.	€/Unid.
18,00	50	19	1	2003018050	168,23
19,00	50	19	1	2003019050	168,94
20,00	50	19	1	2003020050	169,12
21,00	50	19	1	2003021050	169,45
22,00	50	19	1	2003022050	173,37
23,00	50	19	1	2003023050	173,43
24,00	50	19	1	2003024050	174,65
25,00	50	19	1	2003025050	175,48
26,00	50	19	1	2003026050	176,90
27,00	50	19	1	2003027050	177,22
28,00	50	19	1	2003028050	177,48
29,00	50	19	1	2003029050	177,80
30,00	50	19	1	2003030050	179,15
31,00	50	19	1	2003031050	179,78
32,00	50	19	1	2003032050	180,17
33,00	50	19	1	2003033050	180,49
34,00	50	19	1	2003034050	182,35
35,00	50	19	1	2003035050	186,27
36,00	50	19	1	2003036050	192,17
37,00	50	19	1	2003037050	192,17
38,00	50	19	1	2003038050	190,73
39,00	50	19	1	2003039050	187,49
40,00	50	19	1	2003040050	216,48
41,00	50	19	1	2003041050	220,39
42,00	50	19	1	2003042050	221,22
43,00	50	19	1	2003043050	221,62
44,00	50	19	1	2003044050	222,09
45,00	50	19	1	2003045050	222,36
46,00	50	19	1	2003046050	279,96
47,00	50	19	1	2003047050	282,65
48,00	50	19	1	2003048050	283,42
49,00	50	19	1	2003049050	284,06
50,00	50	19	1	2003050050	285,10

PUNZON EXPULSOR / PUNCHER / POINÇON

Ø (mm)	L1 (mm)	Uds. / Pcs.	Cod.	€/Unid.
8	102	1	2001501	26,71



ESTUCHE DE CORONAS PARA MAQUINAS CON **NEW**
BASE ELECTROMAGNÉTICA MD
MD ELECTROMAGNETIC CORE BITS SET
COFFRET SCIÉS ELECTROMAGNETIQUES MD

Medidas mm / Sizes mm	Uds. / Pcs.	Cod.	€/Unid.
18x50, 20x50, 22x50, 24x50, 26x50, 28x50, punzón expulsor 8x102	7	19CW04	1066,46

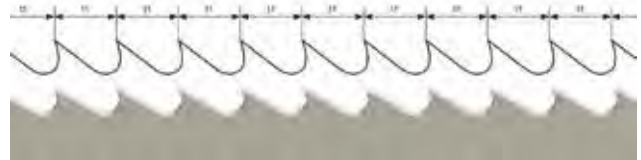


TIPOS DE DENTADOS *TOOTH PITCH • DENTURES*



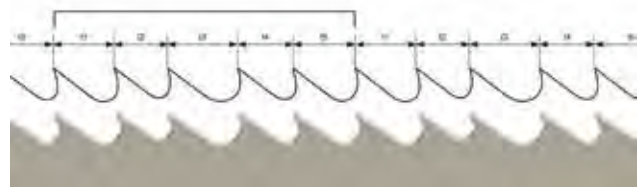
DENTADO FIJO / *CONSTANT TOOTH PITCH / DENTURE CONSTANTE*

Dentado constante en toda la longitud. Para cortes en materiales macizos. Recomendado para aceros, aceros inoxidables.
Constant tooth pitch, suitable for solid materials.
Dentures constante, appropriés pour des matériaux solides.



DENTADO VARIABLE / *VARIABLE TOOTH PITCH / DENTURE VARIABLE*

Dentado alterno en intervalos regulares an toda la longitud. Para cortes en perfiles y tubos, reduce la vibración.
Variable pitch, recommended to suppress the resonance phenomenons and vibrations.
Denture variable, recommandés pour suprimer les phénomènes de résonance et les vibrations.



TIPOS DE TRISCADOS *TOOTH SETTINGS • TYPES D'AVOYAGES*

TRISCADO ESTÁNDAR / *STANDARD SET / AVOYAGE STANDARD*

Triscado constante con secuencia de izquierda / derecha / recto. Recomendado para multiusos. / *Constant tooth set, with sequence left / right / straight. Recommended for multipurpose.*
Denture constante, avoyage gauche / droite / centre.



TRISCADO DE GRUPO / *GROUP TOOTH SET / AVOYAGE GROUPE*

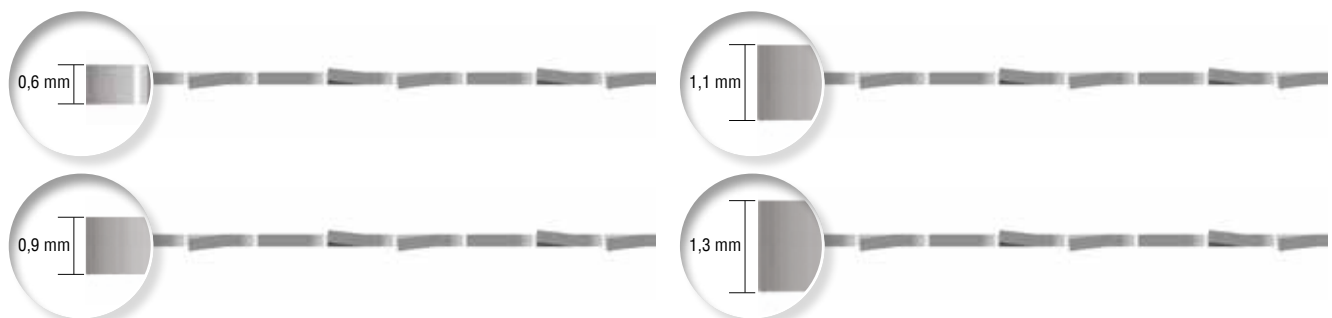
Triscado agrupado, secuencia de dientes por grupo. Mejora los acabados. / *Group tooth set, improve surfaces quality.*
Avoyage groupé, améliore la qualité de la surface.



ANCHO DE LA CINTA *BAND WIDTH • LARGEURS DES LAMES*



GROSOR DE LA CINTA *BAND THICKNESS • ÉPAISSEUR DE LAME*



SIERRAS DE CINTA BIMETAL M42

M42 BIMETAL BANDSAW BLADES • LAMES DE SCIES Á RUBAN M42

SELECCIÓN DEL DENTADO

TOOTH PITCH SELECTION • SÉLECTION DE LA DENTURE

HSS-CO 8%

HRC 68-69

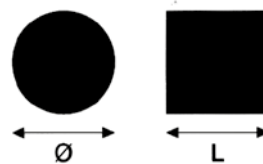


PARA EL CORTE DE TUBOS Y PERFILES / TO CUT TUBES AND BEAMS / POUR LA COUPE DE TUBES ET PROFILS



S (mm)	D (mm)										
	20	40	60	80	100	120	150	200	300	400	500
2			14	14					10/14		
3	14	14	14	10/14	10/14	10/14	10/14	10/14	10/14	8/12	8/12
4											
5	10/14	10/14	10/14	6/10	6/10	6/10	6/10	6/10	6/10	6/10	6/10
6											
7	10/14	8/12	8/12	6/10	6/10	6/10	5/8	5/8	4/6	4/6	4/6
8											
10	-	6/10	6/10	6/10	5/8	5/8	5/8	4/6	4/6	4/6	4/6
12											
15	-	6/10	5/8	5/8	4/6	4/6	4/6	4/6	3/4	3/4	3/4
20	-	-	5/8	4/6	4/6	3/4	3/4	3/4	3/4	3/4	3/4
30	-	-	-	4/6	3/4	3/4	3/4	3/4	3/4	3/4	3/4
50	-	-	-	-	-	-	2/3	2/3	2/3	2/3	2/3

PARA EL CORTE DE SECCIONES MACIZAS / TO CUT SOLID MATERIALS / POUR LA COUPE DE MATÉRIEAUX PLEINS



Ø (mm) / L (mm)	Dentado Variable / Variable Tooth Pitch	Dentado Fijo / Constant Tooth Pitch
- 10	10 / 14	14,00
10 - 20	8 / 12	10,00
20 - 40	6 / 10	8,00
40 - 70	4 / 6	6,00
70 - 140	3 / 4	4,00
140 - 200	3 / 4	3,00
200 - 400	2 / 3	2,00
+ 400	1 / 2	1,25

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CÁLCULO DEL PRECIO DE UNA SIERRA DE CINTA
PRICE CALCULATION • CALCULE DU PRIX



Anchura / Width (mm)	Grosor / Thickness (mm)	Precio Metro / Meter price €	Precio Soldadura / Welding Price €
6	0,9	18,91	8,48
10	0,9	18,91	8,48
13	0,6	17,97	8,48
13	0,9	17,97	8,48
20	0,9	19,96	8,48
27	0,9	21,21	8,48
34	1,1	28,51	10,96
41	1,3	36,36	12,31

	PRECIO METRO METER PRICE PRIX METRE	x	DESARROLLO / MM LENGTH LONGEUR	+	SOLDADURA / WELD WELD SOUDURE	=	PRECIO FINAL PRICE PRIX
Ej / Ex:	21,21	x	2,450 mm	+	8,08	=	60,04 €

PVP CORTES MAS HABITUALES M42
PRICES OF MOST USUAL CUTS
PRIX DES LAMES DE SCIES Á RUBAN PLUS HABITUELS

Desarrollo / Length (mm)	Anchura / Width (mm)	€/Unid.	Desarrollo / Length (mm)	Anchura / Width (mm)	€/Unid.
1,325	13	32,29	2,460	27	60,67
1,330	13	32,39	2,600	27	63,62
1,470	13	34,90	2,750	27	66,81
1,475	13	34,98	2,835	27	68,61
2,000	20	48,40	2,945	27	70,95
2,060	20	49,59	3,010	27	72,34
2,352	20	55,43	3,660	27	86,12
2,960	20	67,57	3,500	34	110,73
2,070	27	52,40	4,570	34	141,28
2,360	27	58,53	5,300	34	162,11
2,450	27	60,45			

SIERRAS DE CINTA BIMETAL M42

M42 BIMETAL BANDSAW BLADES • LAMES DE SCIES Á RUBAN M42

RECOMENDACIÓN DE VELOCIDADES DE CORTE PARA SIERRAS DE CINTA M42 SPEED RECOMMENDATION VITESSE RECOMMANDÉE



MATERIAL	Selección Del Dentado Tooth Selecting		10/14	8/12 - 6/10	5/8 - 4/6	4/6 - 3/4	3/4 - 2/3	Refrigeración Aceite de Corte Coolant Cutting Fluid	
	Dimension A Cortar / To Cut		0 - 13 mm	13-25 mm	25 - 75 mm	75 - 150 mm	150 - 200 mm	SI / YES	NO
	REF - I.HA	REF - SAE / AISI	Velocidad Speed (m / min)	Velocidad Speed (m / min)	Velocidad Speed (m / min)	Velocidad Speed (m / min)	Velocidad Speed (m / min)		
Aceros Al Carbono <i>Carbon Steels</i>	F-151	1010	105	100	90	85	80		X
	F-111 - F-112	1015 - 1025	110	105	100	95	85		X
	F-113	1035	83	79	73	64	61		X
	M14 - F-115	1045 - 1055	71	73	70	60	49		X
	F-S12 - F 516	W-1 - W-2	78	72	66	60	54		X
Aceros Fácil Mecanización <i>Free Cutting Steels</i>	-	1108-1111	105	105	105	102	87		X
	F-211	1117 -1118	102	102	102	99	84		X
	-	1108-1111	100	93	84	81	72		X
Aceros al Manganeso <i>Manganese Steels</i>	F-212	1137-1151 1211 -1215	110	110	105	105	93		X
	-	1330 - 1340	80	75	71	65	56		X
Aceros Molibdeno <i>Molybdenum Steels</i>	-	1513 - 1536	115	112	105	97	85		X
	-	1541 - 1572	75	72	70	60	50		X
	-	4012- 4024	102	97	90	85	75		X
Aceros Cromo Molibdeno <i>Chrome Molybdenum Steels</i>	-	4027 - 4037	36	93	83	81	71		X
	-	4042 - 4047	82	77	68	63	56		X
	-	4118 - 4130	100	88	80	80	75		X
Aceros Niquel <i>Nickel Steels</i>	F-125	4135 - 4142	94	86	77	75	64		X
	F-155	4145 - 4161	75	70	67	63	55		X
Aceros Cromo Niquel <i>Chrome Nickel Steels</i>	F-152	2317	90	85	82	77	70	X	
	-	2330 - 2345	74	70	67	61	55	X	
	-	2512 - 2517	64	61	58	52	49	X	
	F-158	3115 - 3130	90	84	78	75	72	X	
	-	3135 - 3150	70	65	61	57	50	X	
	F-153	3310 - 3315	67	61	55	54	45	X	
	F-154	3320 - 3340	55	50	43	44	40	X	

Reducir de 10 a 20% con dimensiones superiores a 200 mm. / Reduce from 10% to 20% for sizes over 200 mm. / Reduire du 10% à 20% dans les mesures plus grandes.

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DISPLAYS • DISPLAYS

RECOMENDACIÓN DE VELOCIDADES DE CORTE
PARA SIERRAS DE CINTA M42
SPEED RECOMMENDATION
VITESSE RECOMMANDÉE



MATERIAL	Selección Del Dentado Tooth Selecting		10/14	8/12 - 6/10	5/8 - 4/6	4/6 - 3/4	3/4 - 2/3	Refrigeración Aceite de Corte Coolant Cutting Fluid	
	Dimension A Cortar / To Cut		0 -13 mm	13-25 mm	25 - 75 mm	75 - 150 mm	150 - 200 mm	SI / YES	NO
	REF - I.HA	REF - SAE / AISI	Velocidad Speed (m / min)	Velocidad Speed (m / min)	Velocidad Speed (m / min)	Velocidad Speed (m / min)	Velocidad Speed (m / min)		
Aceros Cromo Niquel Molibdeno <i>CR-Ni-Mb Steels</i>	-	4317 - 4320	83	78	70	68	62	X	
	F-127	4337 - 4340	83	75	68	66	54	X	
	-	8615 - 8627	83	78	75	68	54	X	
	F-12S	8630 - 8645	83	78	72	65	54	X	
	-	8647 - 8660	75	69	63	60	48	X	
	-	8716 - 6750	63	78	75	69	54	X	
	F-156	9310 - 9317	73	66	55	52	45	X	
	-	9437 - 9446	86	78	74	68	65	X	
Aceros Niquel Molibdeno <i>Ni-Mb Steels</i>	-	9447 - 9763	80	77	74	66	62	X	
	-	9840 - 9850	78	75	70	66	52	X	
	-	4608 - 4626	89	84	80	75	65	X	
Aceros Cromo <i>Chrome Steel</i>	-	4640	79	72	68	63	64	X	
	-	4812	74	67	62	60	52	X	
	-	5040 - 5050	90	86	80	78	65		X
	F-121	5120 - 5135	90	87	70	75	60		X
Aceros Cromo Vanadio <i>Chrome Vanadium Steels</i>	F-122	5140 - 5160	81	77	74	70	58		X
	F-131	50100 - 52100	63	56	52	48	35		X
Aceros 5(Uck) Manganeso <i>5 (UCK)-Mg Steels</i>	-	6117 - 6120	80	77	70	70	49		X
	F-143	6145 - 6152	76	69	63	60	47		X
Aceros 5(Uck) Manganeso <i>5 (UCK)-Mg Steels</i>	F-144	9255 - 9260	69	63	60	57	46		X
	-	9261 - 9262	67	60	57	54	45		X
Aceros Trabajados en Frío <i>Cold Worked Steels</i>	F-522 - F-520 H	01 - 02	74	67	65	60	50		
	F-523	L-3	63	58	S2	46	36		
	F-520 P	06 - 07	70	65	62	57	46		
	F-S36	A2 - A3 - A6	72	66	65	60	50		
	-	D2 - D3 - D6	44	39	35	33	24		X
	-	D7	33	30	27	25	20		X

Reducir de 10 a 20% con dimensiones superiores a 200 mm. / Reduce from 10% to 20% for sizes over 200 mm. / Reduire du 10% á 20% dans les mesures plus grandes.

SIERRAS DE CINTA BIMETAL M42

M42 BIMETAL BANDSAW BLADES • LAMES DE SCIES Á RUBAN M42

RECOMENDACIÓN DE VELOCIDADES DE CORTE PARA SIERRAS DE CINTA M42

SPEED RECOMMENDATION

VITESSE RECOMMANDÉE



MATERIAL	Selección Del Dentado Tooth Selecting					Refrigeración Aceite de Corte			
	Dimension A Cortar / To Cut		10/14	8/12 - 6/10	5/8 - 4/6	4/6 - 3/4	3/4 - 2/3	Coolant Cutting Fluid	
	REF - I.HA	REF - SAE / AISI	Velocidad Speed (m / min)	Velocidad Speed (m / min)	Velocidad Speed (m / min)	Velocidad Speed (m / min)	Velocidad Speed (m / min)	SI / YES	NO
Aceros Trabajos en Caliente <i>Hot Worked Steels</i>	F-526 - F-536	H12 - H13 - H21	70	68	62	60	48	X	
	-	H22 - H24 - H26	60	54	50	48	42	X	
	F-528	L2 L6 - L7	65	61	50	55	46	X	
	F-532	F-1	62	60	56	50	38		X
Aceros Trabajos de Choque <i>Steel Shock Works</i>	F-524	S1	70	63	60	58	48		
	F-520 E	S-2 - S-5	55	50	48	40	35	X	
	F-552	T-1 - T-2	46	43	39	36	28		X
Aceros Rápidos <i>High Speed Steels</i>	F-553 - F-554	T4 - T5	39	35	33	30	24		X
	-	T-6 - T4	35	31	28	28	20		X
	-	T-15 - M-1S	23	26	21	19	te		X
	-	M-1	53	50	46	43	35		X
	F-S50A	M-2 - M-3	39	36	33	30	24		X
	-	M-41 - M-43	35	31	28	25	20		X
	-								
Aceros Inoxidables <i>Stainless Steels</i>	F-314	201 - 202 - 304	42	39	35	34	26	★	
	F-310 C	303 - 303 F	50	45	42	38	30		
	F-331	308 - 309 - 310	31	30	27	24	19		
	F-310 A	314 - 316 - 317	31	30	27	24	18		
	F-332	321 - 347	44	38	35	35	30		
	F-311 - F-312	410 - 420	53	50	45	42	33		
	-	330	27	24	20	17	14		
	F-313	431	39	33	30	28	24		
	-	440A-B-C	42	36	34	30	24		
	-	I7-7Ph - 17-4Ph	36	30	27	24	15		
	-	NITRONIC - 33	18	18	16	15	12		
F-330 B	446	30	26	23	20	17			
	D2 - D3 - D6	44	39	35	33	24			
	D7	33	30	27	25	20			

★ Especial para INOX / For INOX / Pour INOX

Reducir de 10 a 20% con dimensiones superiores a 200 mm. / Reduce from 10% to 20% for sizes over 200mm. / Reduire du 10% à 20% dans les mesures plus grandes.

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

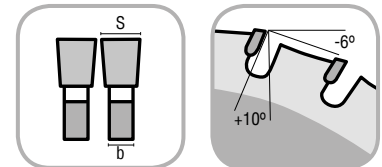
ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

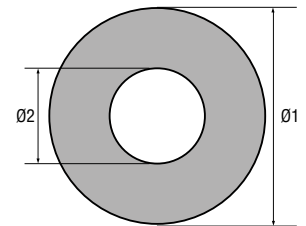
DISCO PARA ALUMINIO Y METALES NO FÉRRICOS
ALUMINIUM AND NON-FERROUS METAL DISCS
DISQUE POUR ALUMINIUM ET METAUX NON FERREUX



Ø (mm)	S Grosor / Thickness	B Grosor / Thickness	Ø Eje / Axe	Z	Cod.	€/Unid.
250	3,2	2,2	32	80	3DM0250	69,59
300	3,2	2,2	32	96	3DM0300	86,79

ANILLOS REDUCTORES
REDUCTIONS RINGS • BIAGUES DE RÉDUCTION

Ø1 / Ø2 (mm)	Cod.	€/Unid.
32/30	2DR3230	4,06
32/25	2DR3225	4,06
32/20	2DR3220	4,06



SIERRAS
SAW BLADES • SCIES

HOJAS DE SIERRA DE MANO BIMETAL
BIMETAL HAND HACKSAW BLADE
LAMES DE SCIES



L1 (mm)	A	Grosor / Thickness	Dtes. x pulgada / Tooth x inch	Uds. / Pcs.	Cod.	€/Unid.
300	13	0,65	24	100	S21224	2,29

DESBARBADORES
DEBURRING TOOLS • ÉBAVUREUR

DESBARBADORES *DEBURRING TOOLS • ÉBAVUREUR*



HSS-G



Uds. / Pcs.	Cod.	€/Unid.
1	3DE1000	20,82

CUCHILLAS RECAMBIO
DEBURRING TOOLS BLADES • LAMES

Uds. / Pcs.	Cod.	€/Unid.
10	3DE1001	2,39



GRANETES
POUNCHES • POINTEAU

GRANETE AUTOMÁTICO
AUTHOMATIC CENTER PUNCH • POINTEAU AUTOMATIQUE

Uds. / Pcs.	Cod.	€/Unid.
1	5PU5000	10,56



CONSTRUCCIÓN
 CONSTRUCTION • CONSTRUCTION

MADERA
 WOOD • BOIS

METAL
 METAL • MÉTAL

FRESADO
 MILLING • FRAISAGE

ROSCADO
 THREADING • FILETAGE

ACCESORIOS
 ACCESSORIES • ACCESSOIRES

HEXAGONAL
 HEXAGONAL • HEXAGONAL

METROLOGÍA
 METROLOGY • MÉTROLOGIE

DISPLAYS
 DISPLAYS • DISPLAYS

NOVEDADES

- FRESAS ROTATIVAS especial INOX
- Ampliación gama FRESAS FRONTALES
- ESTUCHES para FRESAS FRONTALES

NEW FEATURES

- *ROTARY BURRS special for STAINLESS STEEL*
- *Enlargement of END MILLS range*
- *END MILLS SETS*

NOUVEAUTÉS

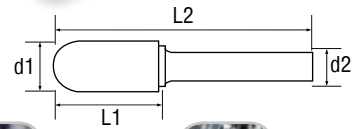
- *FRAISES ROTATIVES spécial ACIER INOXYDABLE*
- *Elargissement de gamme de FRAISES*
- *COFFERTS de FRAISES*

MILLING-FRAISAGE





FRESADO

FRESAS ROTATIVAS DE METAL DURO
HARD METAL ROTARY BURRS
FRAISES ROTATIVES MÉTAL DUR

CILÍNDRICA CYLINDER • CYLINDRIQUE


3 Cortes / 3 Cuts



6 Cortes / 6 Cuts

Tipo / Type	Ø d2 Mango Shank (mm)	Ø d1 (mm)	L1 (mm)	L2 (mm)	Cod.	€/Unid.	Cod.	€/Unid.
A	3,00	3,00	14,00	38,00	FRA3104	18,33	FRA6100	14,33
		6,35	12,70	45,00	FRA3105	28,54	FRA6101	22,99
		4,00	14,00	50,00	*	*	FRA6107	26,64
		6,00	18,00	50,00	FRA3102	29,56	FRA6102	24,75
6,00	6,00	8,00	19,00	64,00	FRA3103	38,65	FRA6103	31,97
		9,60	19,00	64,00	FRA3100	40,91	FRA6104	38,70
		9,60	25,00	70,00	*	*	FRA6109	41,99
		12,70	19,00	64,00	*	*	FRA6105	57,04
		12,70	25,00	70,00	FRA3101	64,23	FRA6106	53,25
		12,70	25,00	70,00	FRA3101	64,23	FRA6106	53,25

CILÍNDRICA CORTE FRONTAL
CYLINDER END CUT • CYLINDRIQUE COUP FRONTALE


3 Cortes / 3 Cuts



6 Cortes / 6 Cuts

Tipo / Type	Ø d2 Mango Shank (mm)	Ø d1 (mm)	L1 (mm)	L2 (mm)	Cod.	€/Unid.	Cod.	€/Unid.
B	3,00	3,00	14,00	38,00	FRB3103	23,67	FRB6100	13,74
		6,35	12,70	45,00	FRB3104	29,00	FRB6101	22,55
		4,00	14,00	50,00	*	*	FRB6107	28,22
		6,00	18,00	50,00	FRB3100	33,55	FRB6102	25,50
6,00	6,00	8,00	19,00	64,00	FRB3101	43,91	FRB6103	33,23
		9,60	25,00	70,00	*	*	FRB6109	45,29
		9,60	19,00	64,00	FRB3102	47,21	FRB6104	38,96
		12,70	19,00	64,00	*	*	FRB6105	58,35
		12,70	25,00	70,00	FRB3105	67,01	FRB6106	53,35
		16,00	25,00	70,00	FRB3106	87,69	FRB6108	61,24

CILÍNDRICA CON RADIO BULL NOSE • CYLINDRIQUE A RAYON


3 Cortes / 3 Cuts



6 Cortes / 6 Cuts

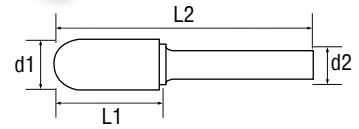
Tipo / Type	Ø d2 Mango Shank (mm)	Ø d1 (mm)	L1 (mm)	L2 (mm)	Cod.	€/Unid.	Cod.	€/Unid.
C	3,00	3,00	14,00	38,00	FRC3104	23,64	FRC6100	14,98
		6,35	12,70	45,00	FRC3105	31,98	FRC6101	22,26
		4,00	14,00	50,00	*	*	FRC6108	28,30
		6,00	18,00	50,00	FRC3102	38,88	FRC6102	30,07
6,00	6,00	8,00	19,00	64,00	FRC3103	43,26	FRC6103	33,98
		9,60	19,00	64,00	FRC3100	45,52	FRC6104	39,36
		12,70	19,00	64,00	*	*	FRC6105	57,32
		12,70	25,00	70,00	FRC3101	76,42	FRC6106	57,91
		16,00	25,00	70,00	FRC3106	89,82	FRC6107	70,55
		6,00	18,00	100,00	*	*	FRC6109	59,11

Especial cerrajería / Special locksmith / Serrurerie spéciale

Para medidas no tarifadas consultar. / For measurements not listed, request / Pour des mesures non cotées consulter

FRESAS
BURRS • FRAISES

FRESAS ROTATIVAS DE METAL DURO
HARD METAL ROTARY BURRS
FRAISES ROTATIVES MÉTAL DUR



ESFÉRICA BALL • SPHERIQUE



3 Cortes / 3 Cuts

6 Cortes / 6 Cuts

Tipo / Type	Ø d2 Mango Shank (mm)	Ø d1 (mm)	L1 (mm)	L2 (mm)	Cod.	€/Unid.	Cod.	€/Unid.
D	3,00	3,00	2,50	38,00	*	*	FRD6100	14,59
		4,00	3,40	38,00	FRD3103	43,68	FRD6102	33,42
		6,35	5,00	38,00	*	*	FRD6101	22,85
6,00	6,00	6,00	4,70	50,00	FRD3100	32,66	FRD6103	24,57
		8,00	6,00	52,00	*	*	FRD6106	27,21
		9,60	8,00	54,00	FRD3101	36,94	FRD6104	29,95
		12,70	11,00	56,00	FRD3102	50,13	FRD6105	41,46
		16,00	14,00	59,00	FRD3104	66,00	FRD6107	51,82

OVAL OVAL • OVALE



3 Cortes / 3 Cuts

6 Cortes / 6 Cuts

Tipo / Type	Ø d2 Mango Shank (mm)	Ø d1 (mm)	L1 (mm)	L2 (mm)	Cod.	€/Unid.	Cod.	€/Unid.
E	3,00	3,00	6,00	38,00	*	*	FRE6100	17,23
		6,35	9,50	42,00	*	*	FRE6101	22,05
		8,00	15,00	60,00	*	*	FRE6102	33,23
6,00	6,00	9,60	16,00	60,00	FRE3100	45,51	FRE6103	36,50
		12,70	22,00	67,00	FRE3101	69,54	FRE6104	55,13
		16,00	25,00	70,00	*	*	FRE6105	73,79

ÁRBOL CON RADIO ROUND TREE • OGIVE A RAYON

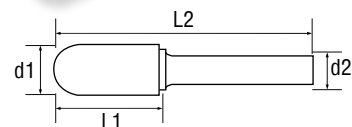


3 Cortes / 3 Cuts

6 Cortes / 6 Cuts

Tipo / Type	Ø d2 Mango Shank (mm)	Ø d1 (mm)	L1 (mm)	L2 (mm)	Cod.	€/Unid.	Cod.	€/Unid.
F	3,00	3,00	14,00	38,00	*	*	FRF6100	18,84
		6,35	12,70	45,00	*	*	FRF6101	21,68
6,00	6,00	6,00	18,00	50,00	FRF3102	37,08	FRF6102	29,06
		8,00	20,00	65,00	FRF3103	42,55	FRF6106	33,93
		9,60	19,00	64,00	FRF3100	45,67	FRF6103	42,80
		12,70	25,00	70,00	FRF3101	68,57	FRF6104	54,26
		16,00	25,00	70,00	FRF3104	90,82	FRF6105	71,11

Para medidas no tarifcadas consultar. / For measurements not listed, request / Pour des mesures non cotées consulter

FRESAS ROTATIVAS DE METAL DURO
HARD METAL ROTARY BURRS
FRAISES ROTATIVES MÉTAL DUR

ÁRBOL CON PUNTA POINTED TREE • ARBRE


3 Cortes / 3 Cuts

6 Cortes / 6 Cuts

Tipo / Type	Ø d2 Mango Shank (mm)	Ø d1 (mm)	L1 (mm)	L2 (mm)	Cod.	€/Unid.	Cod.	€/Unid.
G	3,00	3,00	14,00	38,00	*	*	FRG6100	18,84
		6,35	12,70	45,00	*	*	FRG6101	21,98
	6,00	6,00	18,00	50,00	*	*	FRG6102	28,05
		8,00	19,00	64,00	FRG3100	44,94	FRG6106	33,55
		9,60	19,00	64,00	*	*	FRG6103	39,92
		12,70	19,00	64,00	*	*	FRG6104	50,36
		12,70	25,00	70,00	FRG3101	67,65	FRG6105	54,27

LLAMA FLAME • FLAMME


3 Cortes / 3 Cuts

6 Cortes / 6 Cuts

Tipo / Type	Ø d2 Mango Shank (mm)	Ø d1 (mm)	L1 (mm)	L2 (mm)	Cod.	€/Unid.	Cod.	€/Unid.
H	3,00	3,00	6,00	38,00	*	*	FRH6104	18,79
		6,00	14,00	50,00	*	*	FRH6101	28,77
	6,00	8,00	19,00	64,00	*	*	FRH6102	35,76
		9,60	19,00	65,00	FRH3102	81,01	FRH6103	66,11
		12,70	32,00	77,00	*	*	FRH6100	73,80

CÓNICA 90° COUNTER SINK 90° • CONIQUE 90°


3 Cortes / 3 Cuts

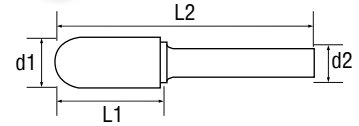
6 Cortes / 6 Cuts

Tipo / Type	Ø d2 Mango Shank (mm)	Ø d1 (mm)	L1 (mm)	L2 (mm)	Cod.	€/Unid.	Cod.	€/Unid.
K	6,00	9,60	4,70	53,00	*	*	FRK6101	32,07
		16,00	8,00	57,00	*	*	FRK6102	53,55



Para medidas no tarifcadas consultar. / For measurements not listed, request / Pour des mesures non cotées consulter

FRESAS
BURRS • FRAISES



FRESAS ROTATIVAS DE METAL DURO
HARD METAL ROTARY BURRS
FRAISES ROTATIVES MÉTAL DUR





CÓNICA CON RADIO BALL NOSE CONE • CONIQUE A RAYON

Tipo / Type	Ø d2 Mango Shank (mm)	Ø d1 (mm)	L1 (mm)	L2 (mm)	3 Cortes / 3 Cuts		6 Cortes / 6 Cuts	
					Cod.	€/Unid.	Cod.	€/Unid.
	3,00	3,00	14,00	38,00	*	*	FRL6100	16,77
		6,35	15,80	48,00	*	*	FRL6101	24,97
	6,00	6,00	18,00	50,00	FRL3102	40,17	*	*
		8,00	25,40	70,00	*	*	FRL6105	38,63
		9,60	30,00	76,00	FRL3100	58,34	FRL6102	45,23
		12,70	32,00	77,00	FRL3101	70,64	FRL6103	58,09
		16,00	33,30	78,00	*	*	FRL6104	106,91


CÓNICA CON PUNTA CONE • CONIQUE TRONQUEE

Tipo / Type	Ø d2 Mango Shank (mm)	Ø d1 (mm)	L1 (mm)	L2 (mm)	3 Cortes / 3 Cuts		6 Cortes / 6 Cuts	
					Cod.	€/Unid.	Cod.	€/Unid.
	3,00	3,00	11,00	38,00	*	*	FRM6100	19,32
		6,00	20,00	50,00	*	*	FRM6101	28,49
	6,00	8,00	18,00	18,00	*	*	FRM6104	40,99
		9,60	16,00	64,00	FRM3101	58,34	FRM6102	42,74
		12,70	22,00	71,00	FRM3102	73,65	FRM6103	59,63
		16,00	25,00	71,00	*	*	FRM6105	77,02

CONO INVERTIDO INVERTED CONE • CONIQUE RENVERSEE

Tipo / Type	Ø d2 Mango Shank (mm)	Ø d1 (mm)	L1 (mm)	L2 (mm)	3 Cortes / 3 Cuts		6 Cortes / 6 Cuts	
					Cod.	€/Unid.	Cod.	€/Unid.
	3,00	3,00	4,00	38,00	*	*	FRN6101	17,03
		6,00	8,00	50,00	*	*	FRN6102	28,54
	6,00	12,70	12,70	58,00	*	*	FRN6103	55,06

PASTILLA RIM SHAPE • DISQUE

Tipo / Type	Ø d2 Mango Shank (mm)	Ø d1 (mm)	L1 (mm)	L2 (mm)	2 Cortes / 2 Cuts		2 Cortes / 2 Cuts	
					Cod.	€/Unid.	Cod.	€/Unid.
	3,00	10,00	1,60	34,00	FRP3101	42,33	*	*
		6,00	12,00	2,60	48,00	*	*	FRP6101

Para medidas no tarifadas consultar. / For measurements not listed, request / Pour des mesures non cotées consulter

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

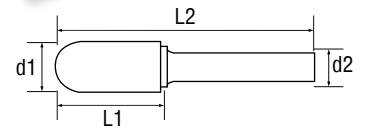
ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL



METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

FRESAS ROTATIVAS DE METAL DURO
RECOMENDADO PARA ACERO INOXIDABLE
HARD METAL ROTARY BURRS
 RECOMMENDED FOR STAINLESS STEEL



FRAISES ROTATIVAS MÉTAL DUR
 RECOMMANDÉ POUR INOX

CILÍNDRICA CYLINDER • CYLINDRIQUE
NEW


INOX

Tipo / Type	Ø d2 Mango Shank (mm)	Ø d1 (mm)	L1 (mm)	L2 (mm)	Cod.	€/Unid.
A  	6,00	6,00	18,00	50,00	FRA3102-INOX	28,13 €
		12,70	25,00	70,00	FRA3101-INOX	61,73 €



CILÍNDRICA CON RADIO BULL NOSE • CYLINDRIQUE A RAYON
NEW


INOX

Tipo / Type	Ø d2 Mango Shank (mm)	Ø d1 (mm)	L1 (mm)	L2 (mm)	Cod.	€/Unid.
C  	6,00	18,00	50,00	50,00	FRC3102-INOX	32,73 €
		12,70	25,00	70,00	FRC3101-INOX	69,22 €



ESFÉRICA BALL • SPHERIQUE
NEW


INOX

Tipo / Type	Ø d2 Mango Shank (mm)	Ø d1 (mm)	L1 (mm)	L2 (mm)	Cod.	€/Unid.
D  	6,00	6,00	4,70	50,00	FRD3100-INOX	30,08 €
		12,70	11,00	56,00	FRD3102-INOX	48,77 €

ÁRBOL CON RADIO ROUND TREE • OGIVE A RAYON
NEW


INOX

Tipo / Type	Ø d2 Mango Shank (mm)	Ø d1 (mm)	L1 (mm)	L2 (mm)	Cod.	€/Unid.
F  	6,00	6,00	18,00	50,00	FRF3102-INOX	34,19 €
		12,70	25,00	70,00	FRF3101-INOX	63,74 €

FRESAS
BURRS • FRAISES

ESTUCHES DE FRESAS ROTATIVAS
ROTARY BURRS SETS
COFFRET FRAISES ROTATIVES



130801256

130801966

130801255

130801965

130801967*

Cod. FR	Uds. Pcs.	€/Unid.
FRA6106	1	
FRB6106	1	
FRC6106	1	
FRD6105	1	
FRE6104	1	
FRF6104	1	
FRG6105	1	
FRL6103	1	
FRM6103	1	
FRH6100	1	
TOTAL	10	561,15

Cod. FR	Uds. Pcs.	€/Unid.
FRB6106	1	
FRB6104	1	
FRC6106	1	
FRC6104	1	
FRL6103	1	
FRE6103	1	
FRG6105	1	
FRG6103	1	
FRD6105	1	
FRF6104	1	
TOTAL	10	474,08

Cod. FR	Uds. Pcs.	€/Unid.
FRB6106	1	
FRF6104	1	
FRC6106	1	
FRD6105	1	
FRM6103	1	
TOTAL	5	266,61

Cod. FR	Uds. Pcs.	€/Unid.
FRC6104	1	
FRB6104	1	
FRG6103	1	
FRF6103	1	
FRM6102	1	
TOTAL	5	203,78

Cod. FR	Uds. Pcs.	€/Unid.
CILINDRICA	1	
CYLINDER	1	
CIL. CON RADIO	1	
BULL NOSE	1	
ESFÉRICA	1	
BALL	1	
OVAL	1	
OVAL	1	
ÁRBOL RADIO	1	
ROUND TREE	1	
ÁRBOL PUNTA	1	
POINTED TREE	1	
LLAMA	1	
FLAME	1	
CÓNICA RADIO	1	
BALL NOSE CONE	1	
CÓNICA PUNTA	1	
CONE	1	
CONO INVERTIDO	1	
INVERTED CONE	1	
TOTAL	10	167,16

*Diámetro fresa/mango 3 mm, dentado cruzado / *Burr and shank diameter 3 mm, 6 cuts / *Diametre fraise et queue 3 mm, 6 coups

EXPOSITOR 40 PIEZAS
DISPLAY 40 PIECES • DISPLAY 40 PIECES

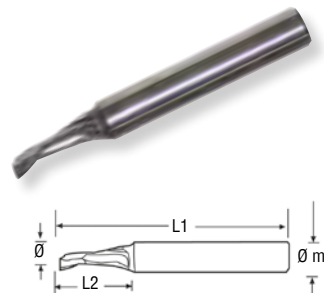
Cod.	Uds. / Pcs.	Cod.	Uds. / Pcs.
FRB6102	2	FRB6104	2
FRC6102	2	FRC6104	2
FRF6102	2	FRF6103	2
FRG6102	2	FRG6103	2
FRL6103	2	FRL6102	2
FRB6103	2	FRB6106	2
FRC6103	2	FRC6106	2
FRE6104	2	FRF6104	2
FRD6104	2	FRG6105	2
FRH6100	2	FRA6105	2
TOTAL €		1.759,90	

Nota: Se puede adaptar el contenido del expositor según requisitos cliente.
Content of display adaptable / Contenu du display adaptable



FRESA FRONTAL UN DIENTE

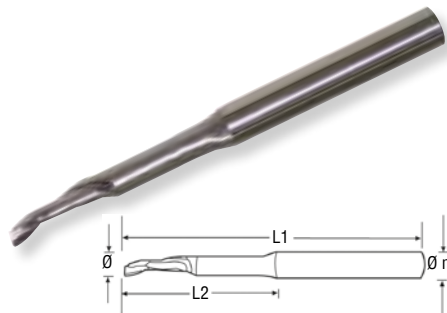
1Z FINISHING END MILLS • FRAISE 1Z FINITION



Ø mm (k12)	L1 (mm)	L2 (mm)	Ø Mango / Shank (h6)	Uds. / Pcs.	Cod.	€/Unid.
3,00	60	12	8	1	TC0300	17,61
4,00	60	12	8	1	TC0400	17,61
5,00	60	14	8	1	TC0500	17,61
6,00	60	14	8	1	TC0600	17,61
7,00	60	14	8	1	TC0700	20,36
8,00	80	14	8	1	TC0800	19,28
10,00	80	14	8	1	TC1000	24,54

FRESA FRONTAL LARGA UN DIENTE

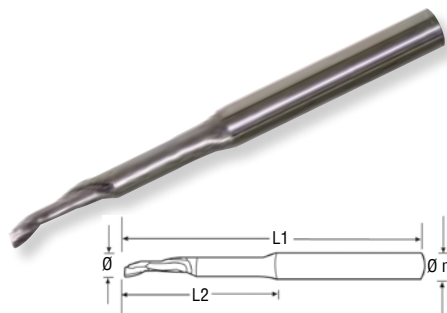
1Z FINISHING LONG END MILLS • FRAISE LONGUE 1Z FINITION



Ø mm (k12)	L1 (mm)	L2 (mm)	Ø Mango / Shank (h6)	Uds. / Pcs.	Cod.	€/Unid.
4,00	80	16 - 45	8	1	TL0400	25,40
5,00	80	16 - 45	8	1	TL0500	25,40
6,00	90	16 - 45	8	1	TL0600	25,40
8,00	100	30 - 70	8	1	TL0800	38,48

FRESA FRONTAL LARGA UN DIENTE PARA PVC

1Z FINISHING LONG END MILLS FOR PVC
FRAISE LONGUE 1Z FINITION POUR PVC



Ø mm (k12)	L1 (mm)	L2 (mm)	Ø Mango / Shank (h6)	Uds. / Pcs.	Cod.	€/Unid.
5,00 PVC +	120	84	8	1	TPVC05	38,72
8,00 PVC +	120	80	8	1	TPVC08	52,85

Condiciones de corte / Cutting conditions / Conditions de coupe

Material	Composición	Vc	fz(mm/z)			
			Ø 3	Ø 6	Ø 8	Ø 10
AL	Si ≤ 12%	160-260	0.008	0.018	0.024	0.03

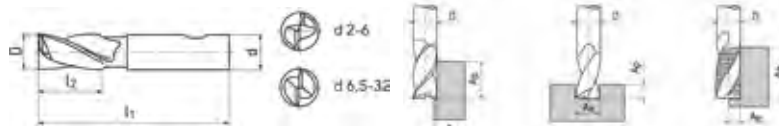
FRESAS CON MANGO CILÍNDRICO

STRAIGHT SHANK END MILLS • FRAISES QUEUE CYLINDRIQUE

FRESA FRONTAL DOS DIENTES PARA ALUMINIO

2Z STRAIGHT SHANK END MILLS ESPECIAL FOR ALUMINIUM
FRAISES QUEUE CYLINDRIQUE 2Z POUR L'ALUMINIUM

NEW



Ø mm (e8)	L1 (mm)	L2 (mm)	Ø Mango / Shank (h6)	Z	Uds. / Pcs.	Cod.	€/Unid.
2,00	51	7	6	2	1	TDW0200	16,54
2,50	52	8	6	2	1	TDW0250	16,54
3,00	52	8	6	2	1	TDW0300	16,54
3,50	54	10	6	2	1	TDW0350	16,54
4,00	55	11	6	2	1	TDW0400	16,54
4,50	55	11	6	2	1	TDW0450	16,54
5,00	57	13	6	2	1	TDW0500	16,54
5,50	57	13	6	2	1	TDW0550	16,54
6,00	57	13	6	2	1	TDW0600	16,54
6,50	66	16	10	2	1	TDW0650	22,52
7,00	66	16	10	2	1	TDW0700	22,52
7,50	66	16	10	2	1	TDW0750	22,52
8,00	69	19	10	2	1	TDW0800	22,52
8,50	69	19	10	2	1	TDW0850	23,57
9,00	69	19	10	2	1	TDW0900	23,57
9,50	69	19	10	2	1	TDW0950	23,57
10,00	72	22	10	2	1	TDW1000	23,57
11,00	79	22	12	2	1	TDW1100	30,57
12,00	83	26	12	2	1	TDW1200	30,57
13,00	83	26	12	2	1	TDW1300	33,78
14,00	83	26	12	2	1	TDW1400	33,78
15,00	83	26	12	2	1	TDW1500	41,22
16,00	92	32	16	2	1	TDW1600	41,22
17,00	92	32	16	2	1	TDW1700	51,13
18,00	92	32	16	2	1	TDW1800	51,13
19,00	92	32	16	2	1	TDW1900	62,22
20,00	104	38	20	2	1	TDW2000	62,22
21,00	104	38	20	2	1	TDW2100	99,45
22,00	104	38	20	2	1	TDW2200	99,45
24,00	121	45	25	2	1	TDW2400	99,45
25,00	121	45	25	2	1	TDW2500	99,45
26,00	121	45	25	2	1	TDW2600	132,56
28,00	121	45	25	2	1	TDW2800	157,29
30,00	121	45	25	2	1	TDW3000	168,39
32,00	133	53	25	2	1	TDW3200	189,90

Condiciones de corte / Cutting conditions / Conditions de coupe

Material	Dureza / Strength / Dureté	Ap	Ae	Vc	fz(mm/z)							
					Ø 3	Ø 6	Ø 8	Ø 10	Ø 12	Ø 16	Ø 18	Ø 20
ACERO	≤ 600 N/mm²	0,5xD	1xD	45	0.009	0.022	0.029	0.036	0.044	0.058	0.065	0.073
AL	Si ≤ 12%	0,5xD	1xD	160-300	0.0117	0.0286	0.0377	0.0468	0.0572	0.0754	0.0845	0.0949

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METAL
METAL • MÉTAL

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MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

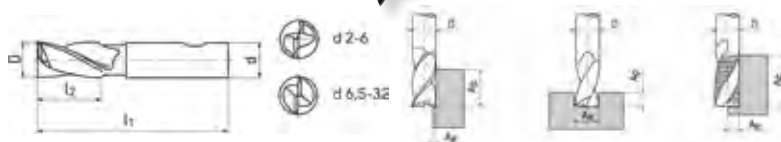
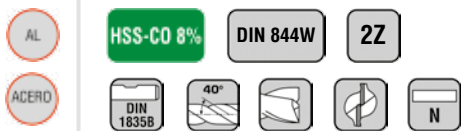
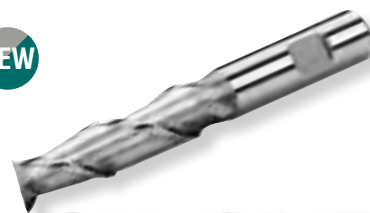
METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

FRESA FRONTAL LARGA DOS DIENTES PARA ALUMINIO

2Z STRAIGHT SHANK LONG END MILLS ESPECIAL FOR ALUMINIUM
FRAISE LONGUE QUEUE CYLINDRIQUE 2Z POUR L'ALUMINIUM

NEW



Ø mm (e8)	L1 (mm)	L2 (mm)	Ø Mango / Shank (h6)	Z	Uds. / Pcs.	Cod.	€/Unid.
2,00	54	10	6	2	1	TDWL0200	23,15
3,00	56	12	6	2	1	TDWL0300	23,15
4,00	63	19	6	2	1	TDWL0400	23,15
5,00	68	24	6	2	1	TDWL0500	23,15
6,00	68	24	6	2	1	TDWL0600	23,15
7,00	80	30	10	2	1	TDWL0700	31,01
8,00	88	38	10	2	1	TDWL0800	33,16
10,00	95	45	10	2	1	TDWL1000	34,48
11,00	102	45	12	2	1	TDWL1100	47,27
12,00	110	53	12	2	1	TDWL1200	47,27
13,00	110	53	12	2	1	TDWL1300	57,01
14,00	110	53	12	2	1	TDWL1400	54,29
15,00	110	53	12	2	1	TDWL1500	61,70
16,00	123	63	16	2	1	TDWL1600	61,70
18,00	123	63	16	2	1	TDWL1800	79,32
20,00	141	75	20	2	1	TDWL2000	91,89
22,00	141	75	20	2	1	TDWL2200	130,68
25,00	166	90	25	2	1	TDWL2500	142,40

Condiciones de corte / Cutting conditions / Conditions de coupe

Material	Dureza / Strength / Dureté	Ap	Ae	Vc	fz(mm/z)							
					Ø 3	Ø 6	Ø 8	Ø 10	Ø 12	Ø 16	Ø 18	Ø 20
ACERO	≤ 600 N/mm ²	0,5xD	1xD	45	0.009	0.022	0.029	0.036	0.044	0.058	0.065	0.073
AL	Si ≤ 12%	0,5xD	1xD	160-300	0.0117	0.0286	0.0377	0.0468	0.0572	0.0754	0.0845	0.0949

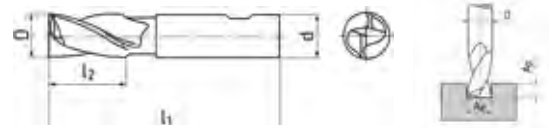
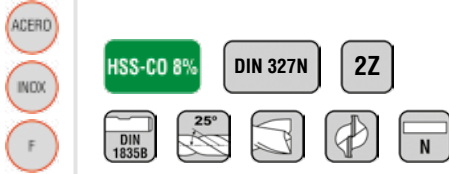
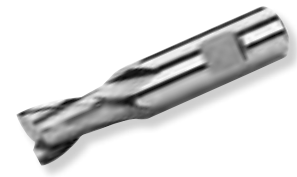
FRESAS CON MANGO CILÍNDRICO

STRAIGHT SHANK END MILLS • FRAISES QUEUE CYLINDRIQUE

FRESA FRONTAL ACABADO DOS DIENTES

2Z FINISHING STRAIGHT SHANK END MILLS

FRAISES QUEUE CYLINDRIQUE FINITION 2Z



Ø mm (e8)	L1 (mm)	L2 (mm)	Ø Mango / Shank (h6)	Z	Uds. / Pcs.	Cod.	€/Unid.
2,00	48	4	6	2	1	TDC0200	15,63
2,50	49	5	6	2	1	TDC0250	15,63
3,00	49	5	6	2	1	TDC0300	15,63
3,50	51	7	6	2	1	TDC0350	16,96
4,00	51	7	6	2	1	TDC0400	14,95
5,00	52	8	6	2	1	TDC0500	14,95
6,00	52	8	6	2	1	TDC0600	14,95
7,00	60	10	10	2	1	TDC0700	24,35
8,00	61	11	10	2	1	TDC0800	19,23
9,00	61	11	10	2	1	TDC0900	24,93
10,00	63	13	10	2	1	TDC1000	19,08
11,00	70	13	12	2	1	TDC1100	29,31
12,00	73	16	12	2	1	TDC1200	24,64
13,00	73	16	12	2	1	TDC1300	37,78
14,00	73	16	12	2	1	TDC1400	36,14
15,00	73	16	16	2	1	TDC1500	42,26
16,00	79	19	16	2	1	TDC1600	34,32
17,00	79	19	16	2	1	TDC1700	50,29
18,00	79	19	16	2	1	TDC1800	48,11
19,00	79	19	16	2	1	TDC1900	63,46
20,00	88	22	20	2	1	TDC2000	57,45
22,00	88	22	25	2	1	TDC2200	78,58
24,00	102	26	25	2	1	TDC2400	105,20
25,00	102	26	25	2	1	TDC2500	99,57
28,00	102	26	25	2	1	TDC2800	125,97
30,00	102	26	25	2	1	TDC3000	143,53
32,00	112	32	32	2	1	TDC3200	147,43
36,00	112	32	32	2	1	TDC3600	197,22
40,00	130	38	38	2	1	TDC4000	242,14

Condiciones de corte / Cutting conditions / Conditions de coupe

Material	Dureza / Strength / Dureté	Ap	Ae	Vc	fz (mm/z)							
					Ø 3	Ø 6	Ø 8	Ø 10	Ø 12	Ø 16	Ø 18	Ø 20
ACERO	≤ 600 N/mm ²	0,5xD	1xD	45	0.009	0.022	0.029	0.036	0.044	0.058	0.065	0.073
	≤ 850 N/mm ²	0,5xD	1xD	39	0.009	0.022	0.029	0.036	0.044	0.058	0.065	0.073
	≤ 1100 N/mm ²	0,5xD	1xD	24	0.009	0.022	0.029	0.036	0.044	0.058	0.065	0.073
	≤ 900 N/mm ²	0,5xD	1xD	30	0.009	0.022	0.029	0.036	0.044	0.058	0.065	0.073
	≤ 1100 N/mm ²	0,5xD	1xD	24	0.009	0.022	0.029	0.036	0.044	0.058	0.065	0.073
INOX	750 - 850 N/mm ²	0,5xD	1xD	15	0.009	0.022	0.029	0.036	0.044	0.058	0.065	0.073
F	< 240 HB	0,5xD	1xD	35	0.009	0.022	0.029	0.036	0.044	0.058	0.065	0.073
	> 240 HB	0,5xD	1xD	25	0.009	0.022	0.029	0.036	0.044	0.058	0.065	0.073

CONSTRUCCIÓN
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HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

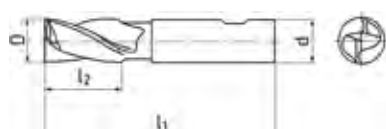
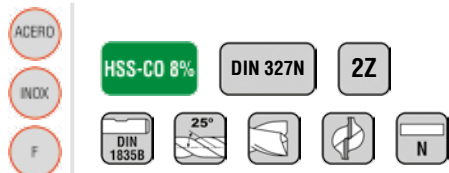
DISPLAYS
DISPLAYS • DISPLAYS

FRESA FRONTAL LARGA ACABADO DOS DIENTES

2Z FINISHING STRAIGHT SHANK LONG END MILLS

FRAISE LONGUE QUEUE CYLINDRIQUE FINITION 2Z

NEW



Ø mm (e8)	L1 (mm)	L2 (mm)	Ø Mango / Shank (h6)	Z	Uds. / Pcs.	Cod.	€/Unid.
2,00	54	7	6	2	1	TDCL0200	18,57
3,00	56	8	6	2	1	TDCL0300	18,57
3,50	59	10	6	2	1	TDCL0350	18,57
4,00	63	11	6	2	1	TDCL0400	16,88
4,50	63	11	6	2	1	TDCL0450	18,57
5,00	68	13	6	2	1	TDCL0500	16,88
5,50	68	13	6	2	1	TDCL0550	18,57
6,00	68	13	6	2	1	TDCL0600	16,88
6,50	80	16	10	2	1	TDCL0650	23,26
7,00	80	16	10	2	1	TDCL0700	21,15
8,00	88	19	10	2	1	TDCL0800	21,15
8,50	88	19	10	2	1	TDCL0850	27,41
9,00	88	19	10	2	1	TDCL0900	24,92
10,00	95	22	10	2	1	TDCL1000	24,92
11,00	102	22	12	2	1	TDCL1100	28,88
12,00	110	26	12	2	1	TDCL1200	28,88
13,00	110	26	12	2	1	TDCL1300	35,92
14,00	110	26	12	2	1	TDCL1400	35,92
15,00	110	26	12	2	1	TDCL1500	41,63
16,00	123	32	16	2	1	TDCL1600	41,63
18,00	123	32	16	2	1	TDCL1800	51,29
20,00	141	38	20	2	1	TDCL2000	64,00
22,00	141	38	20	2	1	TDCL2200	88,15
24,00	166	45	25	2	1	TDCL2400	112,45
25,00	166	45	25	2	1	TDCL2500	123,32
26,00	166	45	25	2	1	TDCL2600	134,38
28,00	166	45	25	2	1	TDCL2800	156,86
30,00	166	45	25	2	1	TDCL3000	177,69
32,00	182	53	32	2	1	TDCL3200	207,33
36,00	182	53	32	2	1	TDCL3600	327,93
40,00	196	63	32*	2	1	TDCL4000	382,32

* d= DIN 327

Condiciones de corte / Cutting conditions / Conditions de coupe

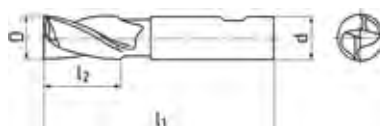
Material	Dureza / Strength / Dureté	Ap	Ae	Vc	fz(mm/z)							
					Ø 3	Ø 6	Ø 8	Ø 10	Ø 12	Ø 16	Ø 18	Ø 20
ACERO	≤ 600 N/mm ²	0,5xD	1xD	45	0.009	0.022	0.029	0.036	0.044	0.058	0.065	0.073
	≤ 850 N/mm ²	0,5xD	1xD	39	0.009	0.022	0.029	0.036	0.044	0.058	0.065	0.073
	≤ 1100 N/mm ²	0,5xD	1xD	24	0.009	0.022	0.029	0.036	0.044	0.058	0.065	0.073
	≤ 900 N/mm ²	0,5xD	1xD	30	0.009	0.022	0.029	0.036	0.044	0.058	0.065	0.073
INOX	≤ 1100 N/mm ²	0,5xD	1xD	24	0.009	0.022	0.029	0.036	0.044	0.058	0.065	0.073
	750 - 850 N/mm ²	0,5xD	1xD	15	0.009	0.022	0.029	0.036	0.044	0.058	0.065	0.073
F	< 240 HB	0,5xD	1xD	35	0.009	0.022	0.029	0.036	0.044	0.058	0.065	0.073
	> 240 HB	0,5xD	1xD	25	0.009	0.022	0.029	0.036	0.044	0.058	0.065	0.073

FRESAS CON MANGO CILÍNDRICO

STRAIGHT SHANK END MILLS • FRAISES QUEUE CYLINDRIQUE

FRESA FRONTAL ACABADO DOS DIENTES-TIALN
 2Z FINISHING STRAIGHT SHANK END MILLS-TIALN
 FRAISES QUEUE CYLINDRIQUE FINITION 2Z-TIALN

NEW



ACERD
 INOX
 F

HSS-CO 8% TIALN DIN 327N 2Z

DIN 1835B 25°

Ø mm (e8)	L1 (mm)	L2 (mm)	Ø Mango / Shank (h6)	Z	Uds. / Pcs.	Cod.	€/Unid.
1,00	47	2,5	6	2	1	TDC0100T	19,97
1,50	47	3	6	2	1	TDC0150T	20,56
2,00	48	4	6	2	1	TDC0200T	16,49
2,50	49	5	6	2	1	TDC0250T	17,88
2,80	49	5	6	2	1	TDC0280T	17,61
3,00	49	5	6	2	1	TDC0300T	17,66
3,50	50	6	6	2	1	TDC0350T	19,06
3,80	51	7	6	2	1	TDC0380T	17,61
4,00	51	7	6	2	1	TDC0400T	18,84
4,50	51	7	6	2	1	TDC0450T	20,23
4,80	52	8	6	2	1	TDC0480T	20,50
5,00	52	8	6	2	1	TDC0500T	20,01
5,50	52	8	6	2	1	TDC0550T	21,39
5,75	52	8	6	2	1	TDC0575T	21,69
6,00	52	8	6	2	1	TDC0600T	21,18
6,50	60	10	10	2	1	TDC0650T	25,13
7,00	60	10	10	2	1	TDC0700T	25,89
7,50	60	10	10	2	1	TDC0750T	28,84
7,75	61	11	10	2	1	TDC0775T	29,14
8,00	61	11	10	2	1	TDC0800T	27,15
8,50	61	11	10	2	1	TDC0850T	31,31
9,00	61	11	10	2	1	TDC0900T	31,44
9,50	61	11	10	2	1	TDC0950T	35,86
9,70	63	13	10	2	1	TDC0970T	35,80
10,00	63	13	10	2	1	TDC1000T	32,73
10,50	70	13	12	2	1	TDC1050T	37,41
11,00	70	13	12	2	1	TDC1100T	37,10
11,50	70	13	12	2	1	TDC1150T	42,26
11,70	70	13	12	2	1	TDC1170T	42,49
12,00	73	16	12	2	1	TDC1200T	38,27
12,50	73	16	12	2	1	TDC1250T	51,87
13,00	73	16	12	2	1	TDC1300T	45,30
13,50	73	16	12	2	1	TDC1350T	46,06
14,00	73	16	12	2	1	TDC1400T	46,48
15,00	73	16	12	2	1	TDC1500T	52,42
16,00	79	19	16	2	1	TDC1600T	53,58
17,00	79	19	16	2	1	TDC1700T	62,99
18,00	79	19	16	2	1	TDC1800T	64,17
19,00	79	19	16	2	1	TDC1900T	75,84
20,00	88	22	20	2	1	TDC2000T	77,15
21,00	88	22	20	2	1	TDC2100T	103,90
22,00	88	22	20	2	1	TDC2200T	93,34
24,00	102	26	25	2	1	TDC2400T	107,23
25,00	102	26	25	2	1	TDC2500T	110,26
25,00	96	26	20	2	1	TDC250020T	110,26
26,00	102	26	25	2	1	TDC2600T	118,43
28,00	102	26	25	2	1	TDC2800T	132,20
28,00	96	26	20	2	1	TDC280020T	132,20
30,00	102	26	25	2	1	TDC3000T	145,99
32,00	112	32	32	2	1	TDC3200T	164,70
36,00	112	32	32	2	1	TDC3600T	206,96
40,00	118	38	32	2	1	TDC400032T	254,71

* d≠ DIN 327

CONSTRUCCIÓN
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ACCESORIOS
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HEXAGONAL
HEXAGONAL • HEXAGONAL

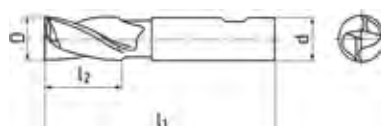
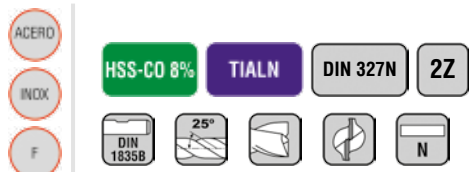
METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

FRESA FRONTAL ACABADO DOS DIENTES-TIALN

2Z FINISHING STRAIGHT SHANK END MILLS- TIALN
FRAISES QUEUE CYLINDRIQUE FINITION 2Z- TIALN

NEW



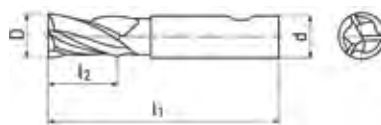
Condiciones de corte / Cutting conditions / Conditions de coupe

Material	Dureza / Strength / Dureté	Ap	Ae	Vc	fz(mm/z)							
					Ø 3	Ø 6	Ø 8	Ø 10	Ø 12	Ø 16	Ø 18	Ø 20
ACERO	≤ 600 N/mm ²	0,5xD	1xD	67	0.009	0.022	0.029	0.036	0.044	0.058	0.065	0.073
	≤ 850 N/mm ²	0,5xD	1xD	58	0.009	0.022	0.029	0.036	0.044	0.058	0.065	0.073
	≤ 1100 N/mm ²	0,5xD	1xD	36	0.009	0.022	0.029	0.036	0.044	0.058	0.065	0.073
	≤ 900 N/mm ²	0,5xD	1xD	45	0.009	0.022	0.029	0.036	0.044	0.058	0.065	0.073
	≤ 1100 N/mm ²	0,5xD	1xD	36	0.009	0.022	0.029	0.036	0.044	0.058	0.065	0.073
INOX	750 - 850 N/mm ²	0,5xD	1xD	22,5	0.009	0.022	0.029	0.036	0.044	0.058	0.065	0.073
F	< 240 HB	0,5xD	1xD	52	0.009	0.022	0.029	0.036	0.044	0.058	0.065	0.073
	> 240 HB	0,5xD	1xD	37	0.009	0.022	0.029	0.036	0.044	0.058	0.065	0.073

FRESA FRONTAL ACABADO TRES DIENTES - PM ALTiN

3Z FINISHING STRAIGHT SHANK END MILLS - PM ALTiN
FRAISES QUEUE CYLINDRIQUE FINITION 3Z - PM ALTiN

NEW



Ø mm (e8)	L1 (mm)	L2 (mm)	Ø Mango / Shank (h6)	Z	Uds. / Pcs.	Cod.	€/Unid.
6,00	52	8	6	3	1	TDC0600PM	26,70
8,00	61	11	10	3	1	TDC0800PM	34,90
10,00	63	13	10	3	1	TDC1000PM	39,36
12,00	73	16	12	3	1	TDC1200PM	48,97
14,00	73	16	12	3	1	TDC1400PM	58,15
16,00	79	19	16	3	1	TDC1600PM	71,17
18,00	79	19	16	3	1	TDC1800PM	81,76
20,00	88	22	20	3	1	TDC2000PM	110,52

Más rápida y menor vibración / Faster and less vibration / Plus rapide et moins de vibrations

Condiciones de corte / Cutting conditions / Conditions de coupe

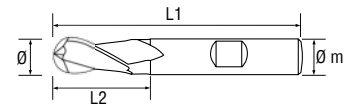
Material	Dureza / Strength / Dureté	Ap	Ae	Vc	fz(mm/z)						
					Ø 6	Ø 8	Ø 10	Ø 12	Ø 16	Ø 18	Ø 20
ACERO	≤ 600 N/mm ²	0,5xD	1xD	114	0.024	0.032	0.04	0.048	0.064	0.072	0.08
	≤ 850 N/mm ²	0,5xD	1xD	99	0.024	0.032	0.04	0.048	0.064	0.072	0.08
	≤ 1100 N/mm ²	0,5xD	1xD	62	0.024	0.032	0.04	0.048	0.064	0.072	0.08
	≤ 900 N/mm ²	0,5xD	1xD	77	0.024	0.032	0.04	0.048	0.064	0.072	0.08
	≤ 1100 N/mm ²	0,5xD	1xD	62	0.024	0.032	0.04	0.048	0.064	0.072	0.08
> 1100 N/mm ²	0,5xD	1xD	51	0.0168	0.0224	0.028	0.0336	0.0448	0.0504	0.056	
INOX	750 - 850 N/mm ²	0,5xD	1xD	38	0.024	0.032	0.04	0.048	0.064	0.072	0.08
F	< 240 HB	0,5xD	1xD	89	0.024	0.032	0.04	0.048	0.064	0.072	0.08
	> 240 HB	0,5xD	1xD	66	0.024	0.032	0.04	0.048	0.064	0.072	0.08

FRESAS CON MANGO CILÍNDRICO

STRAIGHT SHANK END MILLS • FRAISES QUEUE CYLINDRIQUE

FRESA FRONTAL RADIAL ACABADO DOS DIENTES

2Z FINISHING RADIAL STRAIGHT SHANK END MILLS
FRAISES RADIALES QUEUE CYLINDRIQUE FINITION 2Z



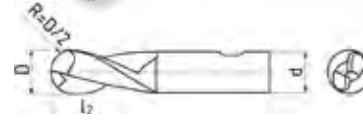
Ø mm (h10)	L1 (mm)	L2 (mm)	Ø Mango / Shank (h6)	Z	Uds. / Pcs.	Cod.	€/Unid.
4,00	51	7	6	2	1	TRC0400	30,46
5,00	52	8	6	2	1	TRC0500	30,46
6,00	52	8	6	2	1	TRC0600	30,46
8,00	61	11	10	2	1	TRC0800	32,80
10,00	63	13	10	2	1	TRC1000	32,92
12,00	73	16	12	2	1	TRC1200	43,15
14,00	73	16	12	2	1	TRC1400	56,96
16,00	79	19	16	2	1	TRC1600	64,22
18,00	79	19	16	2	1	TRC1800	77,23
20,00	88	22	20	2	1	TRC2000	91,58
22,00	88	22	20	2	1	TRC2200	118,40

Condiciones de corte / Cutting conditions / Conditions de coupe

Material	Dureza / Strength / Dureté	Ap	Ae	Vc	fz(mm/z)						
					Ø 6	Ø 8	Ø 10	Ø 12	Ø 16	Ø 18	Ø 20
ACERO	≤ 850 N/mm ²	0,5xD	1xD	39	0.022	0.029	0.036	0.044	0.058	0.065	0.073
	≤ 1100 N/mm ²	0,5xD	1xD	24	0.022	0.029	0.036	0.044	0.058	0.065	0.073
	≤ 900 N/mm ²	0,5xD	1xD	30	0.022	0.029	0.036	0.044	0.058	0.065	0.073
	≤ 1100 N/mm ²	0,5xD	1xD	24	0.022	0.029	0.036	0.044	0.058	0.065	0.073
INOX	750 - 850 N/mm ²	0,5xD	1xD	15	0.022	0.029	0.036	0.044	0.058	0.065	0.073
F	> 240 HB	0,5xD	1xD	25	0.022	0.029	0.036	0.044	0.058	0.065	0.073
TI	≤ 1500 N/mm ²	0,5xD	1xD	12	0.0154	0.0203	0.0252	0.0308	0.0406	0.0455	0.051

FRESA FRONTAL RADIAL ACABADO DOS DIENTES - PM ALTIN

2Z FINISHING RADIAL STRAIGHT SHANK END MILLS - PM ALTIN
FRAISES RADIALES QUEUE CYLINDRIQUE FINITION 2Z - PM ALTIN



Ø mm (h10)	L1 (mm)	L2 (mm)	Ø Mango / Shank (h6)	Z	Uds. / Pcs.	Cod.	€/Unid.
4,00	49	5	6	2	1	TRC0400PM	37,91
5,00	51	7	6	2	1	TRC0500PM	37,91
6,00	52	8	6	2	1	TRC0600PM	37,91
7,00	52	8	6	2	1	TRC0700PM	48,55
8,00	61	11	10	2	1	TRC0800PM	48,55
9,00	63	13	10	2	1	TRC0900PM	55,76
10,00	73	16	12	2	1	TRC1000PM	55,76
12,00	73	16	12	2	1	TRC1200PM	66,96
14,00	79	19	16	2	1	TRC1400PM	80,43
16,00	79	19	16	2	1	TRC1600PM	92,70
18,00	88	22	20	2	1	TRC1800PM	111,80
20,00	88	22	20	2	1	TRC2000PM	138,65

Condiciones de corte / Cutting conditions / Conditions de coupe

Material	Dureza / Strength / Dureté	Ap	Ae	Vc	fz(mm/z)						
					Ø 6	Ø 8	Ø 10	Ø 12	Ø 16	Ø 18	Ø 20
ACERO	≤ 600 N/mm ²	0,5xD	1xD	114	0.024	0.032	0.04	0.048	0.064	0.072	0.08
	≤ 850 N/mm ²	0,5xD	1xD	99	0.024	0.032	0.04	0.048	0.064	0.072	0.08
	≤ 900 N/mm ²	0,5xD	1xD	77	0.024	0.032	0.04	0.048	0.064	0.072	0.08
F	< 240 HB	0,5xD	1xD	89	0.024	0.032	0.04	0.048	0.064	0.072	0.08

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METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

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ACCESORIOS
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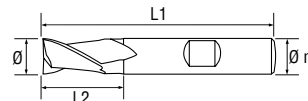
HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

FRESA FRONTAL ACABADO - VARIOS DIENTES

NZ FINISHING STRAIGHT SHANK END MILLS
FRAISES QUEUE CYLINDRIQUE FINITION NZ



Ø mm (k12)	L1 (mm)	L2 (mm)	Ø Mango / Shank (h6)	Z	Uds. / Pcs.	Cod.	€/Unid.
2,00	51	7	6	3	1	TVC0200	17,28
2,50	52	8	6	3	1	TVC0250	17,28
3,00	52	8	6	4	1	TVC0300	17,28
3,50	55	11	6	4	1	TVC0350	17,28
4,00	55	11	6	4	1	TVC0400	16,53
4,50	57	13	6	4	1	TVC0450	17,28
5,00	57	13	6	4	1	TVC0500	16,53
6,00	57	13	6	4	1	TVC0600	16,53
7,00	66	16	10	4	1	TVC0700	25,34
8,00	69	19	10	4	1	TVC0800	20,05
9,00	69	19	10	4	1	TVC0900	26,47
10,00	72	22	10	4	1	TVC1000	23,02
11,00	79	22	12	4	1	TVC1100	31,92
12,00	83	26	12	4	1	TVC1200	27,83
13,00	83	26	12	4	1	TVC1300	41,06
14,00	83	26	12	4	1	TVC1400	37,08
15,00	83	26	12	4	1	TVC1500	44,25
16,00	92	32	16	4	1	TVC1600	43,19
17,00	92	32	16	4	1	TVC1700	53,17
18,00	92	32	16	4	1	TVC1800	50,86
20,00	104	38	20	4	1	TVC2000	59,58
22,00	104	38	20	5	1	TVC2200	86,47
24,00	121	45	25	5	1	TVC2400	107,41
25,00	121	45	25	5	1	TVC2500	107,41
26,00	121	45	25	5	1	TVC2600	130,37
28,00	121	45	25	5	1	TVC2800	134,24
30,00	121	45	25	5	1	TVC3000	155,38
32,00	133	53	32	6	1	TVC3200	160,02
36,00	133	53	32	6	1	TVC3600	209,42
40,00	143	63	32*	6	1	TVC400032	251,74

* d≠ DIN 844

Condiciones de corte / Cutting conditions / Conditions de coupe

Material	Dureza / Strength / Dureté	Ap	Ae	Vc	fz (mm/z)										
					Ø 3	Ø 6	Ø 8	Ø 10	Ø 12	Ø 16	Ø 18	Ø 20	Ø 25	Ø 30	Ø 40
ACERO	≤ 600 N/mm²	1xD	0,1xD	45	0.006	0.015	0.021	0.028	0.034	0.044	0.051	0.057	0.71	0.085	0.11
	≤ 850 N/mm²	1xD	0,1xD	39	0.006	0.015	0.021	0.028	0.034	0.044	0.051	0.057	0.71	0.085	0.11
	≤ 1100 N/mm²	1xD	0,1xD	24	0.006	0.015	0.021	0.028	0.034	0.044	0.051	0.057	0.71	0.085	0.11
	≤ 900 N/mm²	1xD	0,1xD	30	0.006	0.015	0.021	0.028	0.034	0.044	0.051	0.057	0.71	0.085	0.11
	> 1100 N/mm²	1xD	0,1xD	20	0.0042	0.0105	0.0147	0.0196	0.0238	0.0308	0.0357	0.0399	0.497	0.0595	0.077
INOX	750 - 850 N/mm²	1xD	0,1xD	15	0.006	0.015	0.021	0.028	0.034	0.044	0.051	0.057	0.71	0.085	0.11
F	< 240 HB	1xD	0,1xD	35	0.006	0.015	0.021	0.028	0.034	0.044	0.051	0.057	0.71	0.085	0.11
TI	≤ 1500 N/mm²	1xD	0,1xD	12	0.0042	0.0105	0.0147	0.0196	0.0238	0.0308	0.0357	0.0399	0.497	0.0595	0.077

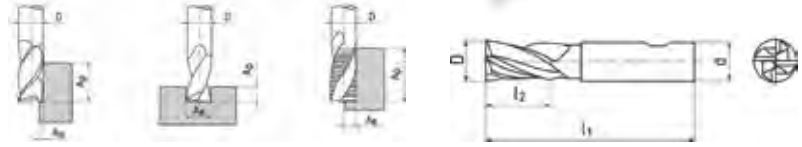
FRESAS CON MANGO CILÍNDRICO

STRAIGHT SHANK END MILLS • FRAISES QUEUE CYLINDRIQUE

FRESA FRONTAL LARGA ACABADO VARIOS DIENTES

NZ FINISHING STRAIGHT SHANK LONG END MILLS
FRAISES LONGUE QUEUE CYLINDRIQUE FINITION NZ

NEW



Ø mm (k10)	L1 (mm)	L2 (mm)	Ø Mango / Shank (h6)	Z	Uds. / Pcs.	Cod.	€/Unid.
2,00	54	10	6	3	1	TVCL0200	17,65
3,00	56	12	6	4	1	TVCL0300	17,65
3,50	59	15	6	4	1	TVCL0350	19,42
4,00	63	19	6	4	1	TVCL0400	18,20
4,50	63	19	6	4	1	TVCL0450	19,82
5,00	68	24	6	4	1	TVCL0500	18,57
5,50	68	24	6	4	1	TVCL0550	20,43
6,00	68	24	6	4	1	TVCL0600	18,57
7,00	80	30	10	4	1	TVCL0700	23,74
8,00	88	38	10	4	1	TVCL0800	23,74
9,00	88	38	10	4	1	TVCL0900	27,84
10,00	95	45	10	4	1	TVCL1000	27,84
11,00	102	45	12	4	1	TVCL1100	34,35
12,00	110	53	12	4	1	TVCL1200	34,35
13,00	110	53	12	4	1	TVCL1300	40,97
14,00	110	53	12	4	1	TVCL1400	40,18
15,00	110	53	12	4	1	TVCL1500	47,89
16,00	123	63	16	4	1	TVCL1600	47,89
18,00	123	63	16	4	1	TVCL1800	55,62
20,00	141	75	20	4	1	TVCL2000	67,86
22,00	141	75	20	5	1	TVCL2200	89,35
24,00	166	90	25	5	1	TVCL2400	109,36
25,00	166	90	25	5	1	TVCL2500	115,80
26,00	166	90	25	5	1	TVCL2600	128,15
28,00	166	90	25	5	1	TVCL2800	130,64
30,00	166	90	25	5	1	TVCL3000	147,05
32,00	186	106	32	6	1	TVCL3200	151,91
36,00	186	106	32	6	1	TVCL3600	273,40
40,00	205	125	32*	6	1	TVCL400032	369,85

* d≠ DIN844

Condiciones de corte / Cutting conditions / Conditions de coupe

Material	Dureza / Strength / Dureté	Ap	Ae	Vc	fz(mm/z)										
					Ø 3	Ø 6	Ø 8	Ø 10	Ø 12	Ø 16	Ø 18	Ø 20	Ø 25	Ø 30	Ø 40
ACERO	≤ 600 N/mm ²	1xD	0,1xD	45	0.006	0.015	0.021	0.028	0.034	0.044	0.051	0.057	0.71	0.085	0.11
	≤ 850 N/mm ²	1xD	0,1xD	39	0.006	0.015	0.021	0.028	0.034	0.044	0.051	0.057	0.71	0.085	0.11
	≤ 1100 N/mm ²	1xD	0,1xD	24	0.006	0.015	0.021	0.028	0.034	0.044	0.051	0.057	0.71	0.085	0.11
	≤ 900 N/mm ²	1xD	0,1xD	30	0.006	0.015	0.021	0.028	0.034	0.044	0.051	0.057	0.71	0.085	0.11
	> 1100 N/mm ²	1xD	0,1xD	20	0.0042	0.0105	0.0147	0.0196	0.0238	0.0308	0.0357	0.0399	0.497	0.0595	0.077
INOX	750 - 850 N/mm ²	1xD	0,1xD	15	0.006	0.015	0.021	0.028	0.034	0.044	0.051	0.057	0.71	0.085	0.11
F	< 240 HB	1xD	0,1xD	35	0.006	0.015	0.021	0.028	0.034	0.044	0.051	0.057	0.71	0.085	0.11
TI	≤ 1500 N/mm ²	1xD	0,1xD	12	0.0042	0.0105	0.0147	0.0196	0.0238	0.0308	0.0357	0.0399	0.497	0.0595	0.077

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HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

FRESA FRONTAL ACABADO VARIOS DIENTES -TIALN

NZ FINISHING STRAIGHT SHANK END MILLS-TIALN
FRAISES QUEUE CYLINDRIQUE FINITION NZ- TIALN

NEW



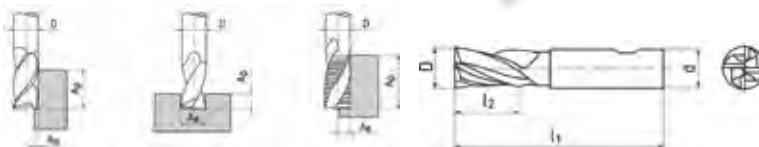
HSS-CO 8%

TIALN

DIN 844N

3Z-6Z

DIN 1835B



Ø mm (k10)	L1 (mm)	L2 (mm)	Ø Mango / Shank (h6)	Z	Uds. / Pcs.	Cod.	€/Unid.
2,00	51	7	6	3	1	TVC0200T	18,98
2,50	52	8	6	3	1	TVC0250T	19,49
3,00	52	8	6	4	1	TVC0300T	18,48
3,50	55	11	6	4	1	TVC0350T	20,55
4,00	55	11	6	4	1	TVC0400T	19,52
4,50	57	13	6	4	1	TVC0450T	21,58
5,00	57	13	6	4	1	TVC0500T	20,57
5,50	57	13	6	4	1	TVC0550T	22,62
6,00	57	13	6	4	1	TVC0600T	21,61
6,50	66	16	10	4	1	TVC0650T	28,35
7,00	66	16	10	4	1	TVC0700T	26,90
7,50	66	16	10	4	1	TVC0750T	29,39
8,00	69	19	10	4	1	TVC0800T	28,03
8,50	69	19	10	4	1	TVC0850T	34,30
9,00	69	19	10	4	1	TVC0900T	32,52
9,50	69	19	10	4	1	TVC0950T	35,35
10,00	72	22	10	4	1	TVC1000T	31,71
11,00	79	22	12	4	1	TVC1100T	39,11
12,00	83	26	12	4	1	TVC1200T	37,54
13,00	83	26	12	4	1	TVC1300T	45,85
14,00	83	26	12	4	1	TVC1400T	46,90
15,00	83	26	12	4	1	TVC1500T	54,08
16,00	92	32	16	4	1	TVC1600T	55,12
17,00	92	32	16	4	1	TVC1700T	65,13
18,00	92	32	16	4	1	TVC1800T	66,17
20,00	104	38	20	4	1	TVC2000T	76,58
22,00	104	38	20	5	1	TVC2200T	100,55
24,00	121	45	25	5	1	TVC2400T	121,95
25,00	121	45	25	5	1	TVC2500T	126,74
26,00	121	45	25	5	1	TVC2600T	140,69
28,00	121	45	25	5	1	TVC2800T	148,44
30,00	121	45	25	5	1	TVC3000T	159,10
32,00	133	53	32	6	1	TVC3200T	172,00
35,00	133	53	32	6	1	TVC3500T	265,15
36,00	133	53	32	6	1	TVC3600T	260,01
40,00	143	63	32*	6	1	TVC400032T	321,23

* d≠ DIN844

Condiciones de corte / Cutting conditions / Conditions de coupe

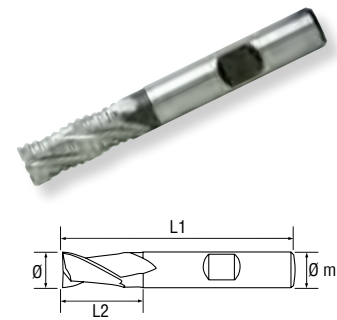
Material	Dureza / Strength / Dureté	Ap	Ae	Vc	fz (mm/z)										
					Ø 3	Ø 6	Ø 8	Ø 10	Ø 12	Ø 16	Ø 18	Ø 20	Ø 25	Ø 32	Ø 40
ACERO	≤ 600 N/mm ²	1xD	0,1xD	67,5	0.006	0.015	0.021	0.028	0.034	0.044	0.051	0.057	0.71	0.091	0.11
	≤ 850 N/mm ²	1xD	0,1xD	58,5	0.006	0.015	0.021	0.028	0.034	0.044	0.051	0.057	0.71	0.091	0.11
	≤ 1100 N/mm ²	1xD	0,1xD	36	0.006	0.015	0.021	0.028	0.034	0.044	0.051	0.057	0.71	0.091	0.11
	≤ 900 N/mm ²	1xD	0,1xD	45	0.006	0.015	0.021	0.028	0.034	0.044	0.051	0.057	0.71	0.091	0.11
	> 1100 N/mm ²	1xD	0,1xD	30	0.0042	0.0105	0.0147	0.0196	0.0238	0.0308	0.0357	0.0399	0.497	0.0637	0.077
INOX	750 - 850 N/mm ²	1xD	0,1xD	22,5	0.006	0.015	0.021	0.028	0.034	0.044	0.051	0.057	0.71	0.091	0.11
F	< 240 HB	1xD	0,1xD	52,5	0.006	0.015	0.021	0.028	0.034	0.044	0.051	0.057	0.71	0.091	0.11
TI	≤ 1500 N/mm ²	1xD	0,1xD	18	0.0042	0.0105	0.0147	0.0196	0.0238	0.0308	0.0357	0.0399	0.497	0.0637	0.077

FRESAS CON MANGO CILÍNDRICO

STRAIGHT SHANK END MILLS • FRAISES QUEUE CYLINDRIQUE

FRESA DESBASTE GRUESO - VARIOS DIENTES

NZ COARSE ROUGHING STRAIGHT SHANK END MILLS
FRAISES QUEUE CYLINDRIQUE EBAUCHE NZ



Ø mm (k12)	L1 (mm)	L2 (mm)	Ø Mango / Shank (h6)	Z	Uds. / Pcs.	Cod.	€/Unid.
6,00	57	13	6	4	1	TVG0600	41,09
8,00	69	19	10	4	1	TVG0800	43,24
10,00	72	22	10	4	1	TVG1000	43,63
12,00	83	26	12	4	1	TVG1200	51,39
14,00	83	26	12	4	1	TVG1400	60,39
16,00	92	32	16	4	1	TVG1600	70,85
18,00	92	32	16	4	1	TVG1800	78,19
20,00	104	38	20	4	1	TVG2000	98,06
22,00	104	38	20	5	1	TVG2200	115,34
24,00	121	45	25	5	1	TVG2400	145,21
25,00	121	45	25	5	1	TVG2500	144,05

FRESA LARGA DESBASTE GRUESO - VARIOS DIENTES

NZ COARSE ROUGHING STRAIGHT SHANK LONG END MILL
FRAISES LONGUE QUEUE CYLINDRIQUE EBAUCHE NZ



Ø mm (k12)	L1 (mm)	L2 (mm)	Ø Mango / Shank (h6)	Z	Uds. / Pcs.	Cod.	€/Unid.
6,00	68	24	6	4	1	TVGL0600	37,18
7,00	80	30	10	4	1	TVGL0700	40,91
8,00	88	38	10	4	1	TVGL0800	40,91
9,00	88	38	10	4	1	TVGL0900	46,60
10,00	95	45	10	4	1	TVGL1000	46,60
11,00	102	45	12	4	1	TVGL1100	54,75
12,00	110	53	12	4	1	TVGL1200	54,75
14,00	110	53	12	4	1	TVGL1400	66,42
15,00	110	53	12	4	1	TVGL1500	77,39
16,00	123	63	16	4	1	TVGL1600	77,39
18,00	123	63	16	4	1	TVGL1800	95,53
20,00	141	75	20	4	1	TVGL2000	114,73
22,00	141	75	20	5	1	TVGL2200	140,67
24,00	166	90	25	5	1	TVGL2400	171,95
25,00	166	90	25	5	1	TVGL2500	168,57
26,00	166	90	25	5	1	TVGL2600	214,30
28,00	166	90	25	5	1	TVGL2800	216,74
30,00	166	90	25	5	1	TVGL3000	252,86
32,00	186	106	32	6	1	TVGL3200	284,55
36,00	186	106	32	6	1	TVGL3600	327,07
40,00	205	125	32*	6	1	TVGL400032	409,55

* d≠ DIN844

Condiciones de corte / Cutting conditions / Conditions de coupe (TVG Y TVGL)

Material	Dureza / Strength / Dureté	Ap	Ae	Vc	fz(mm/z)									
					Ø 6	Ø 8	Ø 10	Ø 12	Ø 16	Ø 18	Ø 20	Ø 25	Ø 30	Ø 40
ACERO	≤ 600 N/mm²	1,5xD	0,5xD	45	0.02	0.025	0.035	0.04	0.07	0.08	0.09	0.1	0.115	0.14
	≤ 850 N/mm²	1,5xD	0,5xD	39	0.02	0.025	0.035	0.04	0.07	0.08	0.09	0.1	0.115	0.14
	≤ 900 N/mm²	1,5xD	0,5xD	30	0.02	0.025	0.035	0.04	0.07	0.08	0.09	0.1	0.115	0.14
INOX	750 - 850 N/mm²	1,5xD	0,5xD	15	0.02	0.025	0.035	0.04	0.07	0.08	0.09	0.1	0.115	0.14
F	< 240 HB	1,5xD	0,5xD	35	0.02	0.025	0.035	0.04	0.07	0.08	0.09	0.1	0.115	0.14

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

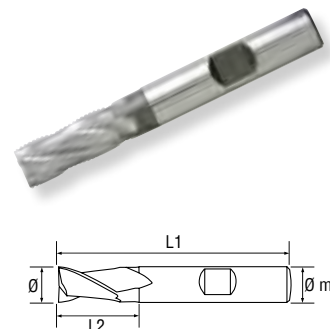
METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

FRESA DESBASTE FINO - VARIOS DIENTES

NZ FINE PITCH ROUGHING STRAIGHT SHANK END MILLS

FRAISES QUEUE CYLINDRIQUE EBAUCHE PAS FIN NZ



Ø mm (k12)	L1 (mm)	L2 (mm)	Ø Mango / Shank (h6)	Z	Uds. / Pcs.	Cod.	€/Unid.
6,00	57	13	6	4	1	TVF0600	46,32
8,00	69	19	10	4	1	TVF0800	48,21
10,00	72	22	10	4	1	TVF1000	48,42
12,00	83	26	12	4	1	TVF1200	57,66
14,00	83	26	12	4	1	TVF1400	67,07
16,00	92	32	16	4	1	TVF1600	78,69

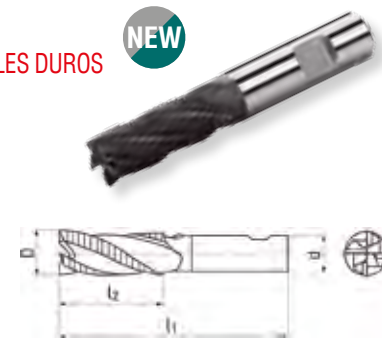
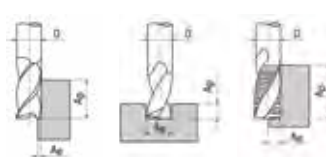
Condiciones de corte / Cutting conditions / Conditions de coupe

Material	Dureza / Strength / Dureté	Ap	Ae	Vc	fz(mm/z)								
					Ø 6	Ø 8	Ø 10	Ø 12	Ø 16	Ø 18	Ø 20	Ø 25	Ø 32
ACERO	≤ 600 N/mm ²	1,5xD	0,5xD	45	0.02	0.025	0.035	0.04	0.07	0.08	0.09	0.1	0.12
	≤ 850 N/mm ²	1,5xD	0,5xD	39	0.02	0.025	0.035	0.04	0.07	0.08	0.09	0.1	0.12
	≤ 900 N/mm ²	1,5xD	0,5xD	30	0.02	0.025	0.035	0.04	0.07	0.08	0.09	0.1	0.12
	≤ 1100 N/mm ²	1,5xD	0,5xD	24	0.02	0.025	0.035	0.04	0.07	0.08	0.09	0.1	0.12
INOX	750 - 850 N/mm ²	1,5xD	0,5xD	15	0.02	0.025	0.035	0.04	0.07	0.08	0.09	0.1	0.12
F	< 240 HB	1,5xD	0,5xD	35	0.02	0.025	0.035	0.04	0.07	0.08	0.09	0.1	0.12

FRESA DESBASTE GRUESO - VARIOS DIENTES - RECOMENDADO PARA MATERIALES DUROS

NZ COARSE ROUGHING STRAIGHT SHANK END MILLS - RECOMMENDED FOR HARD MATERIALS

FRAISES QUEUE CYLINDRIQUE EBAUCHE NZ - RECOMMANDÉ POUR MATÉRIAUX DURS



Ø mm (k12)	L1 (mm)	L2 (mm)	Ø Mango / Shank (h6)	Z	Uds. / Pcs.	Cod.	€/Unid.
9,00	69	19	10	5	1	TVGH0900PM	72,46
10,00	72	22	10	5	1	TVGH1000PM	76,20
11,00	79	22	12	5	1	TVGH1100PM	84,62
12,00	83	26	12	5	1	TVGH1200PM	89,64
13,00	83	26	12	5	1	TVGH1300PM	99,75
14,00	83	26	12	5	1	TVGH1400PM	106,26
15,00	83	26	12	5	1	TVGH1500PM	116,93
16,00	92	32	16	5	1	TVGH1600PM	125,41
18,00	92	32	16	5	1	TVGH1800PM	148,10
20,00	104	38	20	5	1	TVGH2000PM	181,93

Condiciones de corte / Cutting conditions / Conditions de coupe

Material	Dureza / Strength / Dureté	Ap	Ae	Vc	fz(mm/z)								
					Ø 6	Ø 8	Ø 10	Ø 12	Ø 16	Ø 18	Ø 20	Ø 25	Ø 32
ACERO	≤ 1100 N/mm ²	1,5xD	0,5xD	61.5	0.022	0.028	0.039	0.044	0.077	0.088	0.1	0.11	0.132
	≤ 1100 N/mm ²	1,5xD	0,5xD	61.5	0.022	0.028	0.039	0.044	0.077	0.088	0.1	0.11	0.132
	> 1100 N/mm ²	1,5xD	0,5xD	51	0.022	0.028	0.039	0.044	0.077	0.088	0.1	0.077	0.0924
INOX	750 - 850 N/mm ²	1,5xD	0,5xD	37.5	0.022	0.028	0.039	0.044	0.077	0.088	0.1	0.077	0.0924
F	> 240 HB	1,5xD	0,5xD	66	0.022	0.028	0.039	0.044	0.077	0.088	0.1	0.11	0.132
TI	≤ 1500 N/mm ²	1,5xD	0,5xD	31.5	0.022	0.028	0.039	0.044	0.077	0.088	0.1	0.077	0.0924
	≤ 1250 N/mm ²	1,5xD	0,5xD	30	0.022	0.028	0.039	0.044	0.077	0.088	0.1	0.077	0.0924

FRESAS CON MANGO CILÍNDRICO

STRAIGHT SHANK END MILLS • FRAISES QUEUE CYLINDRIQUE

FRESA DESBASTE FINO - VARIOS DIENTES-PM - RECOMENDADO PARA MATERIALES DUROS
NZ FINE PITCH ROUGHING STRAIGHT SHANK END MILLS-PM - RECOMMENDED FOR HARD MATERIALS
FRAISES QUEUE CYLINDRIQUE EBAUCHE PAS FIN NZ-PM - RECOMMANDÉ POUR MATÉRIAUX DURS

NEW



Ø mm (k12)	L1 (mm)	L2 (mm)	Ø Mango / Shank (h6)	Z	Uds. / Pcs.	Cod.	
6,00	57	13	6	4	1	TVFH0600PM	55,61
8,00	69	19	10	4	1	TVFH0800PM	63,78
10,00	72	22	10	4	1	TVFH1000PM	71,12
11,00	79	22	12	4	1	TVFH1100PM	86,34
12,00	83	26	12	4	1	TVFH1200PM	83,30
13,00	83	26	12	4	1	TVFH1300PM	91,13
14,00	83	26	12	4	1	TVFH1400PM	98,11
15,00	83	26	12	4	1	TVFH1500PM	110,81
16,00	92	32	16	4	1	TVFH1600PM	115,33
17,00	92	32	16	4	1	TVFH1700PM	131,93
18,00	92	32	16	4	1	TVFH1800PM	136,21
20,00	104	38	20	4	1	TVFH2000PM	172,50
22,00	104	38	20	5	1	TVFH2200PM	199,92
25,00	121	45	25	5	1	TVFH2500PM	242,23
28,00	121	45	25	5	1	TVFH2800PM	300,78
30,00	121	45	25	5	1	TVFH3000PM	346,06
32,00	133	53	32	6	1	TVFH3200PM	385,72

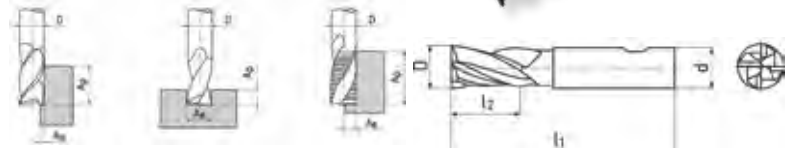
Condiciones de corte / Cutting conditions / Conditions de coupe

Material	Dureza / Strength / Dureté	Ap	Ae	Vc	fz(mm/z)								
					Ø 6	Ø 8	Ø 10	Ø 12	Ø 16	Ø 18	Ø 20	Ø 25	Ø 32
ACERO	≤ 1100 N/mm ²	1,5xD	0,5xD	61.5	0.022	0.028	0.039	0.044	0.077	0.088	0.1	0.11	0.132
	≤ 1100 N/mm ²	1,5xD	0,5xD	61.5	0.022	0.028	0.039	0.044	0.077	0.088	0.1	0.11	0.132
	> 1100 N/mm ²	1,5xD	0,5xD	51	0.022	0.028	0.039	0.044	0.077	0.088	0.1	0.077	0.0924
INOX	750 - 850 N/mm ²	1,5xD	0,5xD	37,5	0.022	0.028	0.039	0.044	0.077	0.088	0.1	0.077	0.0924
F	> 240 HB	1,5xD	0,5xD	66	0.022	0.028	0.039	0.044	0.077	0.088	0.1	0.11	0.132
TI	≤ 1500 N/mm ²	1,5xD	0,5xD	31.5	0.022	0.028	0.039	0.044	0.077	0.088	0.1	0.077	0.0924
	≤ 1250 N/mm ²	1,5xD	0,5xD	30	0.022	0.028	0.039	0.044	0.077	0.088	0.1	0.077	0.0924

FRESA FRONTAL VARIOS DIENTES NEW

NZ FINISHING STRAIGHT SHANK END MILLS

FRAISES QUEUE CYLINDRIQUE FINITION NZ



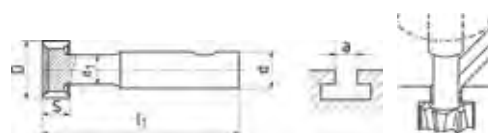
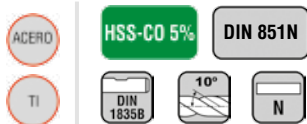
Ø mm (k10)	L1 (mm)	L2 (mm)	Ø Mango / Shank (h6)	Z	Uds. / Pcs.	Cod.	
6,00	57	7	6	4	1	TVC0600PMC	38,09
8,00	65	9	8	4	1	TVC0800PMC	55,68
10,00	72	11	10	4	1	TVC1000PMC	59,16
12,00	83	13	12	4	1	TVC1200PMC	73,27
16,00	92	17	16	4	1	TVC1600PMC	110,04
20,00	104	21	20	4	1	TVC2000PMC	151,19

Condiciones de corte / Cutting conditions / Conditions de coupe

Material	Dureza / Strength / Dureté	Ae	Ap	Vc	fz(mm/z)					
					Ø 6	Ø 8	Ø 10	Ø 12	Ø 16	Ø 20
ACERO	≤ 600 N/mm ²	1xD	0,1xD	78	0.2	0.027	0.038	0.044	0.054	0.065
	≤ 850 N/mm ²	1xD	0,1xD	78	0.2	0.027	0.038	0.044	0.054	0.065
	≤ 1100 N/mm ²	1xD	0,1xD	66	0.018	0.024	0.03	0.036	0.042	0.053
	≤ 900 N/mm ²	1xD	0,1xD	66	0.018	0.024	0.03	0.036	0.042	0.053
	≤ 1100 N/mm ²	1xD	0,1xD	66	0.018	0.024	0.03	0.036	0.042	0.053
INOX	> 1100 N/mm ²	1xD	0,1xD	66	0.018	0.024	0.03	0.036	0.042	0.053
	≤ 750 N/mm ²	1xD	0,1xD	60	0.018	0.024	0.03	0.036	0.042	0.054
	750 - 850 N/mm ²	1xD	0,1xD	48	0.018	0.024	0.03	0.036	0.042	0.054
	> 850 mm ²	1xD	0,1xD	48	0.018	0.024	0.03	0.036	0.042	0.054

FRESA PARA RANURAS EN T NEW

T SLOTS SHANK TOOL • FRAISE POUR RANURES À "T"



Ø mm (d11)	d (h6)	s (d11)	d1	l1	z	a	Uds. / Pcs.	Cod.	€/Unid.
11,00	4	10	53,5	6	4	5	1	T851N01100	83,64
12,50	6	10	57	6	5	6	1	T851N01250	83,97
16,00	8	12	62	6	7	8	1	T851N01600	87,74
18,00	8	12	70	6	8	10	1	T851N01800	91,28
21,00	9	12	74	6	10	12	1	T851N02100	98,31
25,00	11	16	82	8	12	14	1	T851N02500	108,26
32,00	14	16	90	8	15	18	1	T851N03200	137,12
40,00	18	25	108	10	19	22	1	T851N04000	238,20
50,00	22	32	124	10	25	28	1	T851N05000	343,49
60,00	28	32	139	10	30	36	1	T851N06000	419,43

Para recubrimiento TIALN, consultar / Request for TIALN coating / Pour TIALN revêtement, nous consulter.

Condiciones de corte / Cutting conditions / Conditions de coupe

Material	Dureza / Strength / Dureté	Ae	Ap	Vc	fz(mm/z)			
					Ø 21	Ø 25	Ø 40	Ø 50
ACERO	≤ 600 N/mm ²	0,1xD	1xb	37.5	0.07	0.08	0.04	0.05
	≤ 850 N/mm ²	0,1xD	1xb	32.5	0.07	0.08	0.04	0.05
	≤ 1100 N/mm ²	0,1xD	1xb	18	0.07	0.08	0.04	0.05
TI	≤ 1250 N/mm ²	0,1xD	1xb	9	0.049	0.056	0.028	0.035

FRESAS CON MANGO CILÍNDRICO

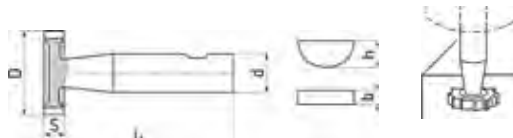
STRAIGHT SHANK END MILLS • FRAISES QUEUE CYLINDRIQUE

FRESA PARA RANURAS WOODRUFF

WOODRUFF SLOTS SHANK TOOL • FRAISE POUR RANURES WOODRUFF

NEW

ACERO HSS-CO 5% DIN 850 6Z-12Z
 TI DIN 1835B 10°



Ø mm (h12)	d (h6)	s (e8)	l1	z	Uds. / Pcs.	Cod.	€/Unid.
4,50	6	1	50	6	1	T850045010	56,61
7,50	6	1,5	50	6	1	T850075015	45,27
7,50	6	2	50	6	1	T850075020	45,27
10,50	6	2	50	6	1	T850105020	54,18
10,50	6	2,5	50	6	1	T850105025	54,18
10,50	6	3	50	6	1	T850105030	54,18
13,50	10	2	56	6	1	T850135020	56,80
13,50	10	3	56	6	1	T850135030	56,80
13,50	10	4	56	6	1	T850135040	56,80
16,50	10	3	56	6	1	T850165030	61,97
16,50	10	4	56	6	1	T850165040	61,97
16,50	10	5	56	6	1	T850165050	61,97
19,50	10	3	63	8	1	T850195030	76,08
19,50	10	4	63	8	1	T850195040	76,08
19,50	10	5	63	8	1	T850195050	76,08
19,50	10	6	63	8	1	T850195060	76,08
22,50	10	4	63	8	1	T850225040	86,21
22,50	10	5	63	8	1	T850225050	86,21
22,50	10	6	63	8	1	T850225060	86,21
22,50	10	8	63	8	1	T850225080	86,21
25,50	10	5	63	10	1	T850255050	96,42
25,50	10	6	63	10	1	T850255060	96,42
28,50	10	6	63	10	1	T850285060	97,70
28,50	10	8	63	10	1	T850285080	97,70
28,50	12	10	71	10	1	T850285100	97,70
32,50	12	6	71	10	1	T850325060	109,18
32,50	12	7	71	10	1	T850325070	109,18
32,50	12	8	71	10	1	T850325080	109,18
32,50	12	10	71	10	1	T850325100	109,18
38,50	12	8	71	10	1	T850385080	129,64
45,50	12	8	71	12	1	T850455080	154,97
45,50	12	10	71	12	1	T850455100	154,97

Diámetros inferiores a 7,50 mm dentado no cruzado / Diametros inferiores a 7,50.-mm dentado no cruzado / Diametros inferiores a 7,50.-mm dentado no cruzado
 Para recubrimiento TIALN, consultar / Request for TIALN coating / Pour TIALN revêtement, nous consulter.

Condiciones de corte / Cutting conditions / Conditions de coupe

Material	Dureza / Strength / Dureté	Ae	Ap	Vc	fz (mm/z)				
					Ø 7.5	Ø 16.5	Ø 22.5	Ø 32.5	Ø 45.5
ACERO	≤ 600 N/mm ²	0,1xD	1xb	37.5	0.04	0.07	0.075	0.09	0.1
	≤ 850 N/mm ²	0,1xD	1xb	32.5	0.04	0.07	0.075	0.09	0.1
	≤ 1100 N/mm ²	0,1xD	1xb	18	0.04	0.07	0.075	0.09	0.1
TI	≤ 1250 N/mm ²	0,1xD	1xb	9	0.028	0.049	0.0525	0.063	0.07

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HEXAGONAL • HEXAGONAL

METROLOGÍA
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DISPLAYS
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FRESA EN BISEL

DOVETAIL MILLING CUTTERS • FRAISES ANGULAIRES

NEW

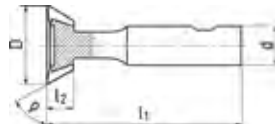


HSS-CO 5%

DIN 1833C

10Z-12Z

DIN 1835B



P° (±30°)	Ø mm (js16)	Ø Mango / Shank (h6)	L1	L2	Z	Uds. / Pcs.	Cod.	€/Unid.
45	16,00	12	60	4	10	1	T1833C4516	66,24
45	20,00	12	63	5	10	1	T1833C4520	84,58
45	25,00	12	67	6,3	10	1	T1833C4525	105,49
45	32,00	16	71	8	12	1	T1833C4532	136,67
45	40,00	16	80	10	12	1	T1833C4540	230,04
60	16,00	12	60	6,3	10	1	T1833C6016	66,24
60	20,00	12	63	8	10	1	T1833C6020	84,58
60	25,00	12	67	10	10	1	T1833C6025	105,49
60	32,00	16	71	12,5	12	1	T1833C6032	136,67
60	40,00	16	80	16	12	1	T1833C6040	230,04

Para recubrimiento TIALN, consultar / Request for TIALN coating / Pour TIALN revêtement, nous consulter.

FRESA EN BISEL

DOVETAIL MILLING CUTTERS • FRAISES ANGULAIRES

NEW

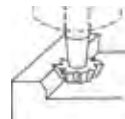
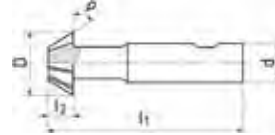


HSS-CO 5%

DIN 1833D

10Z-12Z

DIN 1835B



P° (±30°)	Ø mm (js16)	Ø Mango / Shank (h6)	L1	L2	Z	Uds. / Pcs.	Cod.	€/Unid.
45	16,00	12	60	4	10	1	T1833D4516	66,24
45	20,00	12	63	5	10	1	T1833D4520	84,58
45	25,00	12	67	6,3	10	1	T1833D4525	105,49
45	32,00	16	71	8	12	1	T1833D4532	113,89
45	40,00	16	80	10	12	1	T1833D4540	230,04
60	16,00	12	60	6,3	10	1	T1833D6016	66,24
60	20,00	12	63	8	10	1	T1833D6020	84,58
60	25,00	12	67	10	10	1	T1833D6025	105,49

Para recubrimiento TIALN, consultar / Request for TIALN coating / Pour TIALN revêtement, nous consulter.

Condiciones de corte / Cutting conditions / Conditions de coupe (T1833C y T1833D)

Material	Dureza / Strength / Dureté	Ae	Vc	fz (mm/z)			
				Ø 16	Ø 20	Ø 25	Ø 32
ACERO	≤ 600 N/mm ²	1xb	37.5	0.07	0.075	0.08	0.09
	≤ 850 N/mm ²	1xb	32.5	0.07	0.075	0.08	0.09
	≤ 1100 N/mm ²	1xb	18	0.07	0.075	0.08	0.09
TI	≤ 1250 N/mm ²	1xb	9	0.049	0.0525	0.056	0.063

FRESAS CON MANGO CILÍNDRICO

STRAIGHT SHANK END MILLS • FRAISES QUEUE CYLINDRIQUE

FRESA RADIO

CORNER ROUNDING CUTTER • FRAISE A RAYON **NEW**

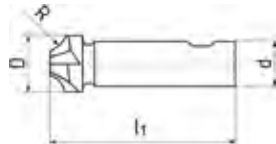


HSS-CO 8%

DIN 6518

4Z-6Z

DIN 1835B



R (H11)	Ø mm (js15)	Ø Mango / Shank (h6)	L1	Z	Uds. / Pcs.	Cod.	€/Unid.
1,00	8	10	60	4	1	T65180100	76,93
1,50	9	10	60	4	1	T65180150	83,99
1,60	9,2	10	60	4	1	T65180160	83,99
2,00	10	10	60	4	1	T65180200	83,99
2,50	11	10	60	4	1	T65180250	83,99
3,00	12	12	60	4	1	T65180300	87,32
3,50	13	12	60	4	1	T65180350	94,48
4,00	14	12	60	4	1	T65180400	94,48
4,50	15	12	60	4	1	T65180450	101,29
5,00	16	12	60	4	1	T65180500	101,29
5,50	19	16	67	4	1	T65180550	106,75
6,00	20	16	67	4	1	T65180600	106,75
6,50	21	16	71	4	1	T65180650	131,11
7,00	22	16	71	4	1	T65180700	131,11
7,50	23	16	71	4	1	T65180750	131,11
8,00	24	16	71	4	1	T65180800	131,11
8,50	25	25	85	4	1	T65180850	157,83
9,00	26	25	85	4	1	T65180900	157,83
9,50	27	25	85	4	1	T65180950	157,83
10,00	28	25	85	4	1	T65181000	157,83
10,50	31	25	90	4	1	T65181050	174,30
11,00	32	25	90	4	1	T65181100	174,30
12,00	34	25	90	4	1	T65181200	174,30
12,50	41	25	100	6	1	T65181250	244,04
13,00	42	25	100	6	1	T65181300	244,04
14,00	44	25	100	6	1	T65181400	244,04
15,00	46	25	100	6	1	T65181500	279,11
16,00	48	25	100	6	1	T65181600	279,11
18,00	52	32	112	6	1	T65181800	314,87
19,00	56	32	112	6	1	T65181900	349,04
20,00	56	32	112	6	1	T65182000	349,75

Para recubrimiento TIALN, consultar / Request for TIALN coating / Pour TIALN revêtement, nous consulter.

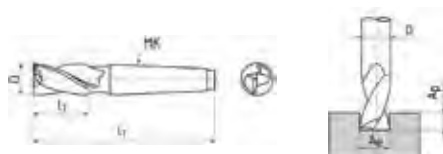
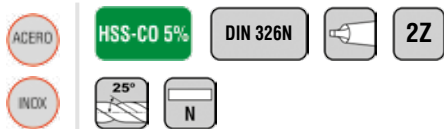
Condiciones de corte / Cutting conditions / Conditions de coupe

Material	Dureza / Strength / Dureté	Ae	Ap	Vc	fz (mm/z)				
					Ø 8	Ø 10	Ø 12	Ø 16	Ø 20
ACERO	≤ 600 N/mm ²	1xR	1xR	45	0.04	0.05	0.06	0.065	0.07
	≤ 850 N/mm ²	1xR	1xR	39	0.04	0.05	0.06	0.065	0.07
	≤ 1100 N/mm ²	1xR	1xR	24	0.04	0.05	0.06	0.065	0.07
TI	≤ 1250 N/mm ²	1xR	1xR	12	0.028	0.035	0.042	0.0455	0.049

FRESA FRONTAL ACABADO DOS DIENTES MANGO CÓNICO

2 Z FINISHING TAPER SHANK END MILL • FRAISE QUEUE CONIQUE FINITION 2Z

NEW



Ø mm (e8)	MK	L1	L2	Z	Uds. / Pcs.	Cod.	€/Unid.
12,00	1	85	14	2	1	TDMC1200	53,77
14,00	2	100	16	2	1	TDMC1400	67,17
16,00	2	105	18	2	1	TDMC1600	74,41
18,00	2	110	20	2	1	TDMC1800	81,74
20,00	2	115	20	2	1	TDMC2000	89,07
22,00	2	120	22	2	1	TDMC2200	96,29
24,00	3	140	25	2	1	TDMC2400	115,11
25,00	3	140	25	2	1	TDMC2500	122,56
28,00	3	145	28	2	1	TDMC2800	132,73
30,00	3	150	30	2	1	TDMC3000	138,63
32,00	4	175	32	2	1	TDMC3200	150,94
36,00	4	175	34	2	1	TDMC3600	179,76
40,00	4	180	38	2	1	TDMC4000	228,41
45,00	4	185	42	2	1	TDMC4500	257,11
50,00	5	220	45	2	1	TDMC5000	313,99

Para recubrimiento TIALN, consultar / Request for TIALN coating / Pour TIALN revêtement, nous consulter.

Condiciones de corte / Cutting conditions / Conditions de coupe

Material	Dureza / Strength / Dureté	Ap	Ae	Vc	fz(mm/z)			
					Ø 12	Ø 16	Ø 18	Ø 20
ACERO	≤ 600 N/mm ²	0,5xD	1xD	45	0.044	0.058	0.065	0.073
	≤ 850 N/mm ²	0,5xD	1xD	39	0.044	0.058	0.065	0.073
	≤ 1100 N/mm ²	0,5xD	1xD	24	0.044	0.058	0.065	0.073
	≤ 900 N/mm ²	0,5xD	1xD	30	0.044	0.058	0.065	0.073
INOX	750 - 850 N/mm ²	0,5xD	1xD	15	0.044	0.058	0.065	0.073

FRESAS CON MANGO CÓNICO

TAPER SHANK END MILL • FRAISE QUEUE CONIQUE

FRESA FRONTAL 4-8 DIENTES MANGO CÓNICO

NZ TAPER SHANK END MILLS • FRAISE QUEUE CONIQUE NZ

NEW



HSS-CO 5%

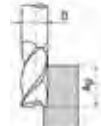
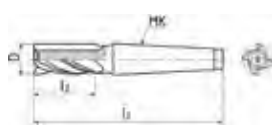
DIN 845N



4Z-8Z

35°

N



Ø mm (e8)	MK	L1	L2	Z	Uds. / Pcs.	Cod.	€/Unid.
10,00	1	92	22	4	1	TVMC1000	50,64
12,00	2	111	26	4	1	TVMC1200	51,73
14,00	2	111	26	4	1	TVMC1400	63,92
16,00	2	117	32	4	1	TVMC1600	71,43
18,00	2	117	32	4	1	TVMC1800	83,11
20,00	2	123	38	4	1	TVMC2000	90,21
22,00	2	123	38	5	1	TVMC2200	102,97
24,00	3	147	45	5	1	TVMC2400	119,38
25,00	3	147	45	5	1	TVMC2500	124,98
26,00	3	147	45	5	1	TVMC2600	132,19
28,00	3	147	45	5	1	TVMC2800	133,43
30,00	3	147	45	6	1	TVMC3000	143,35
32,00	4	178	53	6	1	TVMC3200	162,34
36,00	4	178	53	6	1	TVMC3600	198,97
40,00	4	188	63	6	1	TVMC4000	243,92
45,00	4	188	63	6	1	TVMC4500	307,15
50,00	5	233	75	6	1	TVMC5000	372,76
56,00	5	233	75	8	1	TVMC5600	521,29
63,00	5	248	90	8	1	TVMC6300	669,76

Para recubrimiento TIALN, consultar / Request for TIALN coating / Pour TIALN revêtement, nous consulter.

Condiciones de corte / Cutting conditions / Conditions de coupe

Material	Dureza / Strength / Dureté	Ap	Ae	Vc	fz (mm/z)									
					Ø 10	Ø 12	Ø 16	Ø 18	Ø 20	Ø 25	Ø 32	Ø 40	Ø 50	
ACERO	≤ 600 N/mm ²	1xD	0,1xD	37.5	0.028	0.034	0.044	0.051	0.057	0.71	0.091	0.11	0.13	
	≤ 850 N/mm ²	1xD	0,1xD	32.5	0.028	0.034	0.044	0.051	0.057	0.71	0.091	0.11	0.13	
	≤ 1100 N/mm ²	1xD	0,1xD	18	0.028	0.034	0.044	0.051	0.057	0.71	0.091	0.11	0.13	
	≤ 900 N/mm ²	1xD	0,1xD	25	0.028	0.034	0.044	0.051	0.057	0.71	0.091	0.11	0.13	
	≤ 1100 N/mm ²	1xD	0,1xD	18	0.028	0.034	0.044	0.051	0.057	0.71	0.091	0.11	0.13	
F	> 1100 N/mm ²	1xD	0,1xD	16	0.0196	0.0238	0.0308	0.0357	0.0399	0.497	0.0637	0.077	0.091	
	> 240 HB	1xD	0,1xD	22	0.028	0.034	0.044	0.051	0.057	0.71	0.091	0.11	0.13	
INOX	750 - 850 N/mm ²	1xD	0,1xD	10	0.028	0.034	0.044	0.051	0.057	0.71	0.091	0.11	0.13	
TI	≤ 1500 N/mm ²	1xD	0,1xD	8	0.0196	0.0238	0.0308	0.0357	0.0399	0.497	0.0637	0.077	0.091	

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DISPLAYS
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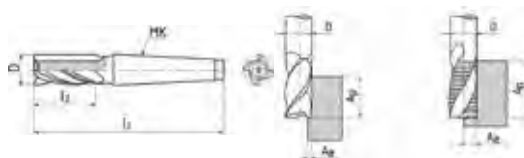
FRESA FRONTAL LARGA 4-8 DIENTES MANGO CONICO

LONG NZ TAPER SHANK END MILLS • FRAISE QUEUE CONIQUE NZ LONGUE

NEW



ACERO F HSS-CO 5% DIN 845N
 INOX TI 4Z-8Z 35° N



Ø mm (e8)	MK	L1	L2	Z	Uds. / Pcs.	Cod.	€/Unid.
10,00	1	115	45	4	1	TVMCL1000	67,70
12,00	2	138	53	4	1	TVMCL1200	69,26
14,00	2	138	53	4	1	TVMCL1400	85,51
16,00	2	148	63	4	1	TVMCL1600	93,58
18,00	2	148	63	4	1	TVMCL1800	105,78
20,00	2	160	75	4	1	TVMCL2000	114,83
22,00	2	160	75	5	1	TVMCL2200	136,17
24,00	3	192	90	5	1	TVMCL2400	152,08
25,00	3	192	90	5	1	TVMCL2500	160,49
26,00	3	192	90	5	1	TVMCL2600	200,55
28,00	3	192	90	5	1	TVMCL2800	213,75
30,00	3	192	90	6	1	TVMCL3000	229,62
32,00	4	231	106	6	1	TVMCL3200	263,17
36,00	4	231	106	6	1	TVMCL3600	292,90
40,00	4	250	125	6	1	TVMCL4000	322,61
45,00	4	250	125	6	1	TVMCL4500	407,89
50,00	5	308	150	6	1	TVMCL5000	492,99
56,00	5	308	150	8	1	TVMCL5600	723,86
63,00	5	338	180	8	1	TVMCL6300	930,06

Para recubrimiento TIALN, consultar / Request for TIALN coating / Pour TIALN revêtement, nous consulter.

Condiciones de corte / Cutting conditions / Conditions de coupe

Material	Dureza / Strength / Dureté	Ap	Ae	Vc	fz(mm/z)								
					Ø 10	Ø 12	Ø 16	Ø 18	Ø 20	Ø 25	Ø 32	Ø 40	Ø 50
ACERO	≤ 600 N/mm ²	1xD	0,1xD	37.5	0.028	0.034	0.044	0.051	0.057	0.71	0.091	0.11	0.13
	≤ 850 N/mm ²	1xD	0,1xD	32.5	0.028	0.034	0.044	0.051	0.057	0.71	0.091	0.11	0.13
	≤ 1100 N/mm ²	1xD	0,1xD	18	0.028	0.034	0.044	0.051	0.057	0.71	0.091	0.11	0.13
	≤ 900 N/mm ²	1xD	0,1xD	25	0.028	0.034	0.044	0.051	0.057	0.71	0.091	0.11	0.13
	≤ 1100 N/mm ²	1xD	0,1xD	18	0.028	0.034	0.044	0.051	0.057	0.71	0.091	0.11	0.13
F	> 240 HB	1xD	0,1xD	16	0.0196	0.0238	0.0308	0.0357	0.0399	0.497	0.0637	0.077	0.091
INOX	750 - 850 N/mm ²	1xD	0,1xD	22	0.028	0.034	0.044	0.051	0.057	0.71	0.091	0.11	0.13
TI	≤ 1500 N/mm ²	1xD	0,1xD	10	0.028	0.034	0.044	0.051	0.057	0.71	0.091	0.11	0.13
				8	0.0196	0.0238	0.0308	0.0357	0.0399	0.497	0.0637	0.077	0.091

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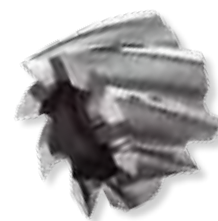
FRESAS DE AGUJERO

MILLING CUTTERS • FRAISES À TROU

FRESA FRONTAL ACABADO AGUJERO

FINISHING END MILLING CUTTER • FRAISE À TROU FINITION

NEW



Ø mm (js16)	d (H7)	L1	Z	Uds. / Pcs.	Cod.	€/Unid.
40,00	16	32	6	1	T1880N040	137,15
50,00	22	36	8	1	T1880N050	174,51
63,00	27	40	8	1	T1880N063	237,12
80,00	27	45	10	1	T1880N080	347,98
100,00	32	50	10	1	T1880N100	552,17
125,00	40	56	14	1	T1880N125	844,50

FRESA FRONTAL ACABADO AGUJERO-TIALN

FINISHING END MILLS-TIALN • FRAISE À TROU FINITION-TIALN

NEW



Ø mm (js16)	d (H7)	L1	Z	Uds. / Pcs.	Cod.	€/Unid.
40,00	16	32	6	1	T1880N040T	197,59
50,00	22	36	8	1	T1880N050T	244,36
63,00	27	40	8	1	T1880N063T	325,45
80,00	27	45	10	1	T1880N080T	462,54
100,00	32	50	10	1	T1880N100T	718,39
125,00	40	56	14	1	T1880N125T	968,84

Condiciones de corte / Cutting conditions / Conditions de coupe

Material	Dureza / Strength / Dureté	Ap	Ae	Vc HSSCO 5%	Vc TIALN	fz (mm/z)			
						Ø 40	Ø 50	Ø 80	Ø 100
ACERO	≤ 600 N/mm ²	0,05xD	0,75xD	37,50	56,25	0.08	0.085	0.11	0.11
	≤ 850 N/mm ²	0,05xD	0,75xD	32,50	48,75	0.08	0.085	0.11	0.11
	≤ 1100 N/mm ²	0,05xD	0,75xD	18,00	27	0.08	0.085	0.11	0.11
	≤ 900 N/mm ²	0,05xD	0,75xD	25,00	37,5	0.08	0.085	0.11	0.11
	≤ 1100 N/mm ²	0,05xD	0,75xD	18,00	27	0.08	0.085	0.11	0.11
INOX	750 - 850 N/mm ²	0,05xD	0,75xD	10,00	15	0.08	0.085	0.11	0.11
F	> 240 HB	0,05xD	0,75xD	22,00	33	0.08	0.085	0.11	0.11

FRESA FRONTAL DESBASTE AGUJERO

ROUGHING END MILLS • FRAISE À TROU EBAUCHE

NEW

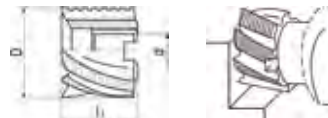
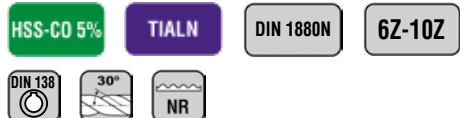


Ø mm (js16)	d (H7)	L1	Z	Uds. / Pcs.	Cod.	€/Unid.
40,00	16	32	6	1	T1880NR040	203,30
50,00	22	36	8	1	T1880NR050	252,62
63,00	27	40	8	1	T1880NR063	320,49
80,00	27	45	10	1	T1880NR080	445,63
100,00	32	50	10	1	T1880NR100	691,68

FRESA FRONTAL DESBASTE AGUJERO - TIALN

ROUGHING END MILLS - TIALN • FRAISE À TROU EBAUCHE - TIALN

NEW



Ø mm (js16)	d (H7)	L1	Z	Uds. / Pcs.	Cod.	€/Unid.
40,00	16	32	6	1	T1880NR040T	273,57
50,00	22	36	8	1	T1880NR050T	334,32
63,00	27	40	8	1	T1880NR063T	423,08
80,00	27	45	10	1	T1880NR080T	578,59
100,00	32	50	10	1	T1880NR100T	885,62

Condiciones de corte / Cutting conditions / Conditions de coupe

Material	Dureza / Strength / Dureté	Ap	Ae	Vc HSSCO 5%	Vc TIALN	fz (mm/z)			
						Ø 40	Ø 50	Ø 80	Ø 100
ACERO	≤ 600 N/mm ²	0,05xD	0,75xD	45,00	67,5	0,08	0,085	0,11	0,11
	≤ 850 N/mm ²	0,05xD	0,75xD	39,00	58,5	0,08	0,085	0,11	0,11
	≤ 900 N/mm ²	0,05xD	0,75xD	30,00	45	0,08	0,085	0,11	0,11
INOX	750 - 850 N/mm ²	0,05xD	0,75xD	15,00	22,5	0,08	0,085	0,11	0,11
F	> 240 HB	0,05xD	0,75xD	25,00	37,5	0,08	0,085	0,11	0,11

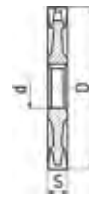
FRESAS DE AGUJERO
MILLING CUTTERS • FRAISES À TROU

FRESA 3 CORTES DENTADO FINO CRUZADO - RECOMENDADO PARA MATERIALES DUROS

SIDE AND FACE MILLING CUTTERS FINE TEETH - RECOMMENDED FOR HARD MATERIALS

FRAISE CIRCULAIRES 3 TAILLES DENTURE FINE - RECOMMANDÉ POUR MATÉRIAUX DURS

NEW



Ø mm (js16)	s (k11)	d (H7)	Z	Uds. / Pcs.	Cod.	€/Unid.
50	4	16	16	1	T885A05004	112,49
50	5	16	16	1	T885A05005	113,30
50	6	16	16	1	T885A05006	119,29
50	8	16	16	1	T885A05008	128,11
50	10	16	16	1	T885A05010	140,33
63	4	16	18	1	T885A06304	125,81
63	5	22	18	1	T885A06305	129,65
63	6	22	18	1	T885A06306	135,13
63	8	22	18	1	T885A06308	145,46
63	10	22	18	1	T885A06310	162,37
63	12	22	18	1	T885A06312	184,30
63	14	22	18	1	T885A06314	206,99
63	16	22	18	1	T885A06316	220,24
80	4	27	20	1	T885A08004	156,44
80	5	27	20	1	T885A08005	163,07
80	6	27	20	1	T885A08006	172,12
80	8	27	20	1	T885A08008	182,68
80	10	27	18	1	T885A08010	187,27
80	12	27	18	1	T885A08012	210,92
80	14	27	18	1	T885A08014	243,75
80	16	27	18	1	T885A08016	264,06
80	18	27	18	1	T885A08018	304,43
80	20	27	18	1	T885A08020	304,63
100	4	32	20	1	T885A10004	176,37
100	5	32	20	1	T885A10005	184,44
100	6	32	20	1	T885A10006	204,25
100	8	32	20	1	T885A10008	226,85
100	10	32	20	1	T885A10010	262,99
100	12	32	20	1	T885A10012	283,58
100	14	32	20	1	T885A10014	316,35
100	16	32	20	1	T885A10016	333,59
100	18	32	20	1	T885A10018	392,15
100	20	32	20	1	T885A10020	394,67
100	25	32	20	1	T885A10025	488,51
125	5	32	24	1	T885A12505	220,12
125	6	32	24	1	T885A12506	241,20
125	8	32	24	1	T885A12508	272,83
125	10	32	22	1	T885A12510	314,78
125	12	32	22	1	T885A12512	375,43
125	14	32	22	1	T885A12514	423,04
125	16	32	22	1	T885A12516	438,56
125	18	32	22	1	T885A12518	505,16
125	20	32	22	1	T885A12520	515,69
125	25	32	22	1	T885A12525	617,46
125	28	32	22	1	T885A12528	663,93
160	6	40	26	1	T885A16006	359,28
160	8	40	26	1	T885A16008	409,92
160	10	40	26	1	T885A16010	447,90
160	12	40	26	1	T885A16012	487,60
160	14	40	26	1	T885A16014	606,81
160	16	40	26	1	T885A16016	652,90
160	18	40	26	1	T885A16018	731,29
160	20	40	26	1	T885A16020	809,85
160	25	40	26	1	T885A16025	895,97
160	32	40	26	1	T885A16032	1126,44

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

FRESA 3 CORTES DENTADO FINO CRUZADO - RECOMENDADO PARA MATERIALES Duros

SIDE AND FACE MILLING CUTTERS FINE TEETH - RECOMMENDED FOR HARD MATERIALS
FRAISE CIRCULAIRES 3 TAILLES DENTURE FINE - RECOMMANDÉ POUR MATÉRIEAUX DURS

NEW

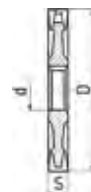


HSS-CO 5%

DIN 885A

DIN 138

N



Ø mm (js16)	s (k11)	d (H7)	Z	Uds. / Pcs.	Cod.	€/Unid.
200	8	40	32	1	T885A20008	636,14
200	10	40	32	1	T885A20010	686,87
200	12	40	32	1	T885A20012	774,95
200	14	40	32	1	T885A20014	876,05
200	16	40	32	1	T885A20016	897,36
200	18	40	32	1	T885A20018	981,83
200	20	40	32	1	T885A20020	1002,21
200	25	40	32	1	T885A20025	1216,52
200	32	40	32	1	T885A20032	1538,31

Condiciones de corte / Cutting conditions / Conditions de coupe

Material	Dureza / Strength / Dureté	Ae	Ap	Vc	fz(mm/z)				
					Ø 50	Ø 80	Ø 100	Ø 160	Ø 200
ACERO	≤ 600 N/mm ²	0,1xD	1xb	37.5	0.05	0.07	0.08	0.09	0.09
	≤ 850 N/mm ²	0,1xD	1xb	32.5	0.05	0.07	0.08	0.09	0.09
	≤ 900 N/mm ²	0,1xD	1xb	25	0.05	0.07	0.08	0.09	0.09
	≤ 1100 N/mm ²	0,1xD	1xb	18	0.05	0.07	0.08	0.09	0.09
F	< 240 HB	0,1xD	1xb	30	0.05	0.07	0.08	0.09	0.09
	> 240 HB	0,1xD	1xb	22	0.05	0.07	0.08	0.09	0.09
INOX	750 - 850 N/mm ²	0,1xD	1xb	10	0.05	0.07	0.08	0.09	0.09
CU	≤ 800 N/mm ²	0,1xD	1xb	60-100	0.05	0.07	0.08	0.09	0.09

ESTUCHES DE FRESAS CON MANGO CILÍNDRICO

STRAIGHT SHANK END MILLS SET • COFFRETS DE FRAISES DE QUEUE CYLINDRIQUE

FRESA FRONTAL DOS DIENTES PARA ALUMINIO **NEW**

2Z STRAIGHT SHANK END MILLS ESPECIAL FOR ALUMINIUM
FRAISES QUEUE CYLINDRIQUE 2Z POUR ALUMINIUM



Ref		
TDW0400, TDW0500, TDW0600, TDW0800, TDW1000, TDW1200		
Uds. / Pcs.	Cod.	€/Unid.
6	TDW0601	126,29 €

*Medidas y condiciones de Corte en pag.193 /
Cutting conditions and sizes in pag.193 / Condition
de coupe et dimensions a la pag.193

FRESA FRONTAL ACABADO DOS DIENTES **NEW**

2Z FINISHING STRAIGHT SHANK END MILLS
FRAISES QUEUE CYLINDRIQUE FINITION 2Z



Ref		
TDC0400, TDC0500, TDC0600, TDC0800, TDC1000, TDC1200		
Uds. / Pcs.	Cod.	€/Unid.
6	TDC0601	107,80 €

*Medidas y condiciones de Corte en pag.195 /
Cutting conditions and sizes in pag.195 / Condition
de coupe et dimensions a la pag.195

FRESA FRONTAL ACABADO DOS DIENTES-TIALN **NEW**

2Z FINISHING STRAIGHT SHANK END MILLS- TIALN
FRAISES QUEUE CYLINDRIQUE FINITION 2Z- TIALN



Ref		
TDC0400T, TDC0500T, TDC0600T, TDC0800T, TDC1000T, TDC1200T		
Uds. / Pcs.	Cod.	€/Unid.
6	TDC0601T	158,19 €

*Medidas y condiciones de Corte en pag.197-198 /
Cutting conditions and sizes in pag.197-198 / Condition
de coupe et dimensions a la pag.197-198

FRESA FRONTAL RADIAL ACABADO - DOS DIENTES **NEW**

2Z FINISHING RADIAL STRAIGHT SHANK END MILLS
FRAISES RADIALES QUEUE CYLINDRIQUE FINITION 2Z



Ref		
TRC0400, TRC0500, TRC0600, TRC0800, TRC1000, TRC1200		
Uds. / Pcs.	Cod.	€/Unid.
6	TRC0601	200,25 €

*Medidas y condiciones de Corte en pag.199 /
Cutting conditions and sizes in pag.199 / Condition
de coupe et dimensions a la pag.199

FRESA FRONTAL RADIAL ACABADO - DOS DIENTES **NEW**

PM ALTIN
2Z FINISHING RADIAL STRAIGHT SHANK END MILLS PM ALTIN
FRAISES RADIALES QUEUE CYLINDRIQUE FINITION 2Z PM ALTIN



Ref		
TRC0400PM, TRC0500PM, TRC0600PM, TRC0800PM, TRC1000PM, TRC1200PM		
Uds. / Pcs.	Cod.	€/Unid.
6	TRC0601PM	284,99 €

*Medidas y condiciones de Corte en pag.199 /
Cutting conditions and sizes in pag.199 / Condition
de coupe et dimensions a la pag.199

FRESA FRONTAL ACABADO VARIOS DIENTES **NEW**

NZ FINISHING STRAIGHT SHANK END MILLS
FRAISES QUEUE CYLINDRIQUE FINITION NZ



Ref		
TVC0400, TVC0500, TVC0600, TVC0800, TVC1000, TVC1200		
Uds. / Pcs.	Cod.	€/Unid.
6	TVC0601	120,49 €

*Medidas y condiciones de Corte en pag.200 /
Cutting conditions and sizes in pag.200 / Condition
de coupe et dimensions a la pag.200

FRESA FRONTAL ACABADO VARIOS DIENTES TIALN **NEW**

NZ FINISHING STRAIGHT SHANK END MILLS TIALN
FRAISES QUEUE CYLINDRIQUE FINITION NZ TIALN



Ref		
TVC0400T, TVC0500T, TVC0600T, TVC0800T, TVC1000T, TVC1200T		
Uds. / Pcs.	Cod.	€/Unid.
6	TVC0601T	158,98 €

*Medidas y condiciones de Corte en pag.202 /
Cutting conditions and sizes in pag.202 / Condition
de coupe et dimensions a la pag.202

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

NOVEDADES

- Machos máquina PM+HL especial INOX
- Machos máquina MULTIMATERIAL
- Machos máquina PM+FUTURA para materiales Duros
- Machos máquina ALUSPEED para ALUMINIO
- Ampliación gama KITS reparadores de roscado

NEW FEATURES

- *PM+HL machine taps special STAINLESS STEEL*
- *MULTIMATERIAL machine taps*
- *PM+FUTURA machine taps for HARD materials*
- *ALUSPEED machine taps for ALUMINIUM*
- *Enlargement of threading repair KITS*

NOUVEAUTÉS

- *PM+HL tarauds machine spécial ACIER INOXYDABLE*
- *MULTIMATERIEL tarauds machine*
- *PM+FUTURA tarauds machine pour matériaux DURS*
- *ALUSPEED tarauds machine pour L'ALUMINIUM*
- *Elargissement de KITS de réparation de filetage*



THREADING-FILETAGE





ROSCADO



TABLA DE ROSCAS Y PASOS EN PULGADAS

TABLE OF THREADS AND PITCHES IN INCHES

TABLE DES FILLETAGES ET PAS EN POUÇES

Ø	WHITWORTH 55°				UN 60°		
	CILÍNDRICAS / CYLINDRICAL		CÓNICA / TAPPER		CILÍNDRICAS / CYLINDRICAL		
	BSW	BSF	G(BSP)	BSPT	NPS	NPSF	UNC
Nº 0	-	-	-	-	-	-	-
Nº 1	-	-	-	-	-	-	64
Nº 2	-	-	-	-	-	-	56
Nº 3	-	-	-	-	-	-	48
Nº 4	-	-	-	-	-	-	40
Nº 5	-	-	-	-	-	-	40
Nº 6	-	-	-	-	-	-	32
Nº 8	-	-	-	-	-	-	32
Nº 10	-	-	-	-	-	-	24
Nº 12	-	-	-	-	-	-	24
1/16	60	-	-	-	-	-	-
5/64	56	-	-	-	-	-	-
3/32	48	-	-	-	-	-	-
7/64	48	-	-	-	-	-	-
1/8	40	-	28	28	27	27	32
9/64	-	-	-	-	-	-	-
5/32	32	-	-	-	-	-	32
11/64	32	-	-	-	-	-	-
3/16	24	32	-	-	-	-	24
13/63	24	-	-	-	-	-	-
7/32	24	28	-	-	-	-	-
15/64	24	-	-	-	-	-	-
1/4	20	26	19	19	18	18	20
9/32	20	-	-	-	-	-	-
5/16	18	22	-	-	-	-	18
11/32	18	20	-	-	-	-	-
3/8	16	20	19	19	18	18	16
13/32	16	20	-	-	-	-	-
7/16	14	18	-	-	-	-	14
15/32	14	-	-	-	-	-	-
1/2	12	16	14	14	14	14	13
9/16	12	16	-	-	-	-	12
5/8	11	14	14	14	-	-	11
11/16	11	14	-	-	-	-	11
3/4	10	12	14	14	14	14	10
13/16	10	12	-	-	-	-	-
7/8	9	11	14	14	-	-	9
15/16	9	11	-	-	-	-	-
1"	8	10	11	11	11,5	-	8
1" 1/16	8	-	-	-	-	-	-
1" 1/8	7	9	11	11	11,5	-	7
1" 3/16	7	-	-	-	-	-	-
1" 1/4	7	9	11	11	-	-	7
1" 3/8	6	8	11	11	-	-	6
1" 1/2	6	8	11	11	11,5	-	6
1" 5/8	5	8	11	11	-	-	5
1" 3/4	5	7	11	11	-	-	5
1" 7/8	4,5	7	11	11	-	-	4,5
2"	4,5	7	11	11	11,5	-	4,5
2" 1/4	4	6	11	11	-	-	4,5
2" 1/2	4	6	11	11	8	-	4
2" 3/4	3,5	6	11	11	-	-	4
3"	3,5	5	11	11	8	-	4
3" 1/2	-	-	11	-	8	-	-
4"	-	-	11	-	8	-	-

INFORMACIÓN TÉCNICA

TECHNICAL INFORMATION • INFORMATION TECHNIQUE

UN 60°				UNS 60°		
CILÍNDRICAS / CYLINDRICAL		CÓNICA / TAPPER		CILÍNDRICAS / CYLINDRICAL		
UNF	UNEF	NPT API	NPTF	UN	UNS	
80	-	-	-	-	-	
72	-	-	-	-	-	
64	-	-	-	-	-	
56	-	-	-	-	-	
48	-	-	-	-	-	
44	-	-	-	-	-	
40	-	-	-	-	-	
36	-	-	-	-	-	
32	-	-	-	-	-	
28	-	-	-	-	-	
-	-	27	-	-	-	
-	-	-	-	-	-	
-	-	-	-	-	-	
-	-	-	-	-	-	
-	-	27	27	-	-	
-	-	-	-	-	-	
-	-	-	-	-	-	
32	-	-	-	-	-	
-	-	-	-	-	-	
-	-	-	-	-	-	
28	32	18	18	-	24 - 27 - 36 - 40 - 48 - 56	
-	-	-	-	-	-	
24	32	-	-	20 - 28	27 - 36 - 40 - 48	
-	-	-	-	-	-	
24	32	18	18	20 - 28	18 - 27 - 36 - 40	
-	-	-	-	-	-	
20	28	-	-	16 - 32	18 - 24 - 27	
-	-	-	-	-	-	
20	28	14	14	16 - 32	12 - 14 - 18 - 24 - 27	
18	24	-	-	16 - 20 - 28 - 32	14 - 27	
18	24	14	-	12 - 16 - 20 - 28 - 32	14 - 27	
-	24	-	-	12 - 16 - 20 - 28 - 32	-	
16	24	14	14	12 - 28 - 32	14 - 18 - 24 - 27	
-	20	-	-	-	-	
14	20	-	-	12 - 16 - 28 - 32	10 - 18 - 24 - 27	
-	20	-	-	-	-	
14 y 12	20	-	-	16 - 28 - 32	10 - 14 - 18 - 24 - 27	
-	20	-	-	-	-	
12	18	-	-	8 - 16 - 20 - 28	10 - 14 - 24	
-	18	-	-	-	-	
12	18	-	-	8 - 16 - 20 - 28	10 - 14 - 24	
12	18	-	-	8 - 16 - 20 - 28	10 - 14 - 24	
12	18	-	-	8 - 16 - 20 - 28	10 - 14 - 24	
-	18	-	-	6 - 8 - 12 - 16 - 20	10 - 14 - 24	
-	-	-	-	6 - 8 - 12 - 16 - 20	10 - 14 - 18	
-	-	-	-	6 - 8 - 12 - 16 - 20	10 - 14 - 18	
-	-	-	-	6 - 8 - 12 - 16 - 20	10 - 14 - 18	
-	-	-	-	-	-	
-	-	-	-	-	-	
-	-	-	-	-	-	
-	-	-	-	-	-	
-	-	-	-	-	-	

CONSTRUCCIÓN
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MADERA
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METAL • MÉTAL

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METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

EQUIVALENCIAS DE PULGADAS EN MM

EQUIVALENTS OF INCHES IN MM • ÉQUIVALENCES DES POUCHES EN MM

BSW

Ø (")	Paso Pitch	Ø (mm)	Ø (")	Paso Pitch	Ø (mm)
1/16	60	1,587	7/8	9	22,226
3/32	48	2,381	1	8	25,401
1/8	40	3,175	1 1/8	7	28,576
5/32	32	3,969	1 1/4	7	31,751
3/16	24	4,762	1 3/8	6	34,926
7/32	24	5,556	1 1/2	6	38,101
1/4	20	6,350	1 5/8	5	41,277
5/16	18	7,938	1 3/4	5	44,452
3/8	16	9,525	1 7/8	4 1/2	47,627
7/16	14	11,113	2	4 1/2	50,802
1/2	12	12,700	2 1/4	4	57,152
9/16	12	14,288	2 1/2	4	63,502
5/8	11	15,876	2 3/4	3 1/2	69,853
3/4	10	19,051	3	3 1/2	76,203

G (BSP)

Ø (")	Paso Pitch	Ø (mm)	Ø (")	Paso Pitch	Ø (mm)
G 1/8	28	9,728	G 1 1/2	11	47,803
G 1/4	19	13,157	G 1 3/4	11	53,746
G 3/8	19	16,662	G 2	11	59,614
G 1/2	14	20,955	G 2 1/4	11	65,710
G 5/8	14	22,911	G 2 3/2	11	75,184
G 3/4	14	26,441	G 2 3/4	11	81,534
G 7/8	14	30,201	G 3	11	87,884
G 1	11	33,249	G 3 1/4	11	93,980
G 1 1/8	11	37,897	G 3 1/2	11	100,330
G 1 1/4	11	41,910	G 3 3/4	11	106,680
G 1 3/8	11	44,323	G 4	11	113,030

CONVERSIÓN DE VELOCIDAD DE CORTE, DE M/MIN A RPM

 CONVERSION TABLE OF CUTTING SPEED M/MIN TO R/MIN
 CONVERSION DE VITESSE DE COUPAGE, DE M/MIN À RPM

m/min.		4	6	8	9	10	12
Medida / Size		RPM					
mm	Pulgada / Inches						
1,6	1/16	800	1.194	1.592	1.791	1.988	2.386
1,8		708	1.065	1.415	1.598	1.768	2.121
2,0		637	955	1.274	1.433	1.591	1.909
2,2	3/32	579	869	1.158	1.303	1.446	1.736
2,5		510	764	1.019	1.147	1.274	1.527
3,0	1/8	425	637	849	955	1.061	1.273
3,5		364	546	728	819	909	1.091
4,0	5/32	318	478	637	718	796	955
4,5		283	425	566	637	707	849
5,0	3/16	255	382	510	573	637	764
6,0	1/4	212	319	425	477	530	636
7,0	9/32	182	273	364	409	455	546
8,0	5/16	159	239	319	358	398	477
9,0		142	212	283	318	354	425
10,0	3/8	127	191	255	286	318	382
11,0		116	174	232	260	289	347
12,0	1/2	106	159	212	238	265	318
13,0		98	147	196	220	245	294
14,0	9/16	91	136	182	205	227	273
16,0	5/8	80	119	159	179	199	239
18,0		71	106	141	159	177	212
20,0	3/4	64	96	127	143	159	191
22,0	7/8	58	87	116	130	145	174
24,0	1	53	80	106	119	133	159
27,0		47	71	94	106	118	141
30,0	1-1/8	43	64	85	95	106	127
33,0	1-1/4	39	58	77	87	96	116
36,0		35	53	71	80	88	106
39,0	1-1/2	33	49	65	73	82	98
42,0		30	46	61	68	76	91
45,0	1-3/4	28	42	57	64	71	85
48,0		27	40	53	60	66	80
52,0		24	37	49	55	61	73
56,0	2	23	34	46	51	57	68

INFORMACIÓN TÉCNICA

TECHNICAL INFORMATION • INFORMATION TECHNIQUE

UNC / UNF

Nº	Paso UNC / Pitch UNC	Paso UNF / Pitch UNF	Ø (mm)
Nr. 0	-	80	1,52
Nr. 1	64	72	1,85
Nr. 2	56	72	1,85
Nr. 3	48	56	2,52
Nr. 4	40	48	2,85
Nr. 5	40	44	3,18
Nr. 6	32	40	3,51
Nr. 8	32	36	4,17
Nr. 10	24	32	4,83
Nr. 12	24	38	5,49

PG

Nº	Paso / Pitch	Ø (mm)
PG 7	20	12,500
PG 9	18	15,200
PG 11	18	18,600
PG 13,5	18	20,400
PG 16	18	22,500
PG 21	16	28,300
PG 29	16	37,000
PG 36	16	47,000
PG 42	16	54,000
PG 48	16	59,500

15	18	21	25	27	30	36
RPM						
2.983	3.579	4.176	4.971	5.369	5.965	7.158
2.652	3.182	3.712	4.419	4.743	5.303	6.364
2.386	2.863	3.341	3.977	4.295	4.773	5.727
2.169	2.603	3.037	3.616	3.905	4.339	5.207
1.909	2.291	2.673	3.182	3.436	3.818	4.582
1.591	1.909	2.227	2.651	2.864	3.182	3.818
1.364	1.636	1.909	2.273	2.455	2.727	3.273
1.193	1.432	1.671	1.989	2.148	2.387	2.864
1.061	1.273	1.485	1.768	1.909	2.122	2.546
955	1.146	1.337	1.591	1.719	1.909	2.292
795	954	1.113	1.326	1.432	1.592	1.909
682	818	955	1.136	1.227	1.364	1.636
597	716	835	994	1.074	1.193	1.432
531	637	742	885	955	1.061	1.293
477	573	668	795	859	955	1.146
434	521	608	723	781	868	1.041
398	477	557	663	716	796	955
367	441	514	612	661	734	881
341	409	477	568	614	682	818
298	358	418	497	537	597	716
265	318	371	442	477	530	636
239	286	334	398	430	477	573
217	260	304	362	391	434	521
199	239	275	331	353	398	477
177	212	245	295	318	354	424
159	191	223	265	286	318	382
145	174	203	241	260	289	347
133	159	186	221	239	265	318
122	147	171	204	220	245	294
114	186	159	189	205	227	273
106	127	149	177	191	212	255
99	119	139	166	179	199	239
92	110	129	153	165	184	220
85	102	119	142	153	170	205

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

DIÁMETRO DE BROCA PREVIA RECOMENDADO

RECOMMENDED TAPPING DRILL SIZES • DIAMÈTRES PRÉALABLES AU FILETAGE

M	Ø (mm)	Mf	Ø (mm)	Mf	Ø (mm)	BSW	Ø (mm)	UNC	Ø (mm)	UNF	Ø (mm)
1 x 0,25	0,75	3 x 0,35	2,65	24 x 2	22,00	W 3/32	1,80	Nº 1-64	1,50	Nº 0-80	1,30
1,1 x 0,25	0,85	3,5 x 0,35	3,15	25 x 1	24,00	W 1/8	2,60	Nº 2-56	1,80	Nº 1-72	1,60
1,2 x 0,25	0,95	4 x 0,35	3,65	25 x 1,5	23,50	W 5/32	3,10	Nº 3-48	2,10	Nº 2-64	1,90
1,4 x 0,3	1,10	4 x 0,5	3,50	26 x 1	25,00	W 3/16	3,60	Nº 4-40	2,30	Nº 3-56	2,10
1,6 x 0,35	1,25	5 x 0,5	4,50	26 x 1,5	24,50	W 7/32	4,40	Nº 5-40	2,60	Nº 4-48	2,40
(1,7) x 0,35	1,30	6 x 0,5	5,50	27 x 1	26,00	W 1/4	5,10	Nº 6-32	2,85	Nº 5-44	2,70
1,8 x 0,35	1,45	6 x 0,75	5,20	27 x 1,5	25,50	W 5/16	6,50	Nº 8-32	3,50	Nº 6-40	3,00
2 x 0,4	1,60	7 x 0,75	6,20	27 x 2	25,00	W 3/8	7,90	Nº 10-24	3,90	Nº 8-36	3,50
2,2 x 0,45	1,75	8 x 0,5	7,50	28 x 1,5	26,50	W 7/16	9,30	Nº 12-24	4,50	Nº 10-32	4,10
(2,3) x 0,4	1,90	8 x 0,75	7,20	28 x 2	26,00	W 1/2	10,50	1/4-20	5,20	Nº 12-28	4,70
2,5 x 0,45	2,05	8 x 0,1	7,00	30 x 1	29,00	W 9/16	12,00	5/16-18	6,60	1/4-28	5,50
(2,6) x 0,45	2,10	9 x 0,1	8,00	30 x 1,5	28,50	W 5/8	13,50	3/8-16	8,00	5/16-24	6,90
3 x 0,5	2,50	10 x 0,5	9,50	30 x 2	28,00	W 3/4	16,50	7/16-14	9,40	3/8-24	8,50
(3) x 0,6	2,40	10 x 0,75	9,20	32 x 1,5	30,50	W 7/8	19,25	1/2-13	10,80	7/16-20	9,90
3,5 x 0,6	2,90	10 x 1	9,00	33 x 1,5	31,50	W 1"	22,00	9/16-12	12,20	1/2-20	11,50
(3,5) x 0,75	2,75	10 x 1,25	8,80	33 x 2	31,00	W 1" 1/8	24,75	5/8-11	13,50	9/16-18	12,90
4 x 0,7	3,30	11 x 1	10,00	34 x 1,5	32,50	W 1" 1/4	27,75	3/4-10	16,50	5/8-18	14,50
(4) x 0,75	3,25	12 x 0,75	11,20	35 x 1,5	33,50	W 1" 3/8	30,20	7/8-9	19,50	3/4-16	17,50
4,5 x 0,75	3,70	12 x 1	11,00	36 x 1,5	34,50	W 1" 1/2	33,50	1"-8	22,25	7/8-14	20,25
5 x 0,8	4,20	12 x 1,25	10,80	36 x 2	34,00	W 1" 3/4	38,50	1" 1/8-7	25,00	1"-12	23,25
(5) x 0,9	4,10	12 x 1,5	10,50	36 x 3	33,00	W 2"	44,50	1" 1/4-7	28,25	1" 1/8-12	26,50
6 x 1	5,00	13 x 1	12,00	38 x 1,5	36,50	BSF Ø (mm)		1" 3/8-6	30,75	1" 1/4-12	29,50
7 x 1	6,00	13 x 1,5	11,50	39 x 1,5	37,50	BSF 1/4	5,20	1" 1/2-6	34,00	1" 3/8-12	32,50
8 x 1,25	6,80	13 x 1,75	11,20	39 x 2	37,00	BSF 5/16	6,60	1" 3/4-5	39,50	1" 1/2-12	36,00
9 x 1,25	7,80	14 x 1	13,00	39 x 3	36,00	BSF 3/8	8,10	2"-4,5	45,00	BSP Ø (mm)	
10 x 1,5	8,50	14 x 1,25	12,80	40 x 1,5	38,50	BSF 7/16	9,50	2" 1/4-4,5	51,50	G 1/8	8,80
11 x 1,5	9,50	14 x 1,5	12,50	40 x 2	38,00	BSF 1/2	11,00	2" 1/2-4	57,25	G 1/4	11,80
12 x 1,75	10,20	15 x 1	14,00	40 x 3	37,00	BSF 5/8	14,00	2" 3/4-4	63,50	G 3/8	15,25
14 x 2	12,00	15 x 1,5	13,50	42 x 1,5	40,50	BSF 3/4	16,50	3"-4	70,00	G 1/2	19,00
16 x 2	14,00	15 x 2	13,00	42 x 2	40,00	BSF 7/8	19,50	3" 1/4-4	76,20	G 5/8	21,00
18 x 2,5	15,50	16 x 1	15,00	42 x 3	39,00	BSF 1"	22,50	3" 1/2-4	82,60	G 3/4	24,50
20 x 2,5	17,50	16 x 1,5	14,50	45 x 1,5	43,50	NPT Ø (mm)		PG Ø (mm)		G 7/8	28,25
22 x 2,5	19,50	18 x 1	17,00	45 x 2	43,00	1/16-27	6,30	PG 7	11,40	G 1"	30,75
24 x 3	21,00	18 x 1,5	16,50	45 x 3	42,00	1/8-27	8,50	PG 9	14,00	G 1" 1/8	35,30
27 x 3	24,00	18 x 2	16,00	48 x 1,5	46,50	1/4-18	11,20	PG 11	17,25	G 1" 1/4	39,30
30 x 3,5	26,50	20 x 1	19,00	48 x 2	46,00	3/8-18	14,50	PG 13,5	19,00	G 1" 3/8	41,70
33 x 3,5	29,50	20 x 1,5	18,50	48 x 3	45,00	1/2-14	18,00	PG 16	21,25	G 1" 1/2	45,20
36 x 4	32,00	20 x 2	18,00	50 x 1,5	48,50	3/4-14	23,00	PG 21	26,75	G 1" 3/4	51,10
39 x 4	35,00	22 x 1	21,00	50 x 2	48,00	1"-11,5	29,00	PG 29	35,50	G 2"	57,00
42 x 4,5	37,50	22 x 1,5	20,50	50 x 3	47,00	1" 1/4-11,5	38,00	PG 36	45,50	G 2" 1/4	63,10
45 x 4,5	40,50	22 x 2	20,00	52 x 1,5	50,50	1" 1/2-11,5	44,00	PG 42	52,50	G 2" 1/2	72,60
48 x 5	43,00	24 x 1	23,00	52 x 2	50,00	2"-11,5	56,00	PG 48	58,00	G 2" 3/4	78,90
52 x 5	47,00	24 x 1,5	22,50	52 x 3	49,00	2" 1/2-8	67,00			G 3"	85,30
						3"-8	83,00				

INFORMACIÓN TÉCNICA

TECHNICAL INFORMATION • INFORMATION TECHNIQUE

DIÁMETRO PREVIO DEL EJE A ROSCAR

RECOMMENDED OUTSIDE DIAMETER • AXES PRÉALABLES AU FILETAGE

M	Ø (mm)	Mf	Ø (mm)	Mf	Ø (mm)	BSW	Ø (mm)	UNC	Ø (mm)	UNF	Ø (mm)
1 x 0,25	0,97	3 x 0,35	2,94	24 x 2	22,82	W 1/4	6,16	Nº 1-64	1,79	Nº 0-80	1,47
1,1 x 0,25	1,07	3,5 x 0,35	3,44	25 x 1	24,88	W 5/16	7,76	Nº 2-56	2,12	Nº 1-72	1,79
1,2 x 0,25	1,17	4 x 0,35	3,94	25 x 1,5	24,85	W 3/8	9,30	Nº 3-48	2,44	Nº 2-64	2,12
1,4 x 0,3	1,36	4 x 0,5	3,93	26 x 1	25,88	W 7/16	10,89	Nº 4-40	2,76	Nº 3-56	2,44
1,6 x 0,35	1,54	5 x 0,5	4,93	26 x 1,5	25,85	W 1/2	12,43	Nº 5-40	3,09	Nº 4-48	2,77
(1,7) x 0,35	1,64	6 x 0,5	5,93	27 x 1	26,88	W 9/16	13,92	Nº 6-32	3,41	Nº 5-44	3,10
1,8 x 0,35	1,74	6 x 0,75	5,90	27 x 1,5	26,85	W 5/8	15,62	Nº 8-32	4,07	Nº 6-40	3,42
2 x 0,4	1,93	7 x 0,75	6,90	27 x 2	26,82	W 3/4	18,76	Nº 10-24	4,71	Nº 8-36	4,08
2,2 x 0,45	2,13	8 x 0,5	7,93	28 x 1,5	27,85	W 7/8	21,89	Nº 12-24	5,37	Nº 10-32	7,73
(2,3) x 0,4	2,23	8 x 0,75	7,90	28 x 2	27,82	W 1"	25,08	1/4-20	6,22	Nº 12-28	5,38
2,5 x 0,45	2,43	8 x 0,1	7,83	30 x 1	29,88	W 1" 1/8	28,21	5/16-18	7,80	1/4-28	6,24
(2,6) x 0,45	2,53	9 x 0,1	8,88	30 x 1,5	29,85	BSF Ø (mm)		3/8-16	9,37	5/16-24	7,82
3 x 0,5	2,92	10 x 0,5	9,93	30 x 2	29,82	BSF 1/4	6,25	7/16-14	10,95	3/8-24	9,41
(3) x 0,6	2,91	10 x 0,75	9,90	32 x 1,5	31,85	BSF 5/16	7,82	1/2-13	12,52	7/16-20	10,98
3,5 x 0,6	3,41	10 x 1	9,88	33 x 1,5	32,85	BSF 3/8	9,39	9/16-12	14,10	1/2-20	12,56
(3,5) x 0,75	3,41	10 x 1,25	9,86	33 x 2	32,82	BSF 7/16	10,97	5/8-11	15,68	9/16-18	14,14
4 x 0,7	3,91	11 x 1	10,88	34 x 1,5	33,85	BSF 1/2	12,54	3/4-10	18,84	5/8-18	15,73
(4) x 0,75	3,91	12 x 0,75	11,90	35 x 1,5	34,85	BSF 5/8	15,71	7/8-9	22,00	3/4-16	18,89
4,5 x 0,75	4,41	12 x 1	11,88	36 x 1,5	35,85	BSF 3/4	18,85	1"-8	25,16	7/8-14	22,05
5 x 0,8	4,90	12 x 1,25	11,86	36 x 2	35,82	BSF 7/8	22,02	1" 1/8-7	28,31	1"-12	25,21
(5) x 0,9	4,89	12 x 1,5	11,85	36 x 3	35,76	BSF 1"	25,17	1" 1/4-7	31,49	1" 1/8-12	28,38
6 x 1	5,88	13 x 1	12,88	38 x 1,5	37,85	NPT Ø (mm)		1" 3/8-6	34,63	1" 1/4-12	31,56
7 x 1	6,88	13 x 1,5	12,85	39 x 1,5	38,85	1/16-27	8,17	1" 1/2-6	37,81	1" 3/8-12	34,73
8 x 1,25	7,87	13 x 1,75	12,83	39 x 2	38,82	1/8-27	10,55	1" 3/4-5	44,12	1" 1/2-12	37,91
9 x 1,25	8,87	14 x 1	13,88	39 x 3	38,76	1/4-18	14,10	2"-4,5	50,45	BSP Ø (mm)	
10 x 1,5	9,85	14 x 1,25	13,86	40 x 1,5	39,85	3/8-18	17,52	2" 1/4-4,5	56,80	G 1/8	9,62
11 x 1,5	10,85	14 x 1,5	13,85	40 x 2	39,82	1/2-14	21,85	2" 1/2-4	63,10	G 1/4	13,03
12 x 1,75	11,83	15 x 1	14,88	40 x 3	39,76	3/4-14	27,16	2" 3/4-4	69,45	G 3/8	16,53
14 x 2	13,82	15 x 1,5	14,85	42 x 1,5	41,85	1"-11,5	34,16	3"-4	75,80	G 1/2	20,81
16 x 2	15,82	15 x 2	14,82	42 x 2	41,85	1" 1/4-11,5	42,74	3" 1/4-4		G 5/8	22,77
18 x 2,5	17,79	16 x 1	15,88	42 x 3	41,76	1" 1/2-11,5	48,87	3" 1/2-4		G 3/4	26,30
20 x 2,5	19,79	16 x 1,5	15,85	45 x 1,5	44,85	2"-11,5	60,95	PG Ø (mm)		G 7/8	30,06
22 x 2,5	21,79	18 x 1	17,88	45 x 2	44,82			PG 7	12,40	G 1"	33,07
24 x 3	23,77	18 x 1,5	17,85	45 x 3	44,76			PG 9	15,10	G 1" 1/8	37,71
27 x 3	26,77	18 x 2	17,82	48 x 1,5	47,85			PG 11	18,50	G 1" 1/4	41,73
30 x 3,5	29,73	20 x 1	19,88	48 x 2	47,82			PG 13,5	20,30	G 1" 3/8	44,14
33 x 3,5	32,73	20 x 1,5	19,85	48 x 3	47,46			PG 16	22,40	G 1" 1/2	47,62
36 x 4	35,70	20 x 2	19,82	50 x 1,5	49,85			PG 21	28,15	G 1" 3/4	53,56
39 x 4	38,70	22 x 1	21,88	50 x 2	49,82			PG 29	36,85	G 2"	59,43
42 x 4,5	41,69	22 x 1,5	21,85	50 x 3	49,76			PG 36	46,85		
45 x 4,5	44,68	22 x 2	21,82	52 x 1,5	51,85			PG 42	53,85		
48 x 5	47,66	24 x 1	23,88	52 x 2	51,82			PG 48	59,15		
52 x 5	51,66	24 x 1,5	23,85	52 x 3	51,76						

CONSTRUCCIÓN
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HEXAGONAL
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METROLOGÍA
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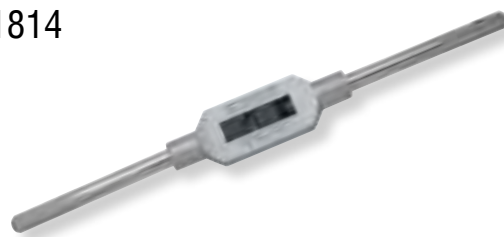
DISPLAYS
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GIRAMACHOS CON CRIQUE IZQ-DCH
TAP HOLDER WITH RATCHET, LEFT-RIGHT HAND
PORTE TARAUDS



Nº	Para machos / For Taps	∅ (mm)	L1 (mm)	Peso / Weight (kg)	Uds. / Pcs.	Cod.	€/Unid.
1	M 3 - 10 1/8 - 3/8	2,4 - 5,5	85	0,165	1	1R10001	18,55
2	M 5 - 12 7/32 - 1/2	4,5 - 8,0	100	0,310	1	1R10002	23,50
10	M 3 - 10 1/8 - 3/8	2,4 - 5,5	250	0,250	1	1R10010	30,91
20	M 5 - 12 7/32 - 1/2	4,5 - 8,0	300	0,440	1	1R10020	37,10

GIRAMACHOS AJUSTABLES DE ZINC FUNDIDO DIN1814
ZINC ADJUSTABLE TAP WRENCHES DIN 1814
PORTE TARAUDS EN ZINC DIN 1814



DIN 1814

Nº	Para machos / For Taps	∅ (mm)	L1 (mm)	Peso / Weight (kg)	Uds. / Pcs.	Cod.	€/Unid.
0	M 1 - 8 1/16 - 1/4	2,0 - 5,0	130	0,050	1	1R13000	8,45
1	M 1 - 10 1/16 - 3/8 G 1/8	2,0 - 6,3	176	0,095	1	1R13010	8,70
1.1/2	M 1 - 12 1/16 - 1/2 G 1/8	2,1 - 8,0	176	0,120	1	1R13015	8,70
2	M 4 - 12 5/32 - 1/2 G 1/8	3,0 - 9,0	280	0,285	1	1R13020	13,98
3	M 5 - 20 7/32 - 3/4 G 1/8 - 1/2	4,9 - 12,0	380	0,660	1	1R13030	23,59
4	M 11 - 27 7/16 - 1 G 1/4 - 3/4	5,5 - 16,0	505	1,500	1	1R13040	42,15
5 L	M 13 - 32 1/2 - 1.1/4 G 1/4 - 1	7,0 - 20,0	700	1,800	1	1R13050	65,75

GIRAMACHOS AJUSTABLES DE ACERO DIN 1814

STEEL ADJUSTABLE TAP WRENCHES DIN 1814
PORTE TARAUDS EN ACIER DIN1814



DIN 1814

Nº	Para machos / For Taps		∅ (mm)	L1 (mm)	Peso / Weight (kg)	Uds. / Pcs.	Cod.	€/Unid.
0	M 1 - 8	1/16 - 1/4	2,0 - 5,0	130	0,050	1	1R14000	16,86
1	M 1 - 10	1/16 - 3/8	2,0 - 6,3	188	0,100	1	1R14010	16,12
1.1/2	M 1 - 12	1/16 - 1/2	G 1/8	2,1 - 8,0	0,120	1	1R14015	17,11
2	M 4 - 12	5/32 - 1/2	G 1/8	3,0 - 9,0	0,285	1	1R14020	21,49
3	M 5 - 20	7/32 - 3/4	G 1/8 - 1/2	4,9 - 12	0,660	1	1R14030	33,22
4	M 11 - 27	7/16 - 1	G 1/4 - 3/4	5,5 - 16	1,500	1	1R14040	61,21
5	M 13 - 32	1/2 - 1.1/4	G 1/4 - 1	7 - 20	1,800	1	1R14050	102,42
6	M 18 - 42	3/4 - 1.1/2	G 1/2 - 1.1/4	11 - 24	2,600	1	1R14060	108,67
7	M 25 - 52	1 - 2.1/8	G 3/4 - 2.1/4	16 - 32	4,500	1	1R14070	183,61
8	M 25 - 64	1 - 2.1/2	G 3/4 - 3	16 - 40	4,500	1	1R14080	417,46

PROLONGADOR PARA MACHOS DIN 377

TAP EXTENSION DIN 377
EXTENSION POUR TARAUDS



DIN 377

∅ (mm)	L1	Para / For DIN 352	Cod.	€/Unid.
2,1	60	M 1-2.6	1R14521	8,14
2,4	70		1R14524	8,14
2,7	80	M 3	1R14527	8,14
3,0	90	M 3.5	1R14530	8,14
3,4	95	M 4	1R14534	8,39
3,8	100		1R14538	8,90
4,3	105		1R14543	9,67
4,9	110	M 4.5-8	1R14549	9,91
5,5	115	M 9-10	1R14555	10,17
6,2	120	M 11	1R14562	13,48
7,0	125	M 12	1R14570	13,98
8,0	125		1R14580	15,76
9,0	130	M 14-16	1R14590	18,55
10,0	140		1R14610	22,64
11,0	150	M 18	1R14611	26,19
12,0	155	M 20	1R14612	29,24
13,0	165		1R14613	38,89
14,5	175	M 22-24	1R14614	44,75
16,0	180	M 27	1R14616	47,29
18,0	200	M 30	1R14618	53,66
20,0	220	M 33	1R14620	72,22
22,0	220	M 36	1R14622	97,89
24,0	235	M 39-42	1R14624	120,53
26,0	250		1R14626	147,35
29,0	265	M 45-48	1R14629	177,49
32,0	285	M 52	1R14632	245,18

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

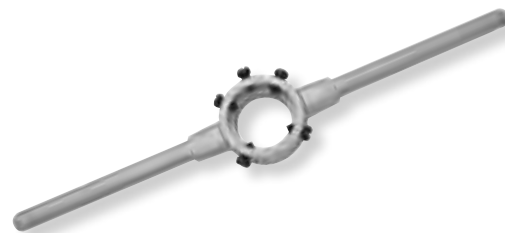
HEXAGONAL
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METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

VOLVEDORES ZINC FUNDIDO DIN 225 (EN 22568)

ZINC DIE HOLDERS DIN 225 (EN 22568)
PORTE FILIÈRES DIN 225 (EN 22568) EN ZINC



DIN 225

DIN 22568

Ø (mm)	Para cojinetes / For Taps		L1 (mm)	Peso / Weight (kg)	Uds. / Pcs.	Cod.	€/Unid.	
16 x 5	M	1,0 - 2,6	BSW 1/16 - 3/32	160	0,050	1	1R15001	5,49
20 x 5	M	3,0 - 4,0	BSW 1/8 - 5/32	200	0,065	1	1R15002	5,73
20 x 7	M	4,5 - 6,0	BSW 3/16 - 1/4	200	0,065	1	1R15003	5,73
25 x 9	M	7,0 - 9,0	BSW 5/16	224	0,105	1	1R15004	6,42
30 x 11	M	10,0 - 11,0	BSW 3/8 - 7/16	280	0,190	1	1R15005	10,56
38 x 10	Mf	12,0 - 15,0	G 1/4	315	0,340	1	1R15006	16,51
38 x 14	M	12,0 - 15,0	BSW 1/2 - 9/16	315	0,340	1	1R15007	16,51
45 x 14	Mf	16,0 - 21,0	G 3/8 - 1/2	450	0,650	1	1R15008	19,50
45 x 18	M	16,0 - 2,0	BSW 5/8 - 13/16	450	0,650	1	1R15009	19,50
55 x 16	Mf	22,0 - 26,0	G 5/8 - 3/4	560	0,900	1	1R15010	25,23
55 x 22	M	22,0 - 24,0	BSW 7/8 - 1	560	0,900	1	1R15011	25,23
65 x 18	Mf	27,0 - 36,0	G 7/8 - 1	630	1,400	1	1R15012	42,43
65 x 25	M	27,0 - 36,0	BSW 1.1/8 - 1.3/8	630	1,400	1	1R15013	42,43

VOLVEDORES ZINC FUNDIDO EN PULGADAS - 3 TORNILLOS

ZINC DIE HOLDERS IN INCH 3 SCREWS
PORTE FILIÈRES EN POUÇES Á 3 VISSÉS



Ø (")	Para cojinetes / For Taps		L1 (mm)	Peso / Weight (kg)	Uds. / Pcs.	Cod.	€/Unid.
13/16	20,6 x 6,35	13/16 x 1/4	200	0,060	1	1R15520	6,12
1	25,4 x 9,5	1 x 3/8"	224	0,100	1	1R15525	6,37
1.5/16	33,4 x 11,1	1.5/16 x 7/16	270	0,180	1	1R15533	9,44
1.1/2	38,1 x 12,7	1.1/2 x 1/2	315	0,320	1	1R15538	17,70
2	50,8 x 15,9	2 x 5/8	560	0,900	1	1R15550	28,31
2.1/4	57,1 x 17,5	2.1/4 x 11/16	560	0,900	1	1R15557	28,31
2.1/2	63,5 x 19,0	2.1/2 x 3/4	630	1,400	1	1R15563	43,66
3	76,2 x 22,2	3 x 7/8"	800	2,200	1	1R15576	99,11
3.1/2	88,9 x 25,4	3.1/2 x 1	900	3,300	1	1R15588	122,72
4	101,6 x 25,4	4 x 1	1.000	3,600	1	1R15599	389,40

ÚTILES Y ACCESORIOS

ACCESORIES • OUTILS ET ACCESSOIRES

VOLVEDORES ACERO DIN 225 (EN 22568)

STEEL DIE HOLDERS DIN 225 (EN 22568)

PORTE FILIÈRES DIN 225 (EN 22568) EN ACIER



DIN 225

DIN 22568

Ø (mm)	Para cojinetes / For Taps		L1 (mm)	Peso / Weight (kg)	Uds. / Pcs.	Cod.	€/Unid.
45 x 18	M 16 - 20	BSW 5/8 - 13/16	450	0,650	1	1R15209	28,82
55 x 22	M 22 - 24	BSW 7/8 - 1	560	0,900	1	1R15211	40,96
65 x 25	M 27 - 36	BSW 1.1/8 - 1.3/8	630	1,400	1	1R15213	53,08
75 x 20	Mf 38 - 42	G 1.1/8 - 1.1/4	800	2,250	1	1R15214	85,14
75 x 30	M 38 - 42	BSW 1.1/2 - 1.5/8	800	2,100	1	1R15215	85,14
90 x 22	Mf 45 - 52	G 1.3/8 - 1.5/8	900	3,200	1	1R15216	105,77
90 x 36	M 45 - 52	BSW 1.3/4 - 2	900	3,000	1	1R15217	105,77
105 x 22	Mf 54 - 63	G 1.3/4 - 2	975	3,500	1	1R15218	168,73
105 x 36	M 54 - 63	BSW 2.1/4	975	3,500	1	1R15219	168,73
120 x 22	Mf 64 - 71	G 2.1/4 - 2.3/4	956	3,170	1	1R15220	427,43
120 x 36	M 64 - 71	BSW 2.1/2 - 2.3/4	956	3,910	1	1R15221	427,43
130 x 25		G 3	966	3,505	1	1R15222	607,39
130 x 36			966	4,025	1	1R15223	764,86
140 x 22			976	3,620	1	1R15224	764,86
150 x 25		G 3.1/2	986	3,950	1	1R15226	868,34
160 x 25		G 4	996	4,115	1	1R15228	1.192,27

ACEITE DE CORTE Y ROSCADO

CUTTING AND TAPPING FLUID

FLUIDE POUR FILETAGE ET DE COUP



Contenido / Content	Uds.	Cod	€/Unid.
400 ml	1	1AC4000	18,19

Metales duros y blandos. Alto poder refrigerante y anticorrosivo.
Suitable for hard and soft metals. High refrigerating and anti-corrosion capacity.
Métaux doux et durs. Haut pouvoir anticorrosion.

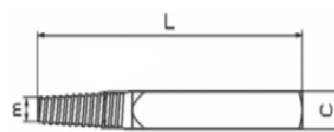
EXTRACTOR DE TORNILLOS 5 PIEZAS ADVANCE

5 PCS ADVANCE SCREW EXTRACTORS
EXTRACTEURS DE VIS ADVANCE 5 PCS



Para Tornillos / Screws	Uds. / Pcs.	Cod.	€/Unid.
3 - 22	5	6Z00GR30	48,86

Broca / Drill Bit	m (mm)	C (mm)	L (mm)
3	2,7	5	51
4	3,3	5	68
5	4,6	6	66
6	5,5	8	73
8	6,7	10	80



EXTRACTOR DE TORNILLOS STANDARD

STANDARD SCREW EXTRACTORS
EXTRACTEURS DE VIS STANDARD



Para Tornillos / Screws	Uds. / Pcs.	Cod.	€/Unid.
3 - 18	5	6Z00GR15	14,78
3 - 24	6	6Z00GR16	18,40
3 - 45	8	6Z00GR18	37,15



JUEGOS DE MACHOS ESTRIADOS 5 PIEZAS

FLUTES TAPS SET - 5 PCS
JEU DE TARAUDS CANÉLÉS 5 PCS

Para Tornillos / Screws	Uds. / Pcs.	Cod.	€/Unid.
5 - 14	5	6Z00ST01	89,36

Contenido / Contains / Contenu

Extractor	Broca / Drill Bit	H (mm)	L (mm)	LE (mm)
H1	4,0	16	10	57
H2	5,0	16	11	68
H3	6,0	16	13	78
H4	7,5	16	14	84
H5	8,5	16	16	94



JUEGOS DE BROCAS Y GUIAS EXTERIORES E INTERIORES

FULL SET WITH 5 DRILLS AND EXTERNAL AND INTERNAL GUIDES
 JEU COMPLET AVEC 5 FORETS ET 10 INTERNE ET EXTERNE GUIDES



Para Tornillos / Screws	Uds. / Pcs.	Cod.	€/Unid.
5 - 14	25	6Z00ST02	184,79

Contenido / Contains / Contenu

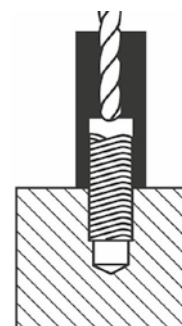
Guía / Guide	1	2	3	4	5	6	7	8	9	10
Ext.	M5	M6	M7	M8	M8	M9	M10	M11	M12	M14
Int.	-	M6	M8	3/8"	1/2"	M10	7/16"	M12	M14	M16
Broca / Drill Bit	4	4	4	4	5	5	5	6	7,5	8,5
Extractor	H1	H1	H1	H1	H2	H2	H2	H3	H4	H5

Instrucciones de uso / Instructions / Mode d'emploi

INTERIOR

EXTERIOR

- Taladrar el espárrago roto con el diámetro correspondiente.
- Se introduce el extractor con un golpe de martillo.
- Con una llave se gira en sentido inverso a la rosca.
- Drill the broken screw with the diameter wich corresponds.
- The extractor is introduced with a hammer.
- With a wrench turn the inverse way to the screw.

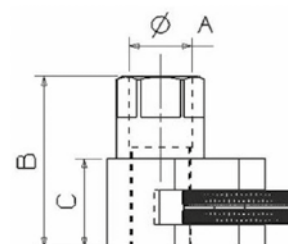


EXTRACTORES DE ESPÁRRAGOS SALIENTES

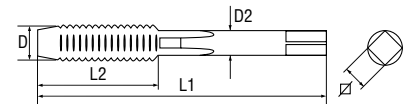
STUD EXTRACTORS • EXTRACTEURS DE GOUJONS



Para Tornillos / Screws	A (mm)	B (mm)	C (mm)	Cod.	€/Unid.
4,5 - 9,5	12	46	25	6Z00GR31	78,77
8 - 19	21	60	31	6Z00GR32	121,03
15 - 25	30	68	38	6Z00GR33	186,82



M JUEGOS DE MACHOS MÉTRICA ISO- ROSCA DIN 13
METRIC ISO-THREAD DIN 13 HAND TAPS
JEUX DE TARAUDS À MAIN, METRIQUE DIN 13



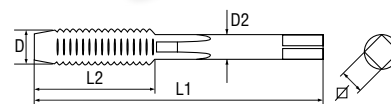
D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.	€/Set
M 1,00 x 0,25	32	5,5	2,5	2,1	2R27302	21,11	63,34
M 1,10 x 0,25	32	5,5	2,5	2,1	2R27304	21,11	63,34
M 1,20 x 0,25	32	5,5	2,5	2,1	2R27306	21,11	63,34
M 1,40 x 0,30	32	7,0	2,5	2,1	2R27308	21,11	63,34
M 1,60 x 0,35	32	8,0	2,5	2,1	2R27310	21,11	63,34
M 1,70 x 0,35	32	8,0	2,5	2,1	2R27312	21,11	63,34
M 1,80 x 0,35	32	8,0	2,5	2,1	2R27314	21,11	63,34
M 2,00 x 0,40	36	8,0	2,8	2,1	2R27316	8,63	25,90
M 2,20 x 0,45	36	9,0	2,8	2,1	2R27318	8,63	25,90
M 2,30 x 0,40	36	9,0	2,8	2,1	2R27320	8,63	25,90
M 2,50 x 0,45	40	9,0	2,8	2,1	2R27322	8,63	25,90
M 2,60 x 0,45	40	9,0	2,8	2,1	2R27324	8,63	25,90
M 3,00 x 0,50	40	11,0	3,5	2,7	2R27326	5,52	16,57
M 3,50 x 0,60	45	13,0	4,0	3,0	2R27328	7,18	21,54
M 4,00 x 0,70	45	13,0	4,5	3,4	2R27330	5,25	15,75
M 4,50 x 0,75	50	16,0	6,0	4,9	2R27332	8,05	24,16
M 5,00 x 0,80	50	16,0	6,0	4,9	2R27334	5,52	16,57
M 5,50 x 0,90	50	18,0	6,0	4,9	2R27336	13,06	39,17
M 6,00 x 1,00	50	19,0	6,0	4,9	2R27338	5,52	16,57
M 7,00 x 1,00	50	19,0	6,0	4,9	2R27340	8,22	24,67
M 8,00 x 1,25	56	22,0	6,0	4,9	2R27342	6,17	18,52
M 9,00 x 1,25	63	22,0	7,0	5,5	2R27344	10,94	32,82
M 10,00 x 1,50	70	24,0	7,0	5,5	2R27346	8,37	25,10
M 11,00 x 1,50	70	24,0	8,0	6,2	2R27348	14,39	43,16
M 12,00 x 1,75	75	29,0	9,0	7,0	2R27350	10,95	32,86
M 14,00 x 2,00	80	30,0	11,0	9,0	2R27354	12,63	37,90
M 15,00 x 2,00	80	32,0	12,0	9,0	2R27356	13,21	39,62
M 16,00 x 2,00	80	32,0	12,0	9,0	2R27358	17,79	53,36
M 18,00 x 2,50	95	40,0	14,0	11,0	2R27362	25,02	75,05
M 20,00 x 2,50	95	40,0	16,0	12,0	2R27366	26,67	80,00
M 22,00 x 2,50	100	40,0	18,0	14,5	2R27370	33,34	100,02
M 24,00 x 3,00	110	50,0	18,0	14,5	2R27374	44,46	133,37
M 27,00 x 3,00	110	50,0	20,0	16,0	2R27376	55,89	167,66
M 30,00 x 3,50	125	56,0	22,0	18,0	2R27378	75,22	225,66
M 33,00 x 3,50	125	56,0	25,0	20,0	2R27380	102,29	306,86
M 36,00 x 4,00	150	63,0	28,0	22,0	2R27382	128,40	385,21
M 39,00 x 4,00	150	63,0	32,0	24,0	2R27384	148,64	445,92
M 42,00 x 4,50	150	63,0	32,0	24,0	2R27386	178,52	535,57
M 45,00 x 4,50	160	70,0	36,0	29,0	2R27388	204,77	614,31
M 48,00 x 5,00	180	75,0	36,0	36,0	2R27390	256,81	770,42
M 52,00 x 5,00	180	75,0	40,0	32,0	2R27392	300,20	900,60
M 56,00 x 5,50	200	85,0	45,0	35,0	2R27394	392,98	1.178,95
M 60,00 x 5,50	200	85,0	45,0	35,0	2R27396	511,12	1.533,35
M 64,00 x 6,00	220	90,0	50,0	39,0	2R27398	666,51	1.999,54
M 68,00 x 6,00	220	90,0	50,0	39,0	2R27399	781,28	2.343,83

MACHOS MANO

HAND TAPS • TARAUDS À MAIN

M JUEGOS DE MACHOS MÉTRICA ISO- ROSCA DIN 13 CON ENTRADA CÓNICA

METRIC ISO-THREAD DIN 13 HAND TAPS
JEUX DE TARAUDS À MAIN, METRIQUE DIN 13



HSS-G

DIN 352

TOL 6H

D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.	€/Set
M 2,00 x 0,40	36	8	2,8	2,1	2R27616	8,57	25,71
M 2,50 x 0,45	40	9	2,8	2,1	2R27622	8,57	25,71
M 3,00 x 0,50	40	11	3,5	2,7	2R27626	5,90	17,71
M 4,00 x 0,70	45	13	4,5	3,4	2R27630	5,61	16,84
M 5,00 x 0,80	50	16	6,0	4,9	2R27634	5,90	17,71
M 6,00 X 100	50	19	6,0	4,9	2R27638	5,90	17,71
M 8,00 x 1,25	56	22	6,0	4,9	2R27642	6,60	19,80
M 9,00 x 1,25	63	22	7,0	5,5	2R27644	11,19	33,57
M 10,00 x 1,50	70	24	7,0	5,5	2R27646	8,94	26,83
M 11,00 x 1,50	70	24	8,0	6,2	2R27648	14,28	42,85
M 12,00 x 1,75	75	29	9,0	7,0	2R27650	11,71	35,14
M 13,00 x 1,75	75	29	9,0	7,0	2R27652	16,12	48,36
M 14,00 x 2,00	80	30	11,0	9,0	2R27654	13,50	40,51
M 16,00 x 2,00	80	32	12,0	9,0	2R27658	19,01	57,04
M 18,00 x 2,50	95	40	14,0	11,0	2R27662	25,58	76,75
M 19,00 x 2,50	95	40	14,0	11,0	2R27664	35,30	105,91
M 20,00 x 2,50	95	40	16,0	12,0	2R27666	27,27	81,81
M 22,00 x 2,50	100	40	18,0	14,5	2R27670	34,09	102,28
M 24,00 x 3,00	110	50	18,0	14,5	2R27674	45,46	136,39
M 27,00 x 3,00	110	50	20,0	16,0	2R27676	57,15	171,45
M 30,00 x 3,50	125	56	22,0	18,0	2R27678	76,92	230,76
M 33,00 x 3,50	125	56	25,0	20,0	2R27680	101,55	304,66
M 36,00 x 4,00	150	63	28,0	22,0	2R27682	127,48	382,45
M 39,00 x 4,00	150	63	32,0	24,0	2R27684	147,58	442,73
M 42,00 x 4,50	150	63	32,0	24,0	2R27686	177,24	531,72
M 3,00 x 0,60	40	11	3,5	2,7	2R27627*	11,09	33,26
M 4,00 x 0,75	45	13	4,5	3,4	2R27631*	11,09	33,26

*Hasta fin de existencias / *Until end of stock / *Jusqu'à épuisement des stocks

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

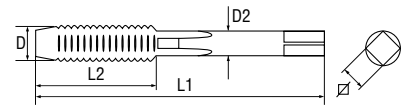
HEXAGONAL
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METROLOGÍA
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DISPLAYS
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Mf

JUEGOS DE MACHOS MÉTRICA FINA DIN 13
METRIC FINE THREAD DIN 13 HAND TAPS
JEUX DE TARAUDS MÉTRIQUE FINE DIN 13



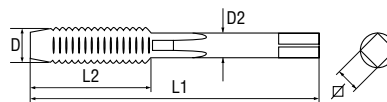
D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.	€/Set
M 2,50 x 0,35	40	9	2,8	2,1	2R26304	15,88	31,77
M 2,60 x 0,35	40	9	2,8	2,1	2R26305	15,88	31,77
M 3,00 x 0,35	40	9	3,5	2,7	2R26308	15,88	31,77
M 3,50 x 0,35	45	10	4,0	3,0	2R26309	15,88	31,77
M 4,00 x 0,35	45	10	4,5	3,4	2R26310	15,88	31,77
M 4,00 x 0,50	45	10	4,5	3,4	2R26312	15,88	31,77
M 4,50 x 0,50	50	12	6,0	4,9	2R26313	15,88	31,77
M 5,00 x 0,50	50	12	6,0	4,9	2R26314	15,88	31,77
M 5,00 x 0,75	50	12	6,0	4,9	2R26316	15,88	31,77
M 5,50 x 0,50	50	12	6,0	4,9	2R26315	15,88	31,77
M 6,00 x 0,50	50	14	6,0	4,9	2R26317	12,59	25,19
M 6,00 x 0,75	50	14	6,0	4,9	2R26318	10,49	20,99
M 7,00 x 0,50	50	14	6,0	4,9	2R26319	14,37	28,75
M 7,00 x 0,75	50	14	6,0	4,9	2R26320	12,72	25,44
M 8,00 x 0,50	50	19	6,0	4,9	2R26322	18,78	37,56
M 8,00 x 0,75	50	19	6,0	4,9	2R26324	13,76	27,52
M 8,00 x 1,00	56	22	6,0	4,9	2R26326	10,72	21,43
M 9,00 x 0,50	56	19	7,0	5,5	2R26327	15,88	31,77
M 9,00 x 0,75	56	19	7,0	5,5	2R26328	15,88	31,77
M 9,00 x 1,00	63	20	7,0	5,5	2R26330	13,41	26,83
M 10,00 x 0,50	63	20	7,0	5,5	2R26331	18,78	37,56
M 10,00 x 0,75	63	20	7,0	5,5	2R26332	18,78	37,56
M 10,00 x 1,00	63	20	7,0	5,5	2R26336	10,54	21,07
M 10,00 x 1,25	70	24	7,0	5,5	2R26338	12,64	25,28
M 11,00 x 0,75	63	20	8,0	6,2	2R26339	25,27	50,54
M 11,00 x 1,00	63	20	8,0	6,2	2R26340	19,49	38,99
M 11,00 x 1,25	63	22	8,0	6,2	2R26342	19,49	38,99
M 12,00 x 0,50	70	22	9,0	7,0	2R26345	25,27	50,54
M 12,00 x 0,75	70	22	9,0	7,0	2R26343	25,27	50,54
M 12,00 x 1,00	70	22	9,0	7,0	2R26344	18,57	37,13
M 12,00 x 1,25	70	22	9,0	7,0	2R26346	18,57	37,13
M 12,00 x 1,50	70	22	9,0	7,0	2R26348	16,37	32,74
M 13,00 x 0,50	70	22	11,0	9,0	2R26347	28,88	57,75
M 13,00 x 0,75	70	22	11,0	9,0	2R26349	27,50	55,00
M 13,00 x 1,00	70	22	11,0	9,0	2R26350	28,88	57,75
M 13,00 x 1,50	70	22	11,0	9,0	2R26351	28,88	57,75
M 14,00 x 0,50	70	22	11,0	9,0	2R26355	32,49	64,98
M 14,00 x 0,75	70	22	11,0	9,0	2R26352	32,49	64,98
M 14,00 x 1,00	70	22	11,0	9,0	2R26353	27,50	55,00
M 14,00 x 1,25	70	22	11,0	9,0	2R26354	24,07	48,13
M 14,00 x 1,50	70	22	11,0	9,0	2R26356	17,97	35,94
M 15,00 x 0,75	70	22	12,0	9,0	2R26357	35,74	71,48
M 15,00 x 1,00	70	22	12,0	9,0	2R26358	35,74	71,48
M 15,00 x 1,50	70	22	12,0	9,0	2R26360	35,74	71,48
M 16,00 x 0,50	70	22	12,0	9,0	2R26361	32,85	65,70

MACHOS MANO

HAND TAPS • TARAUDS À MAIN

Mf JUEGOS DE MACHOS MÉTRICA FINA DIN 13

METRIC FINE THREAD DIN 13 HAND TAPS
JEUX DE TARAUDS MÉTRIQUE FINE DIN 13



HSS-G

DIN 2181

TOL 6H

D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.	€/Set
M 16,00 x 0,75	70	22	12,0	9,0	2R26363	32,85	65,70
M 16,00 x 1,00	70	22	12,0	9,0	2R26362	31,29	62,57
M 16,00 x 1,25	70	22	12,0	9,0	2R26364	31,29	62,57
M 16,00 x 1,50	70	22	12,0	9,0	2R26366	21,85	43,70
M 17,00 x 1,00	70	22	12,0	9,0	2R26368	35,74	71,48
M 17,00 x 1,50	70	22	12,0	9,0	2R26369	35,74	71,48
M 18,00 x 0,50	80	22	14,0	11,0	2R26367	35,74	71,48
M 18,00 x 0,75	80	22	14,0	11,0	2R26373	35,74	71,48
M 18,00 x 1,00	80	22	14,0	11,0	2R26370	34,04	68,07
M 18,00 x 1,25	80	22	14,0	11,0	2R26371	35,74	71,48
M 18,00 x 1,50	80	22	14,0	11,0	2R26372	29,80	59,59
M 18,00 x 2,00	80	22	14,0	11,0	2R26374	34,04	68,07
M 19,00 x 1,00	80	22	16,0	12,0	2R26375	46,94	93,87
M 19,00 x 1,50	80	22	14,0	11,0	2R26376	46,94	93,87
M 20,00 x 0,50	80	22	16,0	12,0	2R26377	46,94	93,87
M 20,00 x 0,75	80	22	16,0	12,0	2R26379	46,94	93,87
M 20,00 x 1,00	80	22	16,0	12,0	2R26378	46,94	93,87
M 20,00 x 1,25	80	22	16,0	12,0	2R26380	46,94	93,87
M 20,00 x 1,50	80	22	16,0	12,0	2R26384	36,51	73,02
M 20,00 x 2,00	80	22	16,0	12,0	2R26386	44,70	89,40
M 21,00 x 1,00	80	22	16,0	12,0	2R26387	46,94	93,87
M 21,00 x 1,50	80	22	16,0	12,0	2R26388	46,94	93,87
M 22,00 x 0,50	80	22	18,0	14,5	2R26389	46,94	93,87
M 22,00 x 0,75	80	22	18,0	14,5	2R26391	46,94	93,87
M 22,00 x 1,00	80	22	18,0	14,5	2R26390	46,94	93,87
M 22,00 x 1,25	80	22	18,0	14,5	2R26392	46,94	93,87
M 22,00 x 1,50	80	22	18,0	14,5	2R26394	42,64	85,28
M 22,00 x 2,00	80	22	18,0	14,5	2R26396	44,70	89,40
M 23,00 x 1,00	80	22	18,0	14,5	2R26397	64,99	129,98
M 23,00 x 1,50	80	22	18,0	14,5	2R26398	64,99	129,98
M 24,00 x 0,50	90	22	18,0	14,5	2R26501	64,99	129,98
M 24,00 x 0,75	90	22	18,0	14,5	2R26503	64,99	129,98
M 24,00 x 1,00	90	22	18,0	14,5	2R26500	64,99	129,98
M 24,00 x 1,25	90	22	18,0	14,5	2R26502	64,99	129,98
M 24,00 x 1,50	90	22	18,0	14,5	2R26504	56,54	113,08
M 24,00 x 2,00	90	22	18,0	14,5	2R26506	61,89	123,79
M 25,00 x 1,00	90	22	18,0	14,5	2R26507	93,87	187,73
M 25,00 x 1,50	90	22	18,0	14,5	2R26508	90,25	180,51
M 26,00 x 1,00	90	22	18,0	14,5	2R26510	90,25	180,51
M 26,00 x 1,50	90	22	18,0	14,5	2R26512	80,55	161,10
M 26,00 x 2,00	90	22	18,0	14,5	2R26514	89,40	178,79
M 27,00 x 1,00	90	22	20,0	16,0	2R26516	93,87	187,73
M 27,00 x 1,50	90	22	20,0	16,0	2R26517	93,87	187,73
M 27,00 x 2,00	90	22	20,0	16,0	2R26518	106,86	213,72
M 28,00 x 1,00	90	22	20,0	16,0	2R26520	115,52	231,04

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HEXAGONAL
HEXAGONAL • HEXAGONAL

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Mf

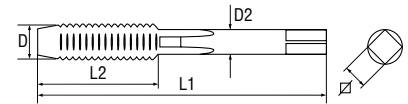
JUEGOS DE MACHOS MÉTRICA FINA DIN 13
METRIC FINE THREAD DIN 13 HAND TAPS
JEUX DE TARAUDS MÉTRIQUE FINE DIN 13



HSS-G

DIN 2181

TOL 6H



D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.	€/Set
M 28,00 x 1,50	90	22	20,0	16,0	2R26522	97,47	194,93
M 28,00 x 2,00	90	22	20,0	16,0	2R26524	108,30	216,60
M 29,00 x 1,50	90	22	22,0	18,0	2R26526	111,91	223,82
M 30,00 x 1,00	90	22	22,0	18,0	2R26528	112,63	225,26
M 30,00 x 1,50	90	22	22,0	18,0	2R26530	101,80	203,60
M 30,00 x 2,00	90	22	22,0	18,0	2R26532	115,52	231,04
M 30,00 x 2,50	125	56	22,0	18,0	2R26533	115,52	231,04
M 30,00 x 3,00	125	56	22,0	18,0	2R26534	122,75	245,49
M 32,00 x 1,00	90	22	22,0	18,0	2R26539	122,75	245,49
M 32,00 x 1,50	90	22	22,0	18,0	2R26536	122,75	245,49
M 32,00 x 2,00	90	22	22,0	18,0	2R26535	122,75	245,49
M 32,00 x 3,00	125	56	22,0	18,0	2R26537	122,75	245,49
M 33,00 x 1,50	100	25	25,0	20,0	2R26538	122,75	245,49
M 33,00 x 2,00	100	25	25,0	20,0	2R26540	151,62	303,25
M 33,00 x 3,00	125	56	25,0	20,0	2R26542	151,62	303,25
M 34,00 x 1,00	100	25	28,0	22,0	2R26543	151,62	303,25
M 34,00 x 1,50	100	25	28,0	22,0	2R26544	151,62	303,25
M 34,00 x 2,00	125	40	28,0	22,0	2R26546	158,85	317,69
M 35,00 x 1,00	100	25	28,0	22,0	2R26547	151,62	303,25
M 35,00 x 1,50	100	25	28,0	22,0	2R26548	151,62	303,25
M 35,00 x 2,00	125	40	28,0	22,0	2R26549	151,62	303,25
M 36,00 x 1,00	100	25	28,0	22,0	2R26551	161,73	323,46
M 36,00 x 1,50	100	25	28,0	22,0	2R26550	161,73	323,46
M 36,00 x 2,00	125	40	28,0	22,0	2R26552	166,07	332,13
M 36,00 x 3,00	125	40	28,0	22,0	2R26554	166,07	332,13
M 37,00 x 1,50	100	25	28,0	22,0	2R26553	187,72	375,45
M 38,00 x 1,00	100	25	28,0	22,0	2R26555	187,72	375,45
M 38,00 x 1,50	100	25	28,0	22,0	2R26556	187,72	375,45
M 38,00 x 2,00	125	40	28,0	22,0	2R26557	202,17	404,33
M 38,00 x 3,00	125	40	28,0	22,0	2R26559	202,17	404,33
M 39,00 x 1,50	110	25	32,0	24,0	2R26558	202,17	404,33
M 39,00 x 2,00	125	40	32,0	24,0	2R26560	202,17	404,33
M 39,00 x 3,00	125	40	32,0	24,0	2R26562	202,17	404,33
M 40,00 x 1,00	110	25	32,0	24,0	2R26563	202,17	404,33
M 40,00 x 1,50	110	25	32,0	24,0	2R26564	202,17	404,33
M 40,00 x 2,00	125	40	32,0	24,0	2R26566	202,17	404,33
M 40,00 x 3,00	125	40	32,0	24,0	2R26568	216,61	433,21
M 42,00 x 1,00	110	25	32,0	24,0	2R26569	216,61	433,21
M 42,00 x 1,50	110	25	32,0	24,0	2R26570	216,61	433,21
M 42,00 x 2,00	125	40	32,0	24,0	2R26572	216,61	433,21
M 42,00 x 3,00	125	40	32,0	24,0	2R26574	245,49	490,98
M 44,00 x 1,50	110	25	36,0	29,0	2R26571	252,71	505,41
M 44,00 x 2,00	125	40	36,0	29,0	2R26573	252,71	505,41
M 45,00 x 1,00	110	25	36,0	29,0	2R26575	252,71	505,41
M 45,00 x 1,50	110	25	36,0	29,0	2R26576	252,71	505,41

MACHOS MANO

HAND TAPS • TARAUDS À MAIN

Mf JUEGOS DE MACHOS MÉTRICA FINA DIN 13

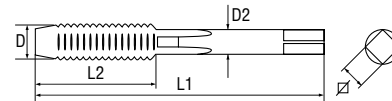
METRIC FINE THREAD DIN 13 HAND TAPS
JEUX DE TARAUDS MÉTRIQUE FINE DIN 13



HSS-G

DIN 2181

TOL 6H



D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.	€/Set
M 45,00 x 2,00	125	40	36,0	29,0	2R26578	252,71	505,41
M 45,00 x 3,00	125	40	36,0	29,0	2R26580	252,71	505,41
M 46,00 x 1,50	140	40	36,0	29,0	2R26581	252,71	505,41
M 48,00 x 1,00	140	40	36,0	29,0	2R26583	274,37	548,73
M 48,00 x 1,50	140	40	36,0	29,0	2R26582	274,37	548,73
M 48,00 x 2,00	140	40	36,0	29,0	2R26584	274,37	548,73
M 48,00 x 3,00	140	40	36,0	29,0	2R26586	274,37	548,73
M 50,00 x 1,50	140	40	36,0	29,0	2R26588	306,85	613,71
M 50,00 x 2,00	140	40	36,0	29,0	2R26590	306,85	613,71
M 50,00 x 3,00	140	40	36,0	29,0	2R26592	306,85	613,71
M 52,00 x 1,50	140	40	40,0	32,0	2R26594	335,74	671,47
M 52,00 x 2,00	140	40	40,0	32,0	2R26596	361,01	722,01
M 52,00 x 3,00	140	40	40,0	32,0	2R26598	361,01	722,01
M 54,00 x 1,00	140	32	40,0	32,0	2R28118	392,62	785,23
M 54,00 x 1,50	140	32	40,0	32,0	2R28001	394,29	788,57
M 54,00 x 2,00	140	36	40,0	32,0	2R28002	394,29	788,57
M 54,00 x 3,00	140	40	40,0	32,0	2R28003	394,29	788,57
M 54,00 x 4,00	180	50	40,0	32,0	2R28004	394,29	788,57
M 55,00 x 1,50	140	32	40,0	32,0	2R28005	518,21	1.036,43
M 55,00 x 2,00	140	36	40,0	32,0	2R28006	518,21	1.036,43
M 55,00 x 3,00	140	40	40,0	32,0	2R28007	518,21	1.036,43
M 55,00 x 4,00	180	50	40,0	32,0	2R28008	518,21	1.036,43
M 56,00 x 1,00	140	32	40,0	32,0	2R28119	550,60	1.101,20
M 56,00 x 1,50	140	32	40,0	32,0	2R28009	550,60	1.101,20
M 56,00 x 2,00	140	36	40,0	32,0	2R28010	549,80	1.099,60
M 56,00 x 3,00	140	40	40,0	32,0	2R28011	549,80	1.099,60
M 56,00 x 4,00	180	50	40,0	32,0	2R28012	478,09	956,18
M 58,00 x 1,00	160	32	45,0	35,0	2R28120	582,99	1.165,98
M 58,00 x 1,50	160	32	45,0	35,0	2R28013	582,99	1.165,98
M 58,00 x 2,00	160	36	45,0	35,0	2R28014	582,99	1.165,98
M 58,00 x 3,00	160	40	45,0	35,0	2R28015	582,99	1.165,98
M 58,00 x 4,00	200	55	45,0	35,0	2R28016	582,99	1.165,98
M 60,00 x 1,50	160	34	45,0	35,0	2R28017	599,18	1.198,36
M 60,00 x 2,00	160	36	45,0	35,0	2R28018	599,18	1.198,36
M 60,00 x 3,00	160	40	45,0	35,0	2R28019	599,18	1.198,36
M 60,00 x 4,00	200	55	45,0	35,0	2R28020	599,18	1.198,36
M 62,00 x 1,50	160	34	50,0	39,0	2R28021	647,77	1.295,53
M 62,00 x 2,00	160	36	50,0	39,0	2R28022	647,77	1.295,53
M 62,00 x 3,00	180	45	50,0	39,0	2R28023	647,77	1.295,53
M 62,00 x 4,00	220	55	50,0	39,0	2R28024	647,77	1.295,53
M 63,00 x 1,50	160	32	50,0	39,0	2R28025	663,97	1.327,93
M 64,00 x 1,50	160	34	50,0	39,0	2R28026	663,97	1.327,93
M 64,00 x 2,00	160	36	50,0	39,0	2R28027	663,97	1.327,93
M 64,00 x 3,00	180	45	50,0	39,0	2R28028	663,97	1.327,93
M 64,00 x 4,00	220	60	50,0	39,0	2R28029	663,97	1.327,93

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HEXAGONAL • HEXAGONAL

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Mf

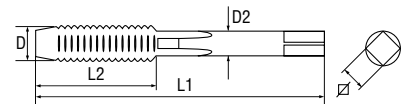
JUEGOS DE MACHOS MÉTRICA FINA DIN 13
METRIC FINE THREAD DIN 13 HAND TAPS
JEUX DE TARAUDS MÉTRIQUE FINE DIN 13



HSS-G

DIN 2181

TOL 6H



D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.	€/Set
M 65,00 x 1,50	160	34	50,0	39,0	2R28030	712,54	1.425,09
M 65,00 x 2,00	160	36	50,0	39,0	2R28031	712,54	1.425,09
M 65,00 x 3,00	180	45	50,0	39,0	2R28032	712,54	1.425,09
M 65,00 x 4,00	220	60	50,0	39,0	2R28033	712,54	1.425,09
M 68,00 x 1,50	160	36	50,0	39,0	2R28034	728,74	1.457,49
M 68,00 x 2,00	160	40	50,0	39,0	2R28035	728,74	1.457,49
M 68,00 x 3,00	180	50	50,0	39,0	2R28036	728,74	1.457,49
M 68,00 x 4,00	220	60	50,0	39,0	2R28037	728,74	1.457,49
M 70,00 x 1,50	160	36	50,0	39,0	2R28038	1.173,11	2.346,23
M 70,00 x 2,00	160	40	50,0	39,0	2R28039	1.173,11	2.346,23
M 70,00 x 3,00	200	50	50,0	39,0	2R28040	1.334,41	2.668,83
M 70,00 X 4,00	240	60	50,0	39,0	2R28041	1.334,41	2.668,83
M 72,00 x 1,50	160	36	50,0	39,0	2R28042	1.173,11	2.346,23
M 72,00 X 2,00	160	40	50,0	39,0	2R28043	1.173,11	2.346,23
M 72,00 x 3,00	200	50	50,0	39,0	2R28044	1.334,41	2.668,83
M 72,00 x 4,00	240	60	50,0	39,0	2R28045	1.334,41	2.668,83
M 74,00 x 1,50	160	36	50,0	39,0	2R28046	1.290,42	2.580,85
M 74,00 x 2,00	160	40	50,0	39,0	2R28047	1.290,42	2.580,85
M 74,00 x 3,00	200	50	50,0	39,0	2R28048	1.525,05	3.050,10
M 74,00 X 4,00	240	60	50,0	39,0	2R28049	1.525,05	3.050,10
M 75,00 x 1,50	160	36	50,0	39,0	2R28050	1.313,89	2.627,78
M 75,00 x 2,00	160	40	50,0	39,0	2R28051	1.313,89	2.627,78
M 75,00 x 3,00	200	50	50,0	39,0	2R28052	1.554,38	3.108,75
M 75,00 x 4,00	240	60	50,0	39,0	2R28053	1.554,38	3.108,75
M 76,00 x 1,50	160	36	50,0	39,0	2R28054	1.334,41	2.668,83
M 76,00 x 2,00	160	40	50,0	39,0	2R28055	1.334,41	2.668,83
M 76,00 x 3,00	220	50	50,0	39,0	2R28056	1.642,36	3.284,72
M 76,00 x 4,00	260	60	50,0	39,0	2R28057	1.642,36	3.284,72
M 78,00 x 1,50	160	36	50,0	39,0	2R28058	1.334,41	2.668,83
M 78,00 x 2,00	160	40	50,0	39,0	2R28059	1.334,41	2.668,83
M 78,00 x 3,00	220	55	50,0	39,0	2R28060	1.642,36	3.284,72
M 78,00 x 4,00	260	65	50,0	39,0	2R28061	1.642,36	3.284,72
M 80,00 x 1,50	160	36	50,0	39,0	2R28062	1.451,73	2.903,46
M 80,00 x 2,00	160	40	50,0	39,0	2R28063	1.451,73	2.903,46
M 80,00 x 3,00	220	55	50,0	39,0	2R28064	1.803,66	3.607,32
M 80,00 x 4,00	260	65	50,0	39,0	2R28065	1.803,66	3.607,32
M 82,00 x 1,50	160	36	50,0	39,0	2R28066	1.451,73	2.903,46
M 82,00 x 2,00	160	40	50,0	39,0	2R28067	1.451,73	2.903,46
M 82,00 x 3,00	220	55	50,0	39,0	2R28068	1.803,66	3.607,32
M 82,00 x 4,00	260	65	50,0	39,0	2R28069	1.803,66	3.607,32
M 84,00 x 1,50	160	36	50,0	39,0	2R28070	1.686,35	3.372,70
M 84,00 x 2,00	160	40	50,0	39,0	2R28071	1.686,35	3.372,70
M 84,00 x 3,00	220	55	50,0	39,0	2R28072	2.052,95	4.105,90
M 84,00 x 4,00	260	65	50,0	39,0	2R28073	2.052,95	4.105,90
M 85,00 x 1,50	160	36	50,0	39,0	2R28074	2.199,59	4.399,18

MACHOS MANO

HAND TAPS • TARAUDS À MAIN

Mf JUEGOS DE MACHOS MÉTRICA FINA DIN 13

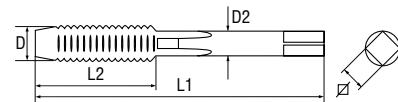
METRIC FINE THREAD DIN 13 HAND TAPS
JEUX DE TARAUDS MÉTRIQUE FINE DIN 13



HSS-G

DIN 2181

TOL 6H



D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.	€/Set
M 85,00 x 2,00	160	40	50,0	39,0	2R28075	2.199,59	4.399,18
M 85,00 x 3,00	220	55	50,0	39,0	2R28076	2.668,84	5.337,67
M 85,00 x 4,00	260	65	50,0	39,0	2R28077	2.668,84	5.337,67
M 86,00 x 1,50	160	36	50,0	39,0	2R28078	2.199,59	4.399,18
M 86,00 x 2,00	160	40	50,0	39,0	2R28079	2.199,59	4.399,18
M 86,00 x 3,00	220	55	50,0	39,0	2R28080	2.668,84	5.337,67
M 86,00 x 4,00	260	65	50,0	39,0	2R28081	2.668,84	5.337,67
M 88,00 x 1,50	160	38	50,0	39,0	2R28082	2.390,22	4.780,44
M 88,00 x 2,00	160	40	50,0	39,0	2R28083	2.390,22	4.780,44
M 88,00 x 3,00	220	55	50,0	39,0	2R28084	2.771,48	5.542,96
M 88,00 x 4,00	260	65	50,0	39,0	2R28085	2.771,48	5.542,96
M 90,00 x 1,50	160	38	50,0	39,0	2R28086	2.492,87	4.985,74
M 90,00 x 2,00	160	40	50,0	39,0	2R28087	2.492,87	4.985,74
M 90,00 x 3,00	220	55	50,0	39,0	2R28088	2.962,11	5.924,22
M 90,00 x 4,00	260	65	50,0	39,0	2R28089	2.962,11	5.924,22
M 92,00 x 1,50	180	40	56,0	44,0	2R28090	2.492,87	4.985,74
M 92,00 x 2,00	180	45	56,0	44,0	2R28091	2.492,87	4.985,74
M 92,00 x 3,00	240	60	56,0	44,0	2R28092	3.152,75	6.305,49
M 92,00 x 4,00	280	70	56,0	44,0	2R28093	3.152,75	6.305,49
M 95,00 x 1,50	180	40	56,0	44,0	2R28094	3.192,04	6.384,08
M 95,00 x 2,00	180	45	56,0	44,0	2R28095	3.192,04	6.384,08
M 95,00 x 3,00	240	60	56,0	44,0	2R28096	3.592,66	7.185,33
M 95,00 x 4,00	280	70	56,0	44,0	2R28097	3.592,66	7.185,33
M 96,00 x 1,50	180	40	56,0	44,0	2R28098	2.712,83	5.425,65
M 96,00 x 2,00	180	45	56,0	44,0	2R28099	2.712,83	5.425,65
M 96,00 x 3,00	240	60	56,0	44,0	2R28100	3.592,66	7.185,33
M 96,00 x 4,00	280	70	56,0	44,0	2R28101	3.592,66	7.185,33
M 98,00 x 1,50	180	40	56,0	44,0	2R28102	4.369,85	8.739,70
M 98,00 x 2,00	180	45	56,0	44,0	2R28103	4.369,85	8.739,70
M 98,00 x 3,00	240	60	56,0	44,0	2R28104	3.812,62	7.625,24
M 98,00 x 4,00	280	70	56,0	44,0	2R28105	3.812,62	7.625,24
M 100,00 x 1,50	180	45	56,0	44,0	2R28106	3.314,05	6.628,09
M 100,00 x 2,00	180	50	56,0	44,0	2R28107	3.314,05	6.628,09
M 100,00 x 3,00	240	65	56,0	44,0	2R28108	4.032,58	8.065,15
M 100,00 x 4,00	280	75	56,0	44,0	2R28109	4.032,58	8.065,15
M 105,00 x 1,50	180	45	56,0	44,0	2R28110	3.592,66	7.185,33
M 105,00 x 2,00	180	50	56,0	44,0	2R28111	3.592,66	7.185,33
M 105,00 x 3,00	240	65	56,0	44,0	2R28112	4.325,86	8.651,72
M 105,00 x 4,00	280	75	56,0	44,0	2R28113	4.325,86	8.651,72
M 110,00 x 1,50	180	45	56,0	44,0	2R28114	3.973,92	7.947,84
M 110,00 x 2,00	180	50	56,0	44,0	2R28115	3.973,92	7.947,84
M 110,00 x 3,00	240	65	56,0	44,0	2R28116	4.883,09	9.766,17
M 110,00 x 4,00	280	75	56,0	44,0	2R28117	4.883,09	9.766,17

CONSTRUCCIÓN
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MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
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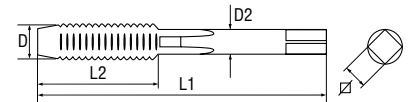
HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
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BSW

JUEGOS DE MACHOS WHITWORTH BS 84
METRIC HAND TAPS WHITWORTH BS 84
JEUX DE TARAUDS À MAIN WHITWORTH



HSS-G

DIN 351

≈DIN 352

D Ø x P (")	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.	€/Set
1/16 x 60	36	10	2,5	2,1	2R22302	12,58	37,74
3/32 x 48	36	10	2,8	2,1	2R22304	9,88	29,65
1/8 x 40	40	12	3,5	2,7	2R22306	7,54	22,62
5/32 x 32	45	14	4,5	3,4	2R22308	7,54	22,62
3/16 x 24	50	18	6,0	4,9	2R22310	7,54	22,62
7/32 x 24	50	18	6,0	4,9	2R22312	9,88	29,65
1/4 x 20	50	19	6,0	4,9	2R22314	8,15	24,45
5/16 x 18	56	22	6,0	4,9	2R22316	9,41	28,24
3/8 x 16	70	24	7,0	5,5	2R22318	10,60	31,79
7/16 x 14	70	24	8,0	6,2	2R22320	13,69	41,08
1/2 x 12	75	29	9,0	7,0	2R22322	15,49	46,46
9/16 x 12	80	30	11,0	9,0	2R22324	21,40	64,19
5/8 x 11	80	32	12,0	9,0	2R22326	24,38	73,15
3/4 x 10	95	40	14,0	11,0	2R22330	33,00	99,01
7/8 x 9	100	40	18,0	14,5	2R22334	41,26	123,79
1 x 8	110	50	18,0	14,5	2R22338	55,01	165,03
1.1/8 x 7	132	56	22,0	18,0	2R22342	85,03	255,10
1.1/4 x 7	132	56	22,0	18,0	2R22346	89,90	269,70
1.3/8 x 6	150	63	28,0	22,0	2R22350	121,49	364,46
1.1/2 x 6	150	63	32,0	24,0	2R22354	143,35	430,05
1.5/8 x 5	160	70	32,0	24,0	2R22358	240,53	721,59
1.3/4 x 5	160	70	36,0	29,0	2R22362	257,54	772,63
1.7/8 x 4.1/2	190	80	36,0	29,0	2R22366	345,01	1.035,02
2 x 4.1/2	190	80	40,0	32,0	2R22370	349,86	1.049,59
2.1/4 x 4	220	80	45,0	35,0	2R22372	663,82	1.991,45
2.1/2 x 4	220	80	50,0	39,0	2R22374	855,08	2.565,25
2.3/4 x 3.1/2	240	80	50,0	39,0	2R22376	2.182,71	6.548,14
3 x 3.1/2	260	80	50,0	39,0	2R22378	2.812,77	8.438,32

CONSTRUCCIÓN
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MADERA
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HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

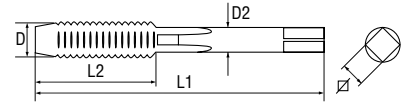
MACHOS MANO

HAND TAPS • TARAUDS À MAIN

BSF JUEGOS DE MACHOS ROSCA BRITÁNICA STANDARD FINA BS 84

BRITISH STANDARD FINE THREAD BS 84

JEUX DE TARAUDS À MAIN FILETAGE WHITWORTH BS 84



HSS-G

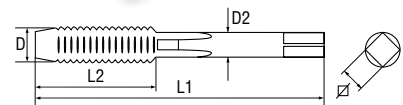
≈DIN 2181

D Ø x P (")	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.	€/Set
3/16 x 32	50	14	6,0	4,9	2R22710	24,91	49,82
1/4 x 26	50	18	6,0	4,9	2R22714	17,33	34,66
5/16 x 22	56	22	6,0	4,9	2R22716	18,05	36,11
3/8 x 20	63	22	7,0	5,5	2R22718	21,66	43,33
7/16 x 18	63	22	8,0	6,2	2R22720	27,44	54,88
1/2 x 16	75	24	9,0	7,0	2R22722	32,49	64,98
9/16 x 16	80	28	11,0	9,0	2R22724	36,11	72,21
5/8 x 14	80	28	12,0	9,0	2R22726	50,54	101,08
3/4 x 12	95	32	14,0	11,0	2R22730	72,20	144,40
7/8 x 11	100	36	18,0	14,5	2R22734	90,25	180,51
1 x 10	110	40	18,0	14,5	2R22738	108,30	216,60

BA JUEGOS DE MACHOS ENTRADA CÓNICA BA, BS 93

BA THREAD BS 93

JEUX DE TARAUDS À MAIN FILETAGE BA, BS 93



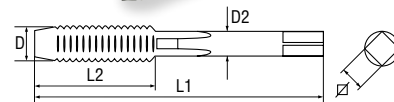
HSS-G

BA ISO 529

D Ø x P (")	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Set
BA 0	66	19,0	6,30	5,00	2R89400	91,06
BA 1	62	17,0	5,60	4,50	2R89401	91,06
BA 2	58	16,0	5,00	4,00	2R89402	91,06
BA 3	53	13,0	4,50	3,55	2R89403	91,06
BA 4	50	13,0	3,55	2,80	2R89404	91,06
BA 5	48	11,0	3,15	2,50	2R89405	91,06
BA 6	45	9,5	2,80	2,24	2R89406	91,06

UNC

JUEGOS DE MACHOS ROSCA GRUESA UNIFICADA ANSI B 1.1
UNIFIED COARSE THREAD ANSI B 1.1
JEUX DE TARAUDS À MAIN FILETAGE UNIFIÉ
PAS GROS ANSI B 1.1



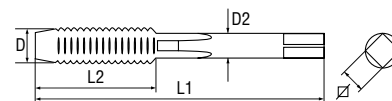
D Ø x P (")	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.	€/Set
Nr. 1 x 64	32	10	2,5	2,1	2R23301	22,69	68,07
Nr. 2 x 56	36	11	2,8	2,1	2R23302	20,63	61,89
Nr. 3 x 48	36	11	2,8	2,1	2R23303	20,63	61,89
Nr. 4 x 40	40	12	3,5	2,7	2R23304	14,12	42,35
Nr. 5 x 40	40	12	3,5	2,7	2R23305	14,12	42,35
Nr. 6 x 32	45	14	4,0	3,0	2R23306	16,26	48,78
Nr. 8 x 32	45	14	4,5	3,4	2R23308	16,26	48,78
Nr. 10 x 24	50	16	6,0	4,9	2R23310	16,26	48,78
Nr. 12 x 24	50	18	6,0	4,9	2R23312	16,26	48,78
1/4 x 20	50	19	6,0	4,9	2R23314	10,91	32,74
5/16 x 18	56	22	6,0	4,9	2R23316	12,66	37,99
3/8 x 16	70	24	7,0	5,5	2R23318	13,97	41,92
7/16 x 14	70	24	8,0	6,2	2R23320	18,33	55,00
1/2 x 13	75	29	9,0	7,0	2R23322	21,83	65,50
9/16 x 12	80	30	11,0	9,0	2R23324	25,32	75,96
5/8 x 11	80	32	12,0	9,0	2R23326	30,56	91,68
3/4 x 10	95	40	14,0	11,0	2R23330	39,29	117,88
7/8 x 9	100	40	18,0	14,5	2R23334	50,43	151,28
1 x 8	110	50	18,0	14,5	2R23338	77,93	233,80
1.1/8 x 7	132	56	22,0	18,0	2R23342	87,47	262,41
1.1/4 x 7	132	56	22,0	18,0	2R23346	89,90	269,70
1.3/8 x 6	150	63	28,0	22,0	2R23350	121,49	364,46
1.1/2 x 6	150	63	32,0	24,0	2R23354	153,67	461,02
1.5/8 x 5	160	70	32,0	24,0	2R23358	340,15	1.020,44
1.3/4 x 5	160	70	36,0	29,0	2R23362	340,15	1.020,44
1.7/8 x 4.1/2	190	80	36,0	29,0	2R23366	388,74	1.166,21
2 x 4.1/2	190	80	40,0	32,0	2R23370	362,82	1.088,47

MACHOS MANO

HAND TAPS • TARAUDS À MAIN

UNF JUEGOS DE MACHOS ROSCA FINA UNIFICADA ANSI B 1.1

UNIFIED FINE THREAD ANSI B 1.1
JEUX DE TARAUDS À MAIN FILETAGE UNIFIÉ
PAS FIN ANSI B 1.1



HSS-G

≈DIN 2181

TOL 2B

D Ø x P (")	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.	€/Set
Nr. 0 x 80	28	8	2,5	2,1	2R24300	28,19	56,38
Nr. 1 x 72	32	9	2,8	2,1	2R24301	28,19	56,38
Nr. 2 x 64	32	10	2,8	2,1	2R24302	25,73	51,45
Nr. 3 x 56	32	10	2,8	2,1	2R24303	25,73	51,45
Nr. 4 x 48	36	11	3,5	2,7	2R24304	17,33	34,66
Nr. 5 x 44	36	11	3,5	2,7	2R24305	17,33	34,66
Nr. 6 x 40	40	12	4,5	3,4	2R24306	17,33	34,66
Nr. 8 x 36	40	12	4,5	3,4	2R24308	17,33	34,66
Nr. 10 x 32	45	14	6,0	4,9	2R24310	16,50	33,01
Nr. 12 x 28	50	14	6,0	4,9	2R24312	17,33	34,66
1/4 x 28	50	18	6,0	4,9	2R24314	10,39	20,78
5/16 x 24	56	22	6,0	4,9	2R24316	11,00	22,01
3/8 x 24	63	22	7,0	5,5	2R24318	14,06	28,12
7/16 x 20	63	22	8,0	6,2	2R24320	15,28	30,56
1/2 x 20	75	24	9,0	7,0	2R24322	17,73	35,46
9/16 x 18	80	28	11,0	9,0	2R24324	22,43	44,86
5/8 x 18	80	28	12,0	9,0	2R24326	27,50	55,00
3/4 x 16	95	32	14,0	11,0	2R24330	37,98	75,96
7/8 x 14	100	36	18,0	14,5	2R24334	51,57	103,15
1 x 12	110	40	18,0	14,5	2R24338	72,20	144,40
1 x 14	110	40	18,0	14,5	2R24340	82,52	165,03
1.1/8 x 12	110	50	22,0	18,0	2R24342	91,11	182,23
1.1/4 x 12	132	56	22,0	18,0	2R24346	127,55	255,10
1.3/8 x 12	132	56	28,0	22,0	2R24350	200,44	400,89
1.1/2 x 12	150	63	32,0	24,0	2R24354	218,67	437,34

CONSTRUCCIÓN
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MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
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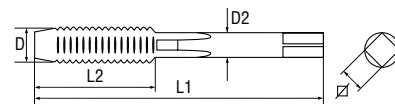
HEXAGONAL
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METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
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G(BSP)

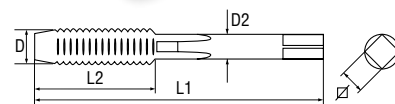
JUEGOS DE MACHOS ROSCA GAS DIN ISO 228
 PIPE THREAD DIN ISO 228
 JEUX DE TARAUDS À MAIN FILETAGE
 PAS GAZ DIN ISO 228


HSS-G
DIN 5157

D Ø x P (")	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.	€/Set
G 1/8 x 28	63	20	7,0	5,5	2R25312	13,81	27,61
G 1/4 x 19	70	22	11,0	9,0	2R25314	18,83	37,65
G 3/8 x 19	70	22	12,0	9,0	2R25316	23,86	47,71
G 1/2 x 14	80	22	16,0	12,0	2R25318	33,89	67,78
G 5/8 x 14	80	22	18,0	14,5	2R25320	43,93	87,85
G 3/4 x 14	90	22	20,0	16,0	2R25322	50,21	100,42
G 7/8 x 14	90	22	22,0	18,0	2R25324	68,76	137,52
G 1 x 11	100	25	25,0	20,0	2R25326	86,84	173,67
G 1.1/8 x 11	125	40	28,0	22,0	2R25330	121,73	243,46
G 1.1/4 x 11	125	40	32,0	24,0	2R25334	145,78	291,55
G 1.3/8 x 11	140	40	36,0	29,0	2R25338	174,93	349,87
G 1.1/2 x 11	140	40	36,0	29,0	2R25342	200,44	400,89
G 1.5/8 x 11	140	40	40,0	32,0	2R25346	349,86	699,72
G 1.3/4 x 11	140	40	40,0	32,0	2R25350	349,86	699,72
G 2 x 11	160	40	45,0	35,0	2R25354	382,66	765,32
G 2.1/4 x 11	160	40	50,0	39,0	2R25358	687,24	1.374,49
G 2.1/2 x 11	160	40	50,0	39,0	2R25362	957,96	1.915,93
G 2.3/4 x 11	160	40	50,0	39,0	2R25366	1.326,57	2.653,15
G 3 x 11	160	40	50,0	39,0	2R25370	1.570,52	3.141,05
G 3.1/2 x 11	180	45	56,0	44,0	2R25374	2.466,21	4.932,42
G 4 x 11	180	45	56,0	44,0	2R25378	3.067,43	6.134,86

VG

PARA ROSCAS DE VALVULAS DE NEUMÁTICO DIN 7756
 FOR TIRE VALVES THREADS DIN 7756
 POUR LES VALVES DES PNEUMATIQUES DIN 7756


HSS-G
DIN 2181
TOL 6H

D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Set
VG 5 X 36	50	12	6,00	2,70	2R21501	449,59
VG 5,2 X 24	56	17	6,00	3,40	2R21502	412,13
VG 6 X 32	56	14	6,00	4,90	2R21503	468,33
VG 8 X 32	56	16	7,00	4,90	2R21504	524,53
VG 10 X 28	63	18	8,00	6,20	2R21505	561,99
VG 12 X 26	70	22	8,00	8,00	2R21506	607,35

MACHOS MANO

HAND TAPS • TARAUDS À MAIN

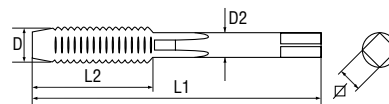
PG ROSCA PARA TUBOS BLINDADOS DIN 40 430

ARMoured TUBE THREAD DIN 40 430
JEUX DE TARAUDS À MAIN FILETAGE ÉLECTRIQUE DIN 40 430



HSS-G

DIN 40432



D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
PG 7 - 12,50 x 20	70	22	9,0	7,0	2R25707-3	27,67
PG 9 - 15,20 x 18	70	22	12,0	9,0	2R25709-3	34,60
PG 11 - 18,60 x 18	80	22	14,0	11,0	2R25711-3	48,43
PG 13,5 - 20,40 x 18	80	22	16,0	12,0	2R25713-3	56,74
PG 16 - 22,50 x 18	80	22	18,0	14,5	2R25716-3	65,93
PG 21 - 28,30 x 16	90	22	22,0	18,0	2R25721-3	87,15
PG 29 - 37,00 x 16	100	25	28,0	22,0	2R25729-3	147,78
PG 36 - 47,00 x 16	140	40	36,0	29,0	2R25736-3	235,66
PG 48 - 59,30 x 16	160	40	45,0	35,0	2R25748-3	391,95

Equivalencia de roscas PG a roscas Mf
Equivalents of threads PG to threads Mf / Équivalence du pas PG à pas Mf

PG 7	M 12 x 150
PG 9	M 16 x 150
PG 11	M 20 x 150
PG 13,5	M 20 x 150
PG 16	M 25 x 150
PG 21	M 32 x 150
PG 29	M 40 x 150
PG 36	M 50 x 150
PG 48	M 63 x 150

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

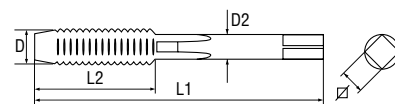
METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

UNEF

JUEGOS DE MACHOS ROSCA EXTRAFINA UNIFICADA ANSI B 1.1, **ENTRADA CÓNICA**

UNIFIED EXTRA FINE THREAD
ANSI B 1.1, NON SERIAL FORM
JEUX DE TARAUDS À MAIN FILETAGE UNIFIÉ PAS FIN ANSI B 1.1



HSS-G

ISO 529

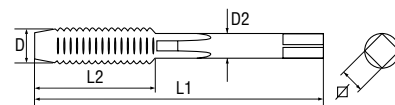
TOL 2B

D Ø x P (")	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.	€/Set
1/4 x 32	66	19	6,3	5,0	2R83821	33,42	100,25
5/16 x 32	72	22	8,0	6,3	2R83822	39,36	118,07
3/8 x 32	80	24	10,0	8,0	2R83823	44,60	133,80
7/16 x 28	85	25	8,0	6,3	2R83824	55,10	165,29
1/2 x 28	89	29	9,0	7,1	2R83825	63,61	190,82
9/16 x 24	95	30	11,2	9,0	2R83826	66,25	198,76
5/8 x 24	102	32	12,5	10,0	2R83827	97,95	293,86
3/4 x 24	112	37	14,0	11,2	2R83829	128,01	384,02
7/8 x 20	118	38	16,0	12,5	2R83831	146,29	438,88
1 x 20	130	45	16,0	14,0	2R83833	177,11	531,32

Tr

JUEGOS DE MACHOS ROSCA TRAPEZOIDAL DIN 103

TRAPEZOIDAL THREAD DIN 103
JEUX DE TARAUDS À MAIN FILETAGE ELECTRIQUE DIN 40 430



HSS-G

TOL 7H

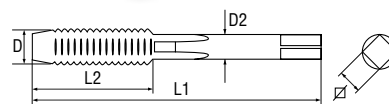
D Ø x P (")	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.	€/Set
Tr 10 x 2	90	34	7	5,5	2R25108	231,78	695,35
Tr 10 x 3	100	40	7	5,5	2R25112	231,78	695,35
Tr 12 x 3	110	40	8	6,2	2R25116	241,86	725,59
Tr 14 x 3	130	45	10	8,0	2R25120	316,72	950,16
Tr 14 x 4	130	55	10	8,0	2R25124	316,72	950,16
Tr 16 x 4	140	55	11	9,0	2R25128	285,05	855,15
Tr 18 x 4	150	55	12	9,0	2R25132	401,04	1.203,13
Tr 20 x 4	160	55	14	11,0	2R25136	431,89	1.295,68
Tr 22 x 5	175	65	16	12,0	2R25140	549,12	1.647,37
Tr 24 x 5	190	65	18	14,5	2R25144	610,82	1.832,47
Tr 26 x 5	210	70	20	16,0	2R25148	666,35	1.999,05
Tr 28 x 5	220	70	22	18,0	2R25152	728,05	2.184,14
Tr 30 x 6	240	80	22	18,0	2R25156	783,58	2.350,74
Tr 32 x 6	255	80	25	20,0	2R25160	950,16	2.850,49

MACHOS MANO

HAND TAPS • TARAUDS À MAIN

M JUEGO DE MACHOS MÉTRICA COBALTO

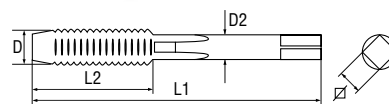
COBALT METRIC HAND TAPS
JEUX DE TARAUDS À MAIN COBALT, METRIQUE



D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.	€/Set
M 3 x 0,50	40	11	3,5	2,7	2R57326	9,25	27,74
M 4 x 0,70	45	13	4,5	3,4	2R57330	9,25	27,74
M 5 x 0,80	50	16	6,0	4,9	2R57334	9,25	27,74
M 6 x 1,00	50	19	6,0	4,9	2R57338	9,25	27,74
M 8 x 1,25	56	22	6,0	4,9	2R57342	10,43	31,29
M 10 x 1,50	70	24	7,0	5,5	2R57346	13,87	41,60
M 12 x 1,75	75	29	9,0	7,0	2R57350	18,48	55,45
M 14 x 2,00	80	30	11,0	9,0	2R57354	22,55	67,64
M 16 x 2,00	80	32	12,0	9,0	2R57358	30,04	90,13
M 18 x 2,50	95	40	14,0	11,0	2R57362	34,67	104,00
M 20 x 2,50	95	40	16,0	12,0	2R57366	41,60	124,79
M 22 x 2,50	100	40	18,0	14,5	2R57370	53,15	159,45
M 24 x 3,00	110	50	18,0	14,5	2R57374	60,08	180,25
M 27 x 3,00	110	50	20,0	16,0	2R57376	97,70	293,11
M 30 x 3,50	125	56	22,0	18,0	2R57378	135,28	405,83

M JUEGO DE MACHOS MÉTRICA CON PUNTA PILOTO COBALTO

COBALT METRIC HAND TAPS ROUGHER PILOTTED
JEUX DE TARAUDS À MAIN COBALT RECTIFIÉ ETAGÉ



D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.	€/Set
M 3 x 0,50	40	11	3,5	2,7	2R57726	18,63	55,88
M 4 x 0,70	45	13	4,5	3,4	2R57730	18,63	55,88
M 5 x 0,80	50	16	6,0	4,9	2R57734	19,97	59,92
M 6 x 1,00	50	19	6,0	4,9	2R57738	19,97	59,92
M 8 x 1,25	56	22	6,0	4,9	2R57742	21,84	65,53
M 10 x 1,50	70	24	7,0	5,5	2R57746	29,29	87,86
M 12 x 1,75	75	29	9,0	7,0	2R57750	39,94	119,82

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

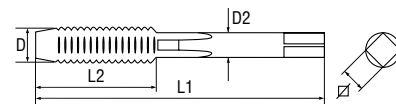
ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

Mf JUEGOS DE MACHOS MANO MÉTRICA FINA **COBALTO**
COBALT METRIC FINE HAND TAPS
JEUX DE TARAUDS À MAIN, METRIQUE FIN



D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.	€/Set
M 6 x 0,75	50	14	6,0	4,9	2R56318	18,65	37,31
M 8 x 0,75	50	19	6,0	4,9	2R56324	18,65	37,31
M 8 x 1,00	56	22	6,0	4,9	2R56326	18,65	37,31
M 10 x 1,00	63	20	7,0	5,5	2R56336	20,13	40,27
M 10 x 1,25	70	24	7,0	5,5	2R56338	23,40	46,79
M 12 x 1,00	70	22	9,0	7,0	2R56344	28,14	56,28
M 12 x 1,25	70	22	9,0	7,0	2R56346	28,14	56,28
M 12 x 1,50	70	22	9,0	7,0	2R56348	28,14	56,28
M 14 x 1,25	70	22	11,0	9,0	2R56354	33,48	66,97
M 14 x 1,50	70	22	11,0	9,0	2R56356	29,61	59,22
M 16 x 1,50	70	22	12,0	9,0	2R56366	37,31	74,63
M 18 x 1,50	80	22	14,0	11,0	2R56372	39,09	78,18
M 18 x 2,00	80	22	14,0	11,0	2R56374	51,82	103,64
M 20 x 1,50	80	22	16,0	12,0	2R56384	48,86	97,72
M 20 x 2,00	80	22	16,0	12,0	2R56386	65,16	130,31
M 22 x 1,50	80	22	18,0	14,5	2R56394	60,71	121,42
M 22 x 2,00	80	22	18,0	14,5	2R56396	65,16	130,31
M 24 x 1,50	90	22	18,0	14,5	2R56504	70,02	140,04

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • METAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

MACHOS MANO

HAND TAPS • TARAUDS À MAIN

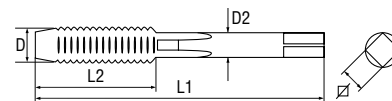
G(BSP)

JUEGOS DE MACHOS ROSCA GAS DIN ISO 228 **COBALTO**

COBALT HAND TAPS PIPE THREAD DIN ISO 228

JEUX DE TARAUDS À MAIN FILETAGE

PAS GAZ DIN ISO 228 COBALT



HSS-CO 5%

DIN 5157

D Ø x P (")	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.	€/Set
G 1/8 x 28	63	20	7,0	5,5	2R55312	18,65	37,31
G 1/4 x 19	70	22	11,0	9,0	2R55314	21,91	43,82
G 3/8 x 19	70	22	12,0	9,0	2R55316	32,87	65,75
G 1/2 x 14	80	22	16,0	12,0	2R55318	45,30	90,61
G 3/4 x 14	90	22	20,0	16,0	2R55322	62,19	124,38
G 1 x 11	100	25	25,0	20,0	2R55326	100,69	201,38

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

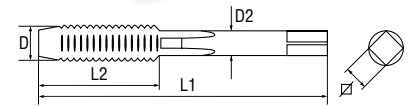
ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

M JUEGO DE MACHOS MÉTRICA **IZQUIERDAS**
METRIC LEFT HAND TAPS
JEUX DE TARAUDS À MAIN À GAUCHE, METRIQUE



D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.	€/Set
M 3 x 0,50	40	11	3,5	2,7	2R27026	11,24	33,73
M 4 x 0,70	45	13	4,5	3,4	2R27030	10,69	32,08
M 5 x 0,80	50	16	6,0	4,9	2R27034	11,24	33,73
M 6 x 1,00	50	19	6,0	4,9	2R27038	11,24	33,73
M 8 x 1,25	56	22	6,0	4,9	2R27042	12,57	37,70
M 10 x 1,50	70	24	7,0	5,5	2R27046	17,04	51,11
M 12 x 1,75	75	29	9,0	7,0	2R27050	22,31	66,92
M 14 x 2,00	80	30	11,0	9,0	2R27054	27,01	81,03
M 16 x 2,00	80	32	12,0	9,0	2R27058	38,03	114,08
M 18 x 2,50	95	40	14,0	11,0	2R27062	51,16	153,49
M 20 x 2,50	95	40	16,0	12,0	2R27066	54,54	163,61
M 22 x 2,50	100	40	18,0	14,5	2R27070	68,19	204,58
M 24 x 3,00	110	50	18,0	14,5	2R27074	90,92	272,76
M 27 x 3,00	110	50	20,0	16,0	2R27076	114,30	342,90
M 30 x 3,50	125	56	22,0	18,0	2R27078	164,83	494,50
M 33 x 3,50	125	56	25,0	20,0	2R27080	217,61	652,84
M 36 x 4,00	150	63	28,0	22,0	2R27082	273,17	819,52
M 39 x 4,00	150	63	32,0	24,0	2R27084	316,23	948,70
M 42 x 4,50	150	63	32,0	24,0	2R27086	379,80	1.139,41
M 45 x 4,50	160	70	36,0	29,0	2R27088	435,64	1.306,93
M 48 x 5,00	180	75	36,0	29,0	2R27090	546,35	1.639,05
M 52 x 5,00	180	75	40,0	32,0	2R27092	612,06	1.836,18

MACHOS MANO

HAND TAPS • TARAUDS À MAIN

Mf JUEGO DE MACHOS MÉTRICA FINA IZQUIERDAS

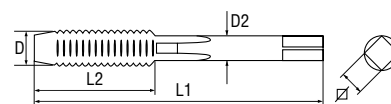
FINE METRIC LEFT HAND TAPS
JEUX DE TARAUDS À MAIN À GAUCHE, METRIQUE FIN



HSS-G

DIN 2181

TOL 6H



D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.	€/Set
M 6 x 0,75	50	14	6,0	4,9	2R26007	22,04	44,07
M 8 x 0,75	50	19	6,0	4,9	2R26010	26,97	53,94
M 8 x 1,00	56	22	6,0	4,9	2R26011	21,00	42,00
M 10 x 1,00	63	20	7,0	5,5	2R26015	22,14	44,29
M 10 x 1,25	70	24	7,0	5,5	2R26016	24,78	49,55
M 12 x 1,00	70	22	9,0	7,0	2R26020	36,39	72,78
M 12 x 1,25	70	22	9,0	7,0	2R26021	36,39	72,78
M 12 x 1,50	70	22	9,0	7,0	2R26022	32,09	64,19
M 14 x 1,25	70	22	11,0	9,0	2R26027	47,17	94,35
M 14 x 1,50	70	22	11,0	9,0	2R26028	37,74	75,47
M 16 x 1,00	70	22	12,0	9,0	2R26031	61,32	122,64
M 16 x 1,50	70	22	12,0	9,0	2R26033	45,89	91,79
M 18 x 1,50	80	22	14,0	11,0	2R26036	58,40	116,81
M 20 x 1,50	80	22	16,0	12,0	2R26040	76,67	153,34
M 22 x 1,50	80	22	18,0	14,5	2R26045	83,57	167,14
M 24 x 1,50	90	22	18,0	14,5	2R26050	111,32	222,63
M 24 x 2,00	90	22	18,0	14,5	2R26051	121,31	242,61
M 30 x 1,50	90	22	22,0	18,0	2R26063	190,03	380,06
M 30 x 2,00	90	22	22,0	18,0	2R26064	215,63	431,27

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

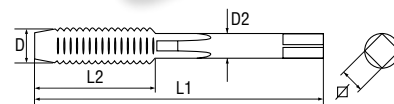
HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

UNC

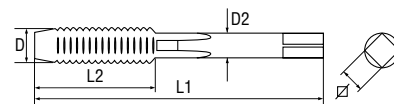
JUEGO DE MACHOS ROSCA UNIFICADA ANSI B 1.1 **IZQUIERDAS**
UNC LEFT HAND TAPS
JEUX DE TARAUDS À MAIN À GAUCHE, UNC



D Ø x P (")	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.	€/Set
UNC Nr. 6 x 32	45	14	4,0	3,0	2R23006	34,84	104,53
UNC Nr. 8 x 32	45	14	4,5	3,4	2R23008	34,84	104,53
UNC Nr. 10 x 24	50	16	6,0	4,9	2R23010	34,84	104,53
UNC Nr. 12 x 24	50	18	6,0	4,9	2R23012	34,84	104,53
UNC 1/4 x 20	50	19	6,0	4,9	2R23014	22,92	68,76
UNC 5/16 x 18	56	22	6,0	4,9	2R23016	26,60	79,79
UNC 3/8 x 16	70	24	7,0	5,5	2R23018	29,35	88,04
UNC 7/16 x 14	70	24	6,2	6,2	2R23020	38,50	115,51
UNC 1/2 x 13	75	29	9,0	7,0	2R23022	45,85	137,54
UNC 9/16 x 12	80	30	11,0	9,0	2R23024	53,17	159,52
UNC 5/8 x 11	80	32	12,0	9,0	2R23026	64,17	192,52
UNC 3/4 x 10	95	40	14,0	11,0	2R23030	94,89	284,68
UNC 7/8 x 9	100	40	18,0	14,5	2R23034	105,90	317,69
UNC 1 x 8	110	50	18,0	14,5	2R23038	163,66	490,99

UNF

JUEGO DE MACHOS ROSCA FINA UNIFICADA ANSI B 1.1 **IZQUIERDAS**
UNF LEFT HAND TAPS
JEUX DE TARAUDS À MAIN À GAUCHE, UNF



D Ø x P (")	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.	€/Set
Nr. 10 x 32	45	14	6,0	4,9	2R24010	32,34	64,69
UNF 1/4 x 28	50	18	6,0	4,9	2R24014	23,38	46,76
UNF 5/16 x 24	56	22	6,0	4,9	2R24016	24,75	49,51
UNF 3/8 x 24	63	22	7,0	5,5	2R24018	31,64	63,29
UNF 7/16 x 20	63	22	8,0	6,2	2R24020	34,38	68,76
UNF 1/2 x 20	75	24	9,0	7,0	2R24022	39,90	79,79
UNF 9/16 x 18	80	28	11,0	9,0	2R24024	50,46	100,93
UNF 5/8 x 18	80	28	12,0	9,0	2R24026	61,88	123,77
UNF 3/4 x 16	95	32	14,0	11,0	2R24030	79,76	159,52
UNF 7/8 x 14	100	36	18,0	14,5	2R24034	108,30	216,60
UNF 1 x 12	110	40	18,0	14,5	2R24038	151,62	303,25

MACHOS MANO

HAND TAPS • TARAUDS À MAIN

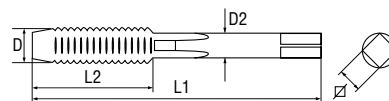
BSW JUEGO DE MACHOS WHITWORTH BS 84 IZQUIERDAS

WHITWORTH BS 84 LEFT HAND TAPS
JEUX DE TARAUDS À MAIN À GAUCHE, WHITWORTH BS 84



HSS-G

≈DIN 351



D Ø x P (")	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.	€/Set
BSW 1/8 x 40	40	12	3,5	2,7	2R22006	15,83	47,49
BSW 5/32 x 32	45	14	4,5	3,4	2R22008	15,83	47,49
BSW 3/16 x 24	50	18	6,0	4,9	2R22010	15,83	47,49
BSW 1/4 x 20	50	19	6,0	4,9	2R22014	17,57	52,71
BSW 5/16 x 18	56	22	6,0	4,9	2R22016	20,30	60,89
BSW 3/8 x 16	70	24	7,0	5,5	2R22018	23,84	71,51
BSW 7/16 x 14	70	24	8,0	6,2	2R22020	30,81	92,42
BSW 1/2 x 12	75	29	9,0	7,0	2R22022	34,84	104,51
BSW 9/16 x 12	80	30	11,0	9,0	2R22024	48,14	144,43
BSW 5/8 x 11	80	32	12,0	9,0	2R22026	54,87	164,60
BSW 3/4 x 10	95	40	14,0	11,0	2R22030	69,31	207,94
BSW 7/8 x 9	100	40	18,0	14,5	2R22034	86,65	259,94
BSW 1 x 8	110	50	18,0	14,5	2R22038	115,52	346,57

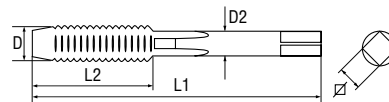
G(BSP) JUEGO DE MACHOS ROSCA GAS DIN ISO 228 IZQUIERDAS

BSP LEFT HAND TAP SETS
JEUX DE TARAUDS À MAIN À GAUCHE, BSP



HSS-G

DIN 5157



D Ø x P (")	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.	€/Set
G 1/8 x 28	63	20	7,0	5,5	2R25012	28,24	56,49
G 1/4 x 19	70	22	11,0	9,0	2R25014	38,51	77,02
G 3/8 x 19	70	22	12,0	9,0	2R25016	48,77	97,54
G 1/2 x 14	80	22	16,0	12,0	2R25018	69,31	138,62
G 5/8 x 14	80	22	18,0	14,5	2R25020	96,27	192,55
G 3/4 x 14	90	22	20,0	16,0	2R25022	110,02	220,04
G 1 x 11	100	25	25,0	20,0	2R25026	182,35	364,70
G 1.1/8 x 11	125	40	28,0	22,0	2R25030	241,16	482,33
G 1.1/4 x 11	125	40	32,0	24,0	2R25034	288,81	577,61
G 1.3/8 x 11	140	40	36,0	29,0	2R25038	346,56	693,12
G 1.1/2 x 11	140	40	36,0	29,0	2R25042	397,11	794,21
G 1.3/4 x 11	140	40	40,0	32,0	2R25050	693,12	1.386,24
G 2 x 11	160	40	45,0	35,0	2R25054	758,10	1.516,21

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

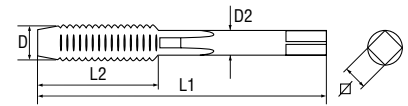
ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

M MÉTRICA ISO-ROSCA DIN 13
METRIC ISO-THREAD DIN 13
FILETAGE MÉTRIQUE ISO DIN 13



PUNTA EN ESPIRAL (PASANTE) • SPIRAL POINT (THROUGH) • POINTE SPIRALE (INTERNE)



HSS-CO 5%

DIN 352

FORM B

TOL 6H



D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
M 3 x 0,50	40	11	3,5	2,7	3R61526	9,90
M 4 x 0,70	45	13	4,5	3,4	3R61530	9,90
M 5 x 0,80	48	16	6,0	4,9	3R61534	9,90
M 6 x 1,00	50	19	6,0	4,9	3R61538	9,90
M 8 x 1,25	56	22	6,0	4,9	3R61542	11,75
M 10 x 1,50	70	24	7,0	5,5	3R61546	14,84
M 12 x 1,75	75	29	9,0	7,0	3R61550	19,17
M 14 x 2,00	80	30	11,0	9,0	3R61554	24,12
M 16 x 2,00	80	32	12,0	9,0	3R61558	29,35
M 18 x 2,50	95	40	14,0	11,0	3R61562	38,61
M 20 x 2,50	95	40	16,0	12,0	3R61566	44,81
M 22 x 2,50	100	40	18,0	14,5	3R61570	55,62
M 24 x 3,00	110	50	18,0	14,5	3R61574	64,90

HELICOIDAL 35° (CIEGO) • 35° SPIRAL FLUTE (BLIND) • HÉLICOÏDAL (AVEUGLE)



HSS-CO 5%

DIN 352

FORM C/35°

TOL 6H



D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
M 3 x 0,50	40	11	3,5	2,7	3R61726	12,05
M 4 x 0,70	45	13	4,5	3,4	3R61730	12,05
M 5 x 0,80	48	16	6,0	4,9	3R61734	12,05
M 6 x 1,00	50	19	6,0	4,9	3R61738	12,05
M 8 x 1,25	56	22	6,0	4,9	3R61742	13,89
M 10 x 1,50	70	24	7,0	5,5	3R61746	17,61
M 12 x 1,75	75	29	9,0	7,0	3R61750	22,25

CON DIENTE ALTERNO (PASANTE) • WIHT INTERRUPTED THREADS (THROUGH) • AVEC ALTERNANCE DENT (INTERNE)



HSS-CO 5%

DIN 352

FORM B-AZ

TOL 6H



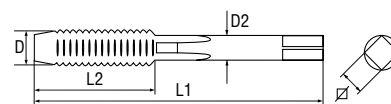
D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
M 3 x 0,50	40	11	3,5	2,7	3R61926	15,13
M 4 x 0,70	45	13	4,5	3,4	3R61930	15,13
M 5 x 0,80	48	16	6,0	4,9	3R61934	15,13
M 6 x 1,00	50	19	6,0	4,9	3R61938	15,13
M 8 x 1,25	56	22	6,0	4,9	3R61942	16,37
M 10 x 1,50	70	24	7,0	5,5	3R61946	20,09
M 12 x 1,75	75	29	9,0	7,0	3R61950	23,48

MACHOS MÁQUINA CORTOS

SHORT MACHINE TAPS • TARAUDS MACHINE COURTS

M MÉTRICA ISO-ROSCA DIN 13

METRIC ISO-THREAD DIN 13
FILETAGE MÉTRIQUE ISO DIN 13



FORMA B • FORM B • FORME B



HSS-G

ISO 529

FORM B

TOL 6H



D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
M 2,0 x 0,40	41,0	8,0	2,50	2,00	3R80516	13,07
M 2,5 x 0,45	44,5	9,5	2,80	2,24	3R80522	13,07
M 2,6 x 0,45	44,5	9,5	2,90	2,24	3R80524	13,07
M 3,0 x 0,50	48,0	11,0	3,15	2,50	3R80526	7,69
M 3,5 x 0,60	50,0	13,0	3,55	2,80	3R80528	8,17
M 4,0 x 0,70	53,0	13,0	4,00	3,15	3R80530	7,69
M 5,0 x 0,80	58,0	16,0	5,00	4,00	3R80534	8,40
M 6,0 x 1,00	66,0	19,0	6,30	5,00	3R80538	8,64
M 8,0 x 1,25	72,0	22,0	8,00	6,30	3R80542	10,97
M 10,0 x 1,50	80,0	24,0	10,00	8,00	3R80546	13,53
M 12,0 x 1,75	89,0	29,0	9,00	7,10	3R80550	19,14
M 14,0 x 2,00	95,0	30,0	11,20	9,00	3R80554	21,69
M 16,0 x 2,00	102,0	32,0	12,50	10,00	3R80558	26,83
M 18,0 x 2,50	110,0	37,0	14,00	11,20	3R80562	38,50
M 20,0 x 2,50	112,0	37,0	14,00	11,20	3R80566	43,17
M 22,0 x 2,50	118,0	38,0	16,00	12,50	3R80570	51,34
M 24,0 x 3,00	130,0	45,0	18,00	14,00	3R80574	58,34
M 27,0 x 3,00	135,0	45,0	20,00	16,00	3R80576	81,67
M 30,0 x 3,50	138,0	48,0	20,00	16,00	3R80578	107,35

CON DIENTE ALTERNO (PASANTE)

WIHT INTERRUPTED THREADS (THROUGH)
AVEC ALTERNANCE DENT (INTERNE)



HSS-G

ISO 529

FORM B-AZ

TOL 6H



D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
M 3 x 0,50	48,0	11,0	3,15	2,50	3R80926	11,66
M 4 x 0,70	53,0	13,0	4,00	3,15	3R80930	11,33
M 5 x 0,80	58,0	16,0	5,00	4,00	3R80934	12,14
M 6 x 1,00	66,0	19,0	6,30	5,00	3R80938	12,14
M 7 x 1,00	66,0	19,0	7,10	5,60	3R80940	14,69
M 8 x 1,25	72,0	22,0	8,00	6,30	3R80942	12,83
M 10 x 1,50	80,0	24,0	10,00	8,00	3R80946	16,09
M 12 x 1,75	89,0	29,0	9,00	7,10	3R80950	20,31
M 14 x 2,00	95,0	30,0	11,20	9,00	3R80954	27,77
M 16 x 2,00	102,0	32,0	12,50	10,00	3R80958	31,03
M 18 x 2,50	110,0	37,0	14,00	11,20	3R80962	46,67
M 20 x 2,50	112,0	37,0	14,00	11,20	3R80966	53,67
M 22 x 2,50	118,0	38,0	16,00	12,50	3R80970	60,67
M 24 x 3,00	130,0	45,0	18,00	14,00	3R80974	67,67

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

M MÉTRICA ISO-ROSCA DIN 13
METRIC ISO-THREAD DIN 13
FILETAGE MÉTRIQUE ISO DIN 13

FORMA C/35° RPS • FORM C/35° RPS

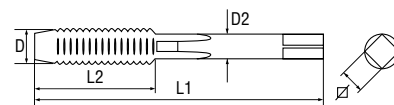


HSS-G

ISO 529

FORM C/35°

TOL 6H



D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
M 2,5 x 0,45	44,5	9,5	2,80	2,24	3R80722	16,81
M 2,6 x 0,45	44,5	9,5	2,90	2,24	3R80724	16,81
M 3,0 x 0,50	48,0	11,0	3,15	2,50	3R80726	10,03
M 4,0 x 0,70	53,0	13,0	4,00	3,15	3R80730	10,03
M 5,0 x 0,80	58,0	16,0	5,00	4,00	3R80734	10,03
M 6,0 x 1,00	66,0	19,0	6,30	5,00	3R80738	10,26
M 8,0 x 1,25	72,0	22,0	8,00	6,30	3R80742	12,14
M 10,0 x 1,50	80,0	24,0	10,00	8,00	3R80746	15,64
M 12,0 x 1,75	89,0	29,0	9,00	7,10	3R80750	20,31
M 14,0 x 2,00	95,0	30,0	11,20	9,00	3R80754	27,77
M 16,0 x 2,00	102,0	32,0	12,50	10,00	3R80758	31,03
M 18,0 x 2,50	110,0	37,0	14,00	11,20	3R80762	46,67
M 20,0 x 2,50	112,0	37,0	14,00	11,20	3R80766	53,67
M 22,0 x 2,50	118,0	38,0	16,00	12,00	3R80770	60,67
M 24,0 x 3,00	130,0	45,0	18,00	14,00	3R80774	67,67
M 27,0 x 3,00	135,0	45,0	20,00	16,00	3R80776	98,01
M 30,0 x 3,50	138,0	48,0	20,00	16,00	3R80778	128,35

MACHOS MÁQUINA CORTOS

SHORT MACHINE TAPS • TARAUDS MACHINE COURTS

Mf MÉTRICA FINA ISO ROSCA DIN 13

METRIC FINE ISO THREAD DIN 13
FILETAGE MÉTRIQUE ISO DIN 13

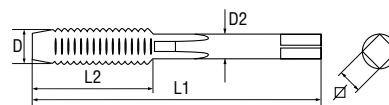


HSS-G

DIN 2181

FORM
D

TOL
6H



D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
M 6 x 0,75	50	14	6,0	4,9	3R66318	14,39
M 8 x 0,75	50	19	6,0	4,9	3R66324	14,39
M 8 x 1,00	56	22	6,0	4,9	3R66326	14,39
M 9 x 0,75	56	19	7,0	5,5	3R66328	16,08
M 9 x 1,00	63	20	7,0	5,5	3R66330	16,08
M 10 x 0,75	63	20	7,0	5,5	3R66332	16,08
M 10 x 1,00	63	20	7,0	5,5	3R66336	14,39
M 10 x 1,25	70	24	7,0	5,5	3R66338	16,08
M 12 x 1,00	70	22	9,0	7,0	3R66344	20,82
M 12 x 1,25	70	22	9,0	7,0	3R66346	20,82
M 12 x 1,50	70	22	9,0	7,0	3R66348	19,29
M 13 x 1,00	70	22	11,0	9,0	3R66350	32,14
M 13 x 1,50	70	22	11,0	9,0	3R66351	32,14
M 14 x 1,00	70	22	11,0	9,0	3R66353	32,14
M 14 x 1,25	70	22	11,0	9,0	3R66354	24,20
M 14 x 1,50	70	22	11,0	9,0	3R66356	20,82
M 15 x 1,50	70	22	12,0	9,0	3R66360	35,52
M 16 x 1,50	70	22	12,0	9,0	3R66366	25,71
M 18 x 1,00	80	22	14,0	11,0	3R66370	38,58
M 18 x 1,50	80	22	14,0	11,0	3R66372	29,08
M 20 x 1,50	80	22	16,0	12,0	3R66384	35,52
M 20 x 2,00	80	22	16,0	12,0	3R66386	48,37
M 22 x 1,50	80	22	18,0	14,5	3R66394	45,31
M 22 x 2,00	80	22	18,0	14,5	3R66396	48,37
M 24 x 1,50	90	22	18,0	14,5	3R66504	48,97
M 24 x 2,00	90	22	18,0	14,5	3R66506	64,29
M 25 x 1,50	90	22	18,0	14,5	3R66508	96,43
M 26 x 1,50	90	22	18,0	14,5	3R66512	90,97
M 27 x 1,50	90	22	20,0	16,0	3R66517	90,97
M 28 x 1,50	90	22	20,0	16,0	3R66522	109,74
M 30 x 1,50	90	22	22,0	18,0	3R66530	121,31
M 30 x 2,00	90	22	22,0	18,0	3R66532	121,31
M 32 x 1,50	90	22	22,0	18,0	3R66536	121,31

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

BSW

WHITWORTH BS 84
WHITWORTH THREAD BS 84
FILETAGE WHITWORTH BS 84

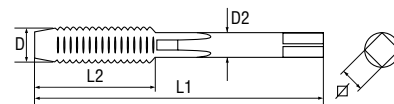


HSS-G

DIN 351

≈DIN 352

FORM D



D Ø x P (")	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
1/8 x 40	40	12	3,5	2,7	3R62306	10,41
3/16 x 24	50	18	6,0	4,9	3R62310	10,41
1/4 x 20	50	19	6,0	4,9	3R62314	10,41
5/16 x 18	56	22	6,0	4,9	3R62316	11,32
3/8 x 16	70	24	7,0	5,5	3R62318	12,87
7/16 x 14	70	24	8,0	6,2	3R62320	16,08
1/2 x 12	75	29	9,0	7,0	3R62322	19,29
9/16 x 12	80	30	11,0	9,0	3R62324	25,10
5/8 x 11	80	32	12,0	9,0	3R62326	28,46
3/4 x 10	95	40	14,0	11,0	3R62330	37,96
7/8 x 9	100	40	18,0	14,5	3R62334	46,86
1 x 8	110	50	18,0	14,5	3R62338	56,33

G(BSP)

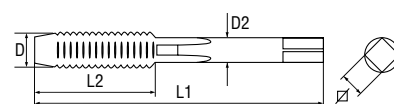
GAS DIN ISO 228
BSP PIPE THREAD DIN ISO 228
FILETAGE PAS GAZ DIN ISO 228



HSS-G

DIN 5157

FORM D



D Ø x P (")	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
G 1/8 x 28	63	20	7	5,5	3R65312	13,77
G 1/4 x 19	70	22	11	9,0	3R65314	15,30
G 3/8 x 19	70	22	12	9,0	3R65316	22,65
G 1/2 x 14	80	22	16	12,0	3R65318	29,08
G 3/4 x 14	90	22	20	16,0	3R65322	41,94
G 1 x 11	100	25	25	20,0	3R65326	72,57
G 1.1/4 x 11	125	40	32	24,0	3R65334	120,92
G 1.1/2 x 11	140	40	32	29,0	3R65342	153,07
G 1.3/4 x 11	140	40	40	32,0	3R65350	321,43
G 2 x 11	160	40	45	35,0	3R65354	321,43
G 2.1/4 x 11	160	40	50	39,0	3R65358	766,60
G 2.1/2 x 11	160	40	50	39,0	3R65362	873,48
G 2.3/4 x 11	160	40	50	39,0	3R65366	1.391,75
G 3 x 11	160	40	50	39,0	3R65370	1.619,33
G 3.1/2 x 11	180	45	56	44,0	3R65374	2.532,23
G 4 x 11	180	45	56	44,0	3R65378	3.153,75

MACHOS MÁQUINA CORTOS

SHORT MACHINE TAPS • TARAUDS MACHINE COURTS

UNC ROSCA GRUESA UNIFICADA ANSI B 1.1 UNC

UNIFIED COARSE THREAD ANSI B 1.1
FILETAGE UNIFIÉ PAS GROS ANSI B 1.1

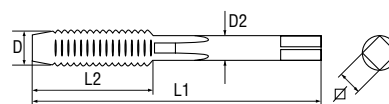


HSS-G

≈DIN 352

FORM
D

TOL
2B



D Ø x P (")	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
1/4 x 20	50	19	6,0	4,9	3R63314	10,41
5/16 x 18	56	22	6,0	4,9	3R63316	11,32
3/8 x 16	70	24	7,0	5,5	3R63318	12,87
7/16 x 14	70	24	8,0	6,2	3R63320	16,08
1/2 x 13	75	29	9,0	7,0	3R63322	19,29
19/16 x 12	80	30	11,0	9,0	3R63324	25,10
5/8 x 11	80	32	12,0	9,0	3R63326	28,46
3/4 x 10	95	40	14,0	11,0	3R63330	37,96
7/8 x 9	100	40	18,0	14,5	3R63334	46,86
1 x 8	110	50	18,0	14,5	3R63338	56,33

UNF ROSCA FINA UNIFICADA ANSI B 1.1 UNF

UNIFIED FINE THREAD ANSI B 1.1
FILETAGE UNIFIÉ PAS GROS ANSI B 1.1

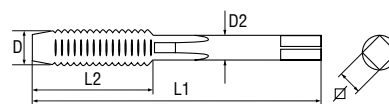


HSS-G

≈DIN 352

FORM
D

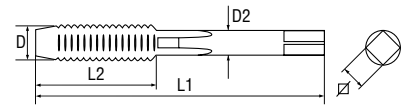
TOL
2B



D Ø x P (")	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
1/4 x 28	50	18	6,0	4,9	3R64314	10,41
5/16 x 24	56	22	6,0	4,9	3R64316	11,32
3/8 x 24	63	22	7,0	5,5	3R64318	12,87
7/16 x 20	63	22	8,0	6,2	3R64320	16,08
1/2 x 20	75	24	9,0	7,0	3R64322	19,29
19/16 x 18	80	28	11,0	9,0	3R64324	25,10
5/8 x 18	80	28	12,0	9,0	3R64326	28,46
3/4 x 16	95	32	14,0	11,0	3R64330	37,96
7/8 x 14	100	36	18,0	14,5	3R64334	46,86
1 x 12	110	40	18,0	14,5	3R64338	56,33

NPT ROSCA AMERICANA PARA TUBO, CONICIDAD 1:16

NPT AMERICAN TAPERED THREAD, TAPER 1:16
FILETAGE AMERICAIN NPT CONICITÉ 1:16



HSS-G

FORM C



D Ø x P (")	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
NPT 1/16 x 27	65	19	7,0	5,5	3R63510	37,49
NPT 1/8 x 27	65	19	7,0	5,5	3R63512	31,23
NPT 1/4 x 18	70	25	11,0	9,0	3R63514	34,21
NPT 3/8 x 18	75	26	12,0	9,0	3R63516	47,59
NPT 1/2 x 14	80	31	16,0	12,0	3R63518	59,49
NPT 3/4 x 14	100	33	20,0	16,0	3R63522	78,23
NPT 1 x 11.5	110	38	25,0	20,0	3R63526	124,95
NPT 1.1/4 x 11.5	125	41	32,0	24,0	3R63534	187,41
NPT 1.1/2 x 11.5	140	42	36,0	29,0	3R63542	351,01
NPT 2 x 11.5	160	44	36,0	35,0	3R63554	431,32



HSS-G

FORM B



D Ø x P (")	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
NPT 1/16 x 27	55	17,5	8,0	6,0	3R98502	47,00
NPT 1/8 x 27	55	19,0	8,0	6,0	3R98506	37,49
NPT 1/4 x 18	62	28,0	11,0	9,0	3R98514	37,49
NPT 3/8 x 18	65	28,0	14,0	11,0	3R98518	56,53
NPT 1/2 x 14	80	35,0	18,0	14,0	3R98522	70,51
NPT 3/4 x 14	85	35,0	23,0	17,0	3R98530	94,00
NPT 1 x 11.5	95	45,0	26,0	21,0	3R98538	150,51
NPT 1.1/4 x 11.5	105	45,0	32,0	26,0	3R98546	226,06
NPT 1.1/2 x 11.5	110	45,0	38,0	29,0	3R98554	374,81
NPT 2 x 11.5	120	50,0	46,0	35,0	3R98570	470,01



HSS-G

FORM C/35°



D Ø x P (")	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
NPT 1/16 x 27	55	17,5	6,0	6,0	3R98702	47,00
NPT 1/8 x 27	55	19,0	8,0	6,0	3R98706	37,49
NPT 1/4 x 18	62	28,0	11,0	9,0	3R98714	37,49
NPT 3/8 x 18	65	28,0	14,0	11,0	3R98718	56,53
NPT 1/2 x 14	80	35,0	18,0	14,0	3R98722	70,51
NPT 3/4 x 14	85	35,0	23,0	17,0	3R98730	94,00
NPT 1 x 11.5	95	45,0	26,0	21,0	3R98738	150,51
NPT 1.1/4 x 11.5	105	45,0	32,0	26,0	3R98746	226,06
NPT 1.1/2 x 11.5	110	45,0	38,0	29,0	3R98754	374,81
NPT 2 x 11.5	120	50,0	46,0	35,0	3R98770	470,01

MACHOS MÁQUINA COMBINADOS

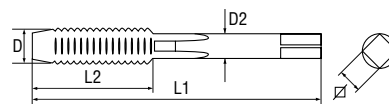
COMBINED MACHINE TAPS • TARAUDS COMBINÉS

M MÉTRICA ISO-ROSCA DIN 13

METRIC ISO-THREAD DIN 13
MÉTRIQUE DIN-13



HSS-G



D Ø x P (mm)	D 1 (mm)	L1 (mm)	Cod.	€/Unid.
M 3 x 0,50	2,5	36	3R67226	16,50
M 4 x 0,70	3,3	39	3R67230	16,50
M 5 x 0,80	4,2	41	3R67234	16,50
M 6 x 1,00	5,0	44	3R67238	16,50
M 8 x 1,25	6,8	50	3R67242	23,59
M 10 x 1,50	8,5	59	3R67246	28,29

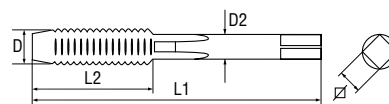
M MÉTRICA ISO-ROSCA DIN 13

METRIC ISO-THREAD DIN 13
MÉTRIQUE DIN-13



HSS-G

TIN



D Ø x P (mm)	D 1 (mm)	L1 (mm)	Cod.	€/Unid.
M 3 x 0,50	2,5	36	3R67210	33,76
M 4 x 0,70	3,3	39	3R67211	33,76
M 5 x 0,80	4,2	41	3R67212	33,76
M 6 x 1,00	5,0	44	3R67213	33,76
M 8 x 1,25	6,8	50	3R67214	45,32
M 10 x 1,50	8,5	59	3R67215	62,51

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

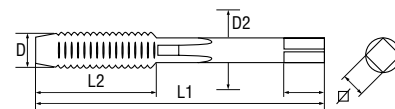
DISPLAYS
DISPLAYS • DISPLAYS

UNC

ROSCA GRUESA UNIFICADA ANSI B 1.1
 UNIFIED COARSE THREAD ANSI B 1.1
 FILETAGE UNIFIÉ PAS GROS ANSI B 1.1



HSS-G



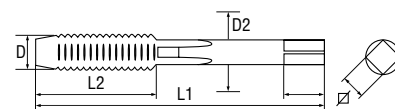
D Ø x P (")	D 1 (mm)	L1 (mm)	Cod.	€/Unid.
Nr. 4 x 40	2.30	36	3R67280	23,44
Nr. 5 x 40	2.60	36	3R67281	23,44
Nr. 6 x 32	2.85	39	3R67282	23,44
Nr. 8 x 32	3.50	39	3R67283	23,44
Nr. 10 x 24	3.90	41	3R67284	23,44
Nr. 12 x 24	4.50	41	3R67285	23,44
1/4 x 20	5.20	44	3R67286	23,44
5/16 x 18	6.60	50	3R67287	32,81
3/8 x 16	8.00	59	3R67288	39,38

UNF

ROSCA FINA UNIFICADA ANSI B 1.1
 UNIFIED FINE THREAD ANSI B 1.1
 FILETAGE UNIFIÉ PAS GROS ANSI B 1.1



HSS-G



D Ø x P (")	D 1 (mm)	L1 (mm)	Cod.	€/Unid.
Nr. 4 x 48	2.4	36	3R67290	23,44
Nr. 5 x 44	2.7	36	3R67291	23,44
Nr. 6 x 40	3.0	39	3R67292	23,44
Nr. 8 x 36	3.5	39	3R67293	23,44
Nr. 10 x 32	4.1	41	3R67294	23,44
Nr. 12 x 28	4.7	41	3R67295	23,44
1/4 x 28	5.5	44	3R67296	23,44
5/16 x 24	6.9	50	3R67297	32,81
3/8 x 24	8.5	59	3R67298	39,38

MACHOS MÁQUINA COMBINADOS

COMBINED MACHINE TAPS • TARAUDS COMBINÉS

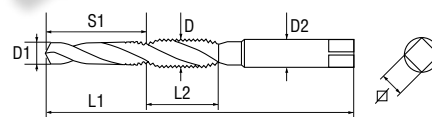
M MÉTRICA ISO-ROSCA DIN 13

METRIC ISO-THREAD DIN 13
MÉTRIQUE DIN-13



HSS-CO 5%

TOL 6H



D Ø x P (mm)	L1 (mm)	S1 (mm)	L2 (mm)	D1 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
M 3 x 0,50	56	16	11	2.5	3.0	2.4	3R37026	34,75
M 4 x 0,70	63	18	14	3.3	4.0	3.0	3R37030	34,75
M 5 x 0,80	71	20	18	4.2	5.0	3.8	3R37034	34,75
M 6 x 1,00	80	22	22	5.0	6.0	4.9	3R37038	34,75
M 8 x 1,25	95	26	25	6.8	8.0	6.2	3R37042	50,20
M 10 x 1,50	106	30	31	8.5	10.0	8.0	3R37046	57,92
M 12 x 1,75	115	32	35	10.2	12.0	9.0	3R37050	64,37

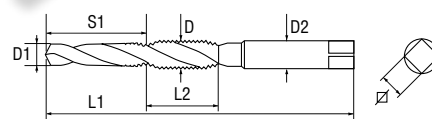
BSW WHITWORTH BS 84

WHITWORTH BS 84
WHITWORTH BS 84



HSS-CO 5%

TOL 6H



D Ø x P (")	L1 (mm)	S1 (mm)	L2 (mm)	D1 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
Nr. 4 x 48	56	16	11	2.6	3.0	2.4	3R70006	37,33
Nr. 5 x 44	63	18	14	3.2	4.0	3.0	3R70008	37,33
Nr. 6 x 40	71	20	18	3.7	5.0	3.8	3R70010	37,33
Nr. 8 x 36	80	22	22	5.1	6.0	4.9	3R70014	42,12
Nr. 10 x 32	95	26	25	6.5	8.0	6.2	3R70016	47,73
Nr. 12 x 28	106	30	31	7.9	10.0	8.0	3R70018	51,94
1/4 x 28	115	32	35	10.5	12.0	9.0	3R70022	61,76

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

**TABLA DE APLICACIONES
Y VELOCIDADES DE CORTE
RECOMENDADAS PARA MACHOS
MÁQUINA**
**MACHINE TAPS APPLICATION GUIDE
AND RECOMMENDED CUTTING
SPEED**
**TABLE D'APPLICATIONS ET VITESSE
DE COUPE RECOMMANDÉ POUR
TARAUDS MACHINE**


MATERIAL / MATERIAL / MATIÈRE		Resistencia Resistance Resistance N/mm	Pág. 267	Pág. 266	Pág. 270	Pág. 268	Pág. 271	Pág. 268	Pág. 271	Pág. 269
ACEROS STEELS ACIERS	Decoletaaje <i>Machining • Décolletage</i>	<500	5 - 15	5 - 15	5 - 15	20 - 30	20 - 30	20 - 30	20 - 30	5 - 15
	Carbono <0,4% <i><0,4% Carbon • Carbon <0,4%</i>	<850	12 - 18	12 - 18	12 - 18	15 - 20	15 - 20	15 - 25	15 - 25	12 - 18
	Acero para herramientas <i>Steel for tools • Acier pour outils</i>	<1.200								
	Templado - Revenido <i>Tempered - Quenched • Trempé - Revenu</i>	<1.400								
ACEROS INOXIDABLES STAINLESS STEEL ACIER INOXYDABLE	Austeníticos Cr-Ni <i>Cr-Ni Austenitics • Cr-Ni austenitique</i>	<850								
	Martensíticos Cr-Mo <i>Cr-Mo Martensitics • Cr-Mo martensitique</i>	<1.200								
FUNDICIÓN CAST IRON FONTE	Fundición gris <i>Grey cast iron • Fonte grise</i>	<700	10 - 15	10 - 15	10 - 15					
	Fundición dura <i>Hard cast iron • Fonte dur</i>	<1.000								
ALUMINIO ALUMINIUM A LUMINIUM	Puro <i>Pure • Pure</i>	<350								
	Si < 10%	<600	10 - 15		10 - 15	10 - 20	10 - 20	20 - 30	20 - 30	
	Si > 10%	<600	10 - 15		10 - 15			20 - 30	20 - 30	
COBRE COPPER CUIVRE	Zamak <i>Zamak • Zamak</i>	<600								
	Bronce <i>Bronze • Bronze</i>	<350								
	Cobre viruta larga <i>Long chip copper • Cuivre coupage long</i>	<700	15 - 20		15 - 20	15 - 20	15 - 20			
	Cobre viruta corta <i>Short chip coppe • Cuivre coupage court</i>	<700								
	Latón duro <i>Hard Brass • Laiton dur</i>	<700	10 - 15		10 - 15	20 - 30	20 - 30			
Latón tenaz <i>Tough Brass • Laiton tenace</i>	<700	10 - 15		10 - 15	10 - 15	10 - 15				
TITANIO TITANIUM TITANE	Puro <i>Pure • Pure</i>	<700								
	Aleaciones de Titanio <i>Titanium alloys • Alliages de titane</i>	<1.200								
SINTÉTICOS PLASTICS PLASTIQUES	Termoplásticos <i>Thermoplastics • Thermoplastique</i>	-	10 - 15		10 - 15	10 - 20	10 - 20			
	Duroplásticos <i>Hard-plastics • Duroplastique</i>	-								

20 - 25

 Macho recomendado por SESATOOLS y velocidad de corte
 SESA TOOLS recommendation and cutting speed
 Foret recommandé par SESA TOOLS et vitesse de coupage

20 - 25

 Buen rendimiento y velocidad de corte (RPM)
 Good performance and speed of the cut (RPM)
 Bon rendement et vitesse de coup recommandée (RPM)

INFORMACIÓN TÉCNICA

TECHNICAL INFORMATION • INFORMATION TECHNIQUE

HSS-CO 5%		PM HL		NEW HSS-E-V3 TIN		NEW HSS-CO 5%		NEW PM FUTURA			NEW HSS-CO 5% ALUSPEED		NEW HSS-CO 5% TIN		
TOL 6H	FORM B-AZ	TOL 6H	FORM B	TOL 6H	FORM B	TOL 6H	FORM B	TOL 6H	FORM C/35°	TOL 6H	FORM C/15°	TOL 6H	FORM B	TOL 6HX	
Pág. 272	Pág. 304	Pág. 304	Pág. 305	Pág. 305	Pág. 306	Pág. 306	Pág. 311	Pág. 311	Pág. 311	Pág. 312	Pág. 312	Pág. 313	Pág. 313		
	8 - 10	8 - 10												12 - 25	12 - 25
	8 - 10	8 - 10	8 - 10	8 - 10										15 - 25	15 - 25
	6 - 8	6 - 8	4 - 6	4 - 6											
							3 - 8	3 - 8	3 - 8						
	8 - 14	8 - 14	6 - 10	6 - 10	5 - 10	5 - 10								15 - 25	15 - 25
	6 - 10	6 - 10	4 - 7	4 - 7										10 - 20	10 - 20
			8 - 12	8 - 12											
			7 - 10	7 - 10											
												15 - 35	15 - 35		
10 - 15			12 - 20	12 - 20								15 - 35	15 - 35		
10 - 15			12 - 20	12 - 20								15 - 30	15 - 30		
10 - 15												15 - 30	15 - 30		
														15 - 35	15 - 35
	10 - 15	10 - 15	12 - 20	12 - 20										10 - 20	10 - 20
	10 - 15	10 - 15													
			2 - 8	2 - 8	2 - 5	2 - 5									
							3 - 8	3 - 8	3 - 8					10 - 20	10 - 20
							10 - 15	10 - 15	10 - 15						

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

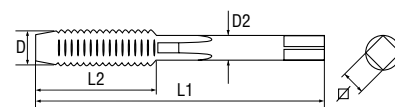
ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

M MÉTRICA ISO-ROSCA DIN 13
METRIC ISO-THREAD DIN 13
MÉTRIQUE DIN-13



HSS-CO 5%

DIN 371

FORM C

TOL 6H

D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
M 2,0 x 0,40	45	8	2,8	2,1	3R37416	13,45
M 2,3 x 0,40	45	9	2,8	2,1	3R37418	13,45
M 2,5 x 0,45	50	9	2,8	2,1	3R37422	13,45
M 2,6 x 0,45	50	9	2,8	2,1	3R37424	13,45
M 3,0 x 0,50	56	11	3,5	2,7	3R37426	10,45
M 3,5 x 0,60	56	13	4,0	3,0	3R37428	12,38
M 4,0 x 0,70	63	13	4,5	3,4	3R37430	10,63
M 5,0 x 0,80	70	16	6,0	4,9	3R37434	10,78
M 6,0 x 1,00	80	19	6,0	4,9	3R37438	11,11
M 7,0 x 1,00	80	19	7,0	5,5	3R37440	15,12
M 8,0 x 1,25	90	22	8,0	6,2	3R37442	13,73
M 10,0 x 1,50	100	24	10,0	8,0	3R37446	15,71



HSS-CO 5%

DIN 376

FORM C

TOL 6H



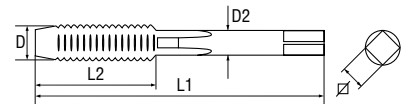
D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
M 3 x 0,50	56	11	2,2	-	3R38426	10,72
M 4 x 0,70	63	13	2,8	2,1	3R38430	10,91
M 5 x 0,80	70	16	3,5	2,7	3R38434	11,05
M 6 x 1,00	80	19	4,5	3,4	3R38438	11,40
M 8 x 1,25	90	22	6,0	4,9	3R38442	14,09
M 10 x 1,50	100	24	7,0	5,5	3R38446	16,12
M 12 x 1,75	110	29	9,0	7,0	3R38450	19,21
M 14 x 2,00	110	30	11,0	9,0	3R38454	25,66
M 16 x 2,00	110	32	12,0	9,0	3R38458	29,64
M 18 x 2,50	125	34	14,0	11,0	3R38462	39,13
M 20 x 2,50	140	34	16,0	12,0	3R38466	53,39
M 22 x 2,50	140	34	18,0	14,5	3R38470	61,23
M 24 x 3,00	160	38	18,0	14,5	3R38474	67,93
M 27 x 3,00	160	38	20,0	16,0	3R38476	105,18
M 30 x 3,50	180	45	22,0	18,0	3R38478	112,49
M 33 x 3,50	180	50	25,0	20,0	3R38480	152,08
M 36 x 4,00	200	56	28,0	22,0	3R38482	238,41
M 39 x 4,00	200	60	32,0	24,0	3R38484	307,29
M 42 x 4,50	200	60	32,0	24,0	3R38486	351,06
M 45 x 4,50	220	65	36,0	29,0	3R38488	398,22
M 48 x 5,00	250	70	36,0	29,0	3R38490	434,89
M 52 x 5,00	250	70	40,0	32,0	3R38492	537,60

MACHOS MÁQUINA

MACHINE TAPS • TARAUDS MACHINE

M MÉTRICA ISO-ROSCA DIN 13

METRIC ISO-THREAD DIN 13
MÉTRIQUE DIN-13



HSS-CO 5%

DIN 371

FORM B

TOL 6H



D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
M 2,0 x 0,40	45	8	2,8	2,1	3R37516	14,62
M 2,5 x 0,45	50	9	2,8	2,1	3R37522	15,06
M 3,0 x 0,50	56	11	3,5	2,7	3R37526	10,97
M 3,5 x 0,60	56	13	4,0	3,0	3R37528	12,27
M 4,0 x 0,70	63	13	4,5	3,4	3R37530	10,93
M 5,0 x 0,80	70	16	6,0	4,9	3R37534	11,36
M 6,0 x 1,00	80	19	6,0	4,9	3R37538	11,90
M 7,0 x 1,00	80	19	7,0	5,5	3R37540	15,97
M 8,0 x 1,25	90	22	8,0	6,2	3R37542	13,76
M 10,0 x 1,50	100	24	10,0	8,0	3R37546	16,55



HSS-CO 5%

DIN 376

FORM B

TOL 6H



D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
M 3 x 0,50	56	11	2,2	-	3R38526	11,55
M 4 x 0,70	63	13	2,8	2,1	3R38530	11,51
M 5 x 0,80	70	16	3,5	2,7	3R38534	11,97
M 6 x 1,00	80	19	4,5	3,4	3R38538	12,54
M 8 x 1,25	90	22	6,0	4,9	3R38542	14,49
M 10 x 1,50	100	24	7,0	5,5	3R38546	17,43
M 12 x 1,75	110	29	9,0	7,0	3R38550	22,16
M 14 x 2,00	110	30	11,0	9,0	3R38554	28,58
M 16 x 2,00	110	32	12,0	9,0	3R38558	33,66
M 18 x 2,50	125	34	14,0	11,0	3R38562	47,68
M 20 x 2,50	140	34	16,0	12,0	3R38566	56,02
M 22 x 2,50	140	34	18,0	14,5	3R38570	63,97
M 24 x 3,00	160	38	18,0	14,5	3R38574	73,59
M 27 x 3,00	160	38	20,0	16,0	3R38576	112,65
M 30 x 3,50	180	45	22,0	18,0	3R38578	120,91
M 33 x 3,50	180	50	25,0	20,0	3R38580	161,97
M 36 x 4,00	200	56	28,0	22,0	3R38582	266,37
M 39 x 4,00	200	60	32,0	24,0	3R38584	343,60
M 42 x 4,50	200	60	32,0	24,0	3R38586	393,40
M 45 x 4,50	220	65	36,0	29,0	3R38588	446,90
M 48 x 5,00	250	70	36,0	29,0	3R38590	490,85
M 52 x 5,00	250	70	40,0	32,0	3R38592	598,07

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
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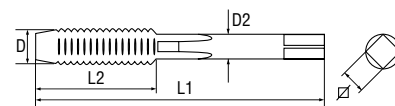
HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
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DISPLAYS
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M MÉTRICA ISO-ROSCA DIN 13

METRIC ISO-THREAD DIN 13
MÉTRIQUE DIN-13



HSS-CO 5%

TIN

DIN 371

FORM B

TOL 6H



D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
M 3 x 0,50	56	11	3,5	2,7	3R31526	19,93
M 4 x 0,70	63	13	4,5	3,4	3R31530	19,93
M 5 x 0,80	70	16	6,0	4,9	3R31534	20,44
M 6 x 1,00	80	19	6,0	4,9	3R31538	23,48
M 8 x 1,25	90	22	8,0	6,2	3R31542	26,83
M 10 x 1,50	100	24	10,0	8,0	3R31546	32,85
M 12 x 1,75*	110	29	9,0	7,0	3R31550	40,73

* Machos en DIN 376



HSS-CO 5%

VAP

DIN 371

FORM B

TOL 6H



D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
M 3 x 0,50	56	11	3,5	2,7	3R31570	12,80
M 4 x 0,70	63	13	4,5	3,4	3R31571	12,80
M 5 x 0,80	70	16	6,0	4,9	3R31572	13,97
M 6 x 1,00	80	19	6,0	4,9	3R31573	13,97
M 8 x 1,25	90	22	8,0	6,2	3R31574	16,76
M 10 x 1,50	100	24	10,0	8,0	3R31575	20,49



HSS-CO 5%

VAP

DIN 376

FORM B

TOL 6H



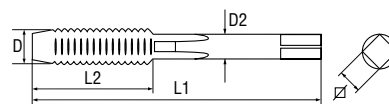
D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
M 12 x 1,75	110	29	9,0	7,0	3R31576	26,95
M 14 x 2,00	110	30	11,0	9,0	3R31577	35,79
M 16 x 2,00	110	32	12,0	9,0	3R31578	39,93
M 18 x 2,50	125	34	14,0	11,0	3R31579	57,05
M 20 x 2,50	140	34	16,0	12,0	3R31580	77,02

MACHOS MÁQUINA

MACHINE TAPS • TARAUDS MACHINE

M MÉTRICA ISO-ROSCA DIN 13

METRIC ISO-THREAD DIN 13
MÉTRIQUE DIN-13



HSS-CO 5%

DIN 371

FORM C/15°

TOL 6H



D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
M 3,0 x 0,50	56	11	3,5	2,7	3R37626	14,03
M 3,5 x 0,60	56	13	4,0	3,0	3R37628	15,80
M 4,0 x 0,70	63	13	4,5	3,4	3R37630	14,03
M 5,0 x 0,80	70	16	6,0	4,9	3R37634	14,56
M 6,0 x 1,00	80	19	6,0	4,9	3R37638	14,73
M 7,0 x 1,00	80	19	7,0	5,5	3R37640	20,46
M 8,0 x 1,25	90	22	8,0	6,2	3R37642	17,76
M 10,0 x 1,50	100	24	10,0	8,0	3R37646	21,94



HSS-CO 5%

DIN 376

FORM C/15°

TOL 6H



D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
M 3 x 0,50	56	11	2,2	-	3R38626	14,67
M 4 x 0,70	63	13	2,8	2,1	3R38630	14,67
M 5 x 0,80	70	16	3,5	2,7	3R38634	15,24
M 6 x 1,00	80	19	4,5	3,4	3R38638	15,40
M 8 x 1,25	90	22	6,0	4,9	3R38642	18,56
M 10 x 1,50	100	24	7,0	5,5	3R38646	21,94
M 12 x 1,75	110	29	9,0	7,0	3R38650	27,39
M 14 x 2,00	110	30	11,0	9,0	3R38654	34,37
M 16 x 2,00	110	32	12,0	11,0	3R38658	40,65
M 18 x 2,50	125	34	14,0	11,0	3R38662	55,58
M 20 x 2,50	140	34	16,0	12,0	3R38666	73,80
M 22 x 2,50	140	34	18,0	14,5	3R38670	84,84
M 24 x 3,00	160	38	18,0	14,5	3R38674	90,36

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

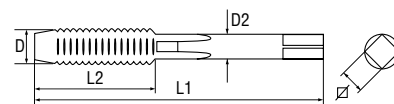
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HEXAGONAL
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METROLOGÍA
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DISPLAYS
DISPLAYS • DISPLAYS

M MÉTRICA ISO-ROSCA DIN 13
METRIC ISO-THREAD DIN 13
MÉTRIQUE DIN-13



D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
M 2,0 x 0,40	45	6	2,8	2,1	3R37716	17,06
M 2,5 x 0,45	50	6	2,8	2,1	3R37722	17,57
M 3,0 x 0,50	56	6	3,5	2,7	3R37726	13,10
M 3,5 x 0,60	56	13	4,0	3,0	3R37728	15,36
M 4,0 x 0,70	63	7	4,5	3,4	3R37730	13,10
M 5,0 x 0,80	70	8	6,0	4,9	3R37734	13,75
M 6,0 x 1,00	80	10	6,0	4,9	3R37738	13,75
M 7,0 x 1,00	80	19	7,0	5,5	3R37740	18,34
M 8,0 x 1,25	90	14	8,0	6,2	3R37742	16,64
M 10,0 x 1,50	100	16	10,0	8,0	3R37746	19,44



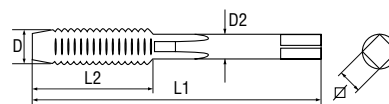
D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
M 3 x 0,50	56	6	2,2	-	3R38726	13,73
M 4 x 0,70	63	7	2,8	2,1	3R38730	13,73
M 5 x 0,80	70	8	3,5	2,7	3R38734	14,42
M 6 x 1,00	80	10	4,5	3,4	3R38738	14,42
M 8 x 1,25	90	14	6,0	4,9	3R38742	17,46
M 10 x 1,50	100	16	7,0	5,5	3R38746	20,39
M 12 x 1,75	110	18	9,0	7,0	3R38750	24,56
M 14 x 2,00	110	20	11,0	9,0	3R38754	31,88
M 16 x 2,00	110	22	12,0	9,0	3R38758	38,70
M 18 x 2,50	125	25	14,0	11,0	3R38762	52,34
M 20 x 2,50	140	25	16,0	12,0	3R38766	65,58
M 22 x 2,50	140	27	18,0	14,5	3R38770	75,28
M 24 x 3,00	160	30	18,0	14,5	3R38774	81,51
M 27 x 3,00	160	30	20,0	16,0	3R38776	131,20
M 30 x 3,50	180	35	22,0	18,0	3R38778	137,47
M 33 x 3,50	180	35	25,0	20,0	3R38780	189,30
M 36 x 4,00	200	40	28,0	22,0	3R38782	312,31
M 39 x 4,00	200	40	32,0	24,0	3R38784	474,67
M 42 x 4,50	200	45	32,0	24,0	3R38786	548,84
M 45 x 4,50	220	45	36,0	29,0	3R38788	623,00
M 48 x 5,00	250	50	36,0	29,0	3R38790	682,33
M 52 x 5,00	250	50	40,0	32,0	3R38792	830,66

MACHOS MÁQUINA

MACHINE TAPS • TARAUDS MACHINE

M MÉTRICA ISO-ROSCA DIN 13

METRIC ISO-THREAD DIN 13
MÉTRIQUE DIN-13



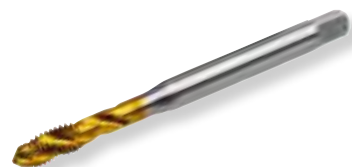
HSS-CO 5%

TIN

DIN 371

FORM C/35°

TOL 6H



D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
M 3 x 0,50	56	6	3,5	2,7	3R31726	21,27
M 4 x 0,70	63	7	4,5	3,4	3R31730	21,27
M 5 x 0,80	70	8	6,0	4,9	3R31734	22,47
M 6 x 1,00	80	10	6,0	4,9	3R31738	25,17
M 8 x 1,25	90	14	8,0	6,2	3R31742	30,20
M 10 x 1,50	100	16	10,0	8,0	3R31746	37,48
M 12 x 1,75*	110	18	7,0	7,0	3R31750	45,51

* Machos en DIN376 / Taps on DIN376 / Tarauds en DIN376



HSS-CO 5%

VAP

DIN 371

FORM C/35°

TOL 6H



D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
M 3 x 0,50	56	6	3,5	2,7	3R31770	16,19
M 4 x 0,70	63	7	4,5	3,4	3R31771	16,19
M 5 x 0,80	70	8	4,5	4,9	3R31772	17,66
M 6 x 1,00	80	10	6,0	4,9	3R31773	17,66
M 8 x 1,25	90	14	6,0	6,2	3R31774	21,08
M 10 x 1,50	100	16	10,0	8,0	3R31775	25,99



HSS-CO 5%

VAP

DIN 376

FORM C/35°

TOL 6H



D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
M 12 x 1,75	110	18	9,0	7,0	3R31776	31,39
M 14 x 2,00	110	20	11,0	9,0	3R31777	41,66
M 16 x 2,00	110	22	12,0	9,0	3R31778	46,73
M 18 x 2,50	125	25	14,0	11,0	3R31779	66,67
M 20 x 2,50	140	25	16,0	12,0	3R31780	90,16

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

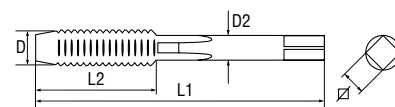
ACCESORIOS
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HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

M MÉTRICA ISO-ROSCA DIN 13
METRIC ISO-THREAD DIN 13
MÉTRIQUE DIN-13



HSS-CO 5%

DIN 371

FORM B-AZ

TOL 6H



D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
M 3 x 0,50	56	11	3,5	2,7	3R37926	19,73
M 4 x 0,70	63	13	4,5	3,4	3R37930	19,73
M 5 x 0,80	70	16	6,0	4,9	3R37934	20,19
M 6 x 1,00	80	19	6,0	4,9	3R37938	20,59
M 8 x 1,25	90	22	8,0	6,2	3R37942	24,99
M 10 x 1,50	100	24	10,0	8,0	3R37946	28,61



HSS-CO 5%

DIN 376

FORM B-AZ

TOL 6H



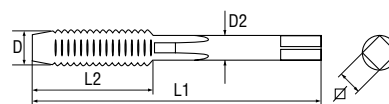
D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
M 3 x 0,50	56	11	2,2	-	3R38926	19,73
M 4 x 0,70	63	13	2,8	2,1	3R38930	19,73
M 5 x 0,80	70	16	3,5	2,7	3R38934	20,19
M 6 x 1,00	80	19	4,5	3,4	3R38938	20,59
M 8 x 1,25	90	22	6,0	4,9	3R38942	24,99
M 10 x 1,50	100	24	7,0	5,5	3R38946	28,61
M 12 x 1,75	110	29	9,0	7,0	3R38950	34,47
M 14 x 2,00	110	30	11,0	9,0	3R38954	43,45
M 16 x 2,00	110	32	12,0	9,0	3R38958	48,92
M 18 x 2,50	125	34	14,0	11,0	3R38962	65,46
M 20 x 2,50	140	34	16,0	12,0	3R38966	87,18
M 22 x 2,50	140	34	18,0	14,5	3R38970	100,51
M 24 x 3,00	160	38	18,0	14,5	3R38974	106,28

MACHOS MÁQUINA

MACHINE TAPS • TARAUDS MACHINE

M MÉTRICA ISO-ROSCA DIN 13 EXTRA-LARGOS

METRIC ISO-THREAD DIN 13 EXTRALONG
MÉTRIQUE DIN-13 EXTRALONG



100 mm



HSS-CO 5%

≈DIN 371

FORM B

TOL 6H



D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
M 3 x 0.50	100	11	3,5	2,7	3R32010	20,90
M 4 x 0.70	100	13	4,5	3,4	3R32011	20,90
M 5 x 0.80	100	16	6,0	4,9	3R32012	21,60
M 6 x 1.00	100	19	6,0	4,9	3R32013	21,60
M 8 x 1.25	100	22	8,0	6,2	3R32014	24,67
M 10 x 1.50	100	24	10,0	8,0	3R32015	34,95
M 12 x 1.75	100	29	12,0	9,0	3R32016	29,13

120 mm



HSS-CO 5%

≈DIN 371

FORM B

TOL 6H



D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
M 4 x 0.70	120	13	4,5	3,4	3R32021	21,60
M 5 x 0.80	120	16	6,0	4,9	3R32022	23,63
M 6 x 1.00	120	19	6,0	4,9	3R32023	23,63
M 8 x 1.25	120	22	8,0	6,2	3R32024	27,40
M 10 x 1.50	120	24	10,0	8,0	3R32025	31,18
M 12 x 1.75	120	29	12,0	9,0	3R32026	35,30

150 mm



HSS-CO 5%

≈DIN 371

FORM B

TOL 6H



D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
M 4 x 0.70	150	13	4,5	3,4	3R32031	22,62
M 5 x 0.80	150	16	6,0	4,9	3R32032	25,71
M 6 x 1.00	150	19	6,0	4,9	3R32033	31,18
M 8 x 1.25	150	22	8,0	6,2	3R32034	31,18
M 10 x 1.50	150	24	10,0	8,0	3R32035	38,04
M 12 x 1.75	150	29	12,0	9,0	3R32036	42,49

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

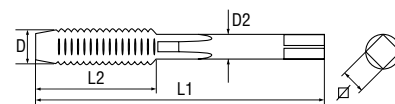
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METROLOGÍA
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DISPLAYS
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M MÉTRICA ISO-ROSCA DIN 13 **EXTRA-LARGOS**
METRIC ISO-THREAD DIN 13 EXTRALONG
MÉTRIQUE DIN-13 EXTRALONG



100 mm



HSS-CO 5%

≈DIN 371

FORM C/35°

TOL 6H



D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
M 3 x 0,50	100	6	3,5	2,7	3R32040	24,67
M 4 x 0,70	100	7	4,5	3,4	3R32041	24,67
M 5 x 0,80	100	8	6,0	4,9	3R32042	26,39
M 6 x 1,00	100	10	6,0	4,9	3R32043	26,39
M 8 x 1,25	100	14	8,0	6,2	3R32044	29,13
M 10 x 1,50	100	16	10,0	8,0	3R32045	30,45
M 12 x 1,75	100	18	12,0	9,0	3R32046	32,23

120 mm



HSS-CO 5%

≈DIN 371

FORM C/35°

TOL 6H



D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
M 4 x 0,70	120	7	4,5	3,4	3R32051	25,71
M 5 x 0,80	120	8	6,0	4,9	3R32052	28,45
M 6 x 1,00	120	10	6,0	4,9	3R32053	28,45
M 8 x 1,25	120	14	8,0	6,2	3R32054	32,23
M 10 x 1,50	120	16	10,0	8,0	3R32055	37,01
M 12 x 1,75	120	18	12,0	9,0	3R32056	38,04

150 mm



HSS-CO 5%

≈DIN 371

FORM C/35°

TOL 6H



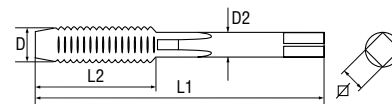
D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
M 4 x 0,70	150	7	4,5	3,4	3R32061	26,39
M 5 x 0,80	150	8	6,0	4,9	3R32062	30,49
M 6 x 1,00	150	10	6,0	4,9	3R32063	30,49
M 8 x 1,25	150	14	8,0	6,2	3R32064	35,98
M 10 x 1,50	150	16	10,0	8,0	3R32065	43,53
M 12 x 1,75	150	18	12,0	9,0	3R32066	45,58

MACHOS MÁQUINA

MACHINE TAPS • TARAUDS MACHINE

M MÉTRICA ISO-ROSCA DIN 13 SOBREDIMENSIONADO

METRIC ISO-THREAD DIN 13 OVERSIZE
MÉTRIQUE DIN-13 SURCOTÉS



HSS-CO 5%

DIN 371

DIN 376

FORM B

TOL 6G



DIN 371

DIN 376

D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
M 2,5 x 0,45	50	9	2,8	2,1	3R32522	17,21
M 3,0 x 0,50	56	11	3,5	2,7	3R32526	17,76
M 4,0 x 0,70	63	13	4,5	3,4	3R32530	17,76
M 5,0 x 0,80	70	16	6,0	4,9	3R32534	18,75
M 6,0 x 1,00	80	19	6,0	4,9	3R32538	18,75
M 8,0 x 1,25	90	22	8,0	6,2	3R32542	22,94
M 10,0 x 1,50	100	24	10,0	8,0	3R32546	25,83
M 12,0 x 1,75*	110	29	90,0	7,0	3R32550	31,86
M 14,0 x 2,00*	110	30	11,0	9,0	3R32554	45,58
M 16,0 x 2,00*	110	32	12,0	9,0	3R32558	51,75
M 18,0 x 2,50*	125	34	14,0	11,0	3R32562	71,26
M 20,0 x 2,50*	140	34	16,0	12,0	3R32566	94,72



HSS-CO 5%

DIN 371

DIN 376

FORM B

TOL 7G



DIN 371

DIN 376

D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
M 3 x 0,50	56	11	3,5	2,7	3R32503	18,65
M 4 x 0,70	63	13	4,5	3,4	3R32504	18,65
M 5 x 0,80	70	16	6,0	4,9	3R32505	19,77
M 6 x 1,00	80	19	6,0	4,9	3R32506	19,77
M 8 x 1,25	90	22	6,0	6,2	3R32508	24,86
M 10 x 1,50	100	24	10,0	8,0	3R32510	29,66
M 12 x 1,75*	110	29	9,0	7,0	3R32512	36,26



HSS-CO 5%

DIN 371

DIN 376

FORM B

TOL 6H +0,1mm



DIN 371

DIN 376

D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
M 3 x 0,50	56	11	3,5	2,7	3R32583	18,65
M 4 x 0,70	63	13	4,5	3,4	3R32584	18,65
M 5 x 0,80	70	16	6,0	4,9	3R32585	19,77
M 6 x 1,00	80	19	6,0	4,9	3R32586	19,77
M 8 x 1,25	90	22	8,0	6,2	3R32588	24,86
M 10 x 1,50	100	24	10,0	8,0	3R32590	29,66
M 12 x 1,75*	110	29	9,0	7,0	3R32592	36,26

* Machos en DIN376 / Taps on DIN376 / Tarauds en DIN376

Sobredimensión: 0.02 - 0.04 mm / Oversize 0.02 - 0.04 mm / Surcotage 0.02 - 0.04 mm

Materiales tratados superficialmente (galvanizados, cromados...) / For pre plate material for galvanising / Pour matériaux présentant une couche de galvanisation

CONSTRUCCIÓN
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THREADING • FILETAGE

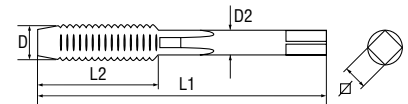
ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

M MÉTRICA ISO-ROSCA DIN 13 **SOBREDIMENSIONADO**
METRIC ISO-THREAD DIN 13 OVERSIZE
MÉTRIQUE DIN-13 EXTRALONG



HSS-CO 5%

DIN 371

DIN 376

FORM C/35°

TOL 6G



D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
M 3,0 x 0,50	56	6	3,5	2,7	3R32726	22,62
M 4,0 x 0,70	63	7	4,5	3,4	3R32730	22,62
M 5,0 x 0,80	70	8	6,0	4,9	3R32734	23,63
M 6,0 x 1,00	80	10	6,0	4,9	3R32738	23,63
M 8,0 x 1,25	90	14	8,0	6,2	3R32742	27,46
M 10,0 x 1,50	100	16	10,0	8,0	3R32746	31,66
M 12,0 x 1,75*	110	18	9,0	7,0	3R32750	32,62
M 14,0 x 2,00*	110	20	11,0	9,0	3R32754	47,18
M 16,0 x 2,00*	110	22	12,0	9,0	3R32758	49,74
M 18,0 x 2,50*	125	25	14,0	11,0	3R32762	73,64
M 20,0 x 2,50*	140	25	16,0	12,0	3R32766	98,20



HSS-CO 5%

DIN 371

DIN 376

FORM C/35°

TOL 7G



D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
M 3 x 0,50	56	6	3,5	2,7	3R32703	23,98
M 4 x 0,70	63	7	4,5	3,4	3R32704	23,98
M 5 x 0,80	70	8	6,0	4,9	3R32705	25,77
M 6 x 1,00	80	10	6,0	4,9	3R32706	25,77
M 8 x 1,25	90	14	8,0	6,2	3R32708	31,07
M 10 x 1,50	100	16	10,0	8,0	3R32710	36,72
M 12 x 1,75*	110	18	9,0	7,0	3R32712	39,55



HSS-CO 5%

DIN 371

DIN 376

FORM C/35°

TOL 6H +0,1mm



D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
M 3 x 0,50	56	6	3,5	2,7	3R32783	23,98
M 4 x 0,70	63	7	4,5	3,4	3R32784	23,98
M 5 x 0,80	70	8	6,0	4,9	3R32785	25,77
M 6 x 1,00	80	10	6,0	4,9	3R32786	25,77
M 8 x 1,25	90	14	8,0	6,2	3R32788	31,07
M 10 x 1,50	100	16	10,0	8,0	3R32790	36,72
M 12 x 1,75*	110	18	9,0	7,0	3R32792	39,55

* Machos en DIN376 / Taps on DIN376 / Tarauds en DIN376

Sobredimensión: 0.02 - 0.04 mm / Oversize 0.02 - 0.04 mm / Surcotage 0.02 - 0.04 mm

Materiales tratados superficialmente (galvanizados, cromados...) / For pre plate material for galvanising / Pour matériaux présentant une couche de galvanisation

Mf MÉTRICA FINA ISO-ROSCA DIN 13
METRIC FINE ISO-THREAD DIN 13
MÉTRIQUE FIN ISO DIN-13

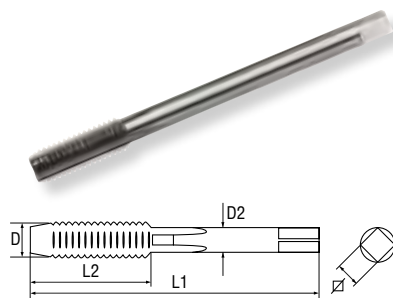


HSS-CO 5%

DIN 374

FORM C

TOL 6H



D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
M 4 x 0,35	63	10	2,8	2,1	3R39402	21,65
M 5 x 0,50	70	12	3,5	2,7	3R39404	20,36
M 6 x 0,75	80	14	4,5	3,4	3R39407	19,04
M 8 x 0,75	80	19	6,0	4,9	3R39410	19,12
M 8 x 1,00	90	22	6,0	4,9	3R39411	18,48
M 10 x 1,00	90	20	7,0	5,5	3R39415	21,04
M 10 x 1,25	100	24	7,0	5,5	3R39416	21,04
M 12 x 1,00	100	22	9,0	7,0	3R39420	28,05
M 12 x 1,25	100	22	9,0	7,0	3R39421	28,05
M 12 x 1,50	100	22	9,0	7,0	3R39422	28,05
M 14 x 1,00	100	22	11,0	9,0	3R39426	36,34
M 14 x 1,25	100	22	11,0	9,0	3R39427	34,42
M 14 x 1,50	100	22	11,0	9,0	3R39428	34,42
M 16 x 1,00	100	22	12,0	9,0	3R39431	46,53
M 16 x 1,50	100	22	12,0	9,0	3R39433	39,52
M 18 x 1,00	110	25	14,0	11,0	3R39434	58,64
M 18 x 1,50	110	25	14,0	11,0	3R39436	45,90
M 18 x 2,00	125	34	14,0	11,0	3R39437	54,50
M 20 x 1,00	125	25	16,0	12,0	3R39438	67,65
M 20 x 1,25	125	25	16,0	12,0	3R39439	67,65
M 20 x 1,50	125	25	16,0	12,0	3R39440	51,87
M 20 x 2,00	140	34	16,0	12,0	3R39441	60,87
M 22 x 1,00	125	25	18,0	14,5	3R39443	78,80
M 22 x 1,50	125	25	18,0	14,5	3R39445	65,67
M 22 x 2,00	140	34	18,0	14,5	3R39446	78,80
M 24 x 1,00	140	28	18,0	14,5	3R39448	86,56
M 24 x 1,50	140	28	18,0	14,5	3R39450	78,80
M 24 x 2,00	140	28	18,0	14,5	3R39451	89,31
M 25 x 1,00	140	28	18,0	14,5	3R39452	97,40
M 26 x 1,50	140	28	18,0	14,5	3R39454	94,56
M 27 x 1,50	140	28	20,0	16,0	3R39456	103,73
M 27 x 2,00	140	28	20,0	16,0	3R39457	106,85
M 28 x 1,50	140	28	20,0	16,0	3R39459	103,73
M 30 x 1,50	150	28	22,0	16,0	3R39463	110,32
M 30 x 2,00	150	28	22,0	18,0	3R39464	131,19
M 32 x 1,50	150	28	22,0	18,0	3R39466	137,89
M 32 x 2,00	150	28	22,0	18,0	3R39467	162,31
M 33 x 2,00	160	28	25,0	20,0	3R39468	175,83
M 35 x 1,50	170	30	28,0	22,0	3R39472	175,83
M 36 x 1,50	170	30	28,0	22,0	3R39473	177,10
M 36 x 2,00	170	30	28,0	22,0	3R39474	216,42
M 38 x 1,50	170	30	28,0	22,0	3R39476	188,02
M 40 x 1,50	170	30	32,0	24,0	3R39480	236,39
M 42 x 1,50	170	30	32,0	24,0	3R39483	250,83
M 45 x 1,50	180	32	36,0	29,0	3R39486	301,39
M 48 x 1,50	190	32	36,0	29,0	3R39489	327,14
M 50 x 1,50	190	32	36,0	29,0	3R39494	380,02
M 52 x 1,50	190	32	40,0	32,0	3R39497	414,83

CONSTRUCCIÓN
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DISPLAYS
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Mf MÉTRICA FINA ISO-ROSCA DIN 13
METRIC FINE ISO-THREAD DIN 13
MÉTRIQUE FIN ISO DIN-13

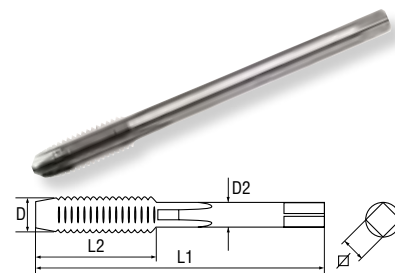


HSS-CO 5%

DIN 374

FORM B

TOL 6H



D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
M 3 x 0,35	56	9	2,2	-	3R39501	25,04
M 4 x 0,35	63	10	2,8	2,1	3R39502	25,04
M 4 x 0,50	63	10	2,8	2,1	3R39503	22,21
M 5 x 0,50	70	12	3,5	2,7	3R39504	22,21
M 5 x 0,75	70	12	3,5	2,7	3R39505	20,85
M 6 x 0,50	80	14	4,5	3,4	3R39506	25,04
M 6 x 0,75	80	14	4,5	3,4	3R39507	19,81
M 7 x 0,75	80	14	5,5	4,3	3R39508	24,07
M 8 x 0,50	80	19	6,0	4,9	3R39509	25,04
M 8 x 0,75	80	19	6,0	4,9	3R39510	22,87
M 8 x 1,00	90	22	6,0	4,9	3R39511	19,81
M 9 x 0,75	80	19	7,0	5,5	3R39512	25,04
M 9 x 1,00	90	22	7,0	5,5	3R39513	26,42
M 10 x 0,75	90	20	7,0	5,5	3R39514	31,48
M 10 x 1,00	90	20	7,0	5,5	3R39515	23,40
M 10 x 1,25	100	24	7,0	5,5	3R39516	25,41
M 11 x 1,00	90	20	8,0	6,2	3R39517	34,11
M 11 x 1,25	90	22	8,0	6,2	3R39518	36,11
M 12 x 0,75	100	22	9,0	7,0	3R39519	38,64
M 12 x 1,00	100	22	9,0	7,0	3R39520	31,33
M 12 x 1,25	100	22	9,0	7,0	3R39521	31,33
M 12 x 1,50	100	22	9,0	7,0	3R39522	32,10
M 13 x 1,00	100	22	11,0	9,0	3R39523	52,16
M 13 x 1,50	100	22	11,0	9,0	3R39524	52,16
M 14 x 0,75	100	22	11,0	9,0	3R39525	55,80
M 14 x 1,00	100	22	11,0	9,0	3R39526	42,81
M 14 x 1,25	100	22	11,0	9,0	3R39527	40,76
M 14 x 1,50	100	22	11,0	9,0	3R39528	40,76
M 15 x 1,00	100	22	12,0	9,0	3R39529	56,17
M 15 x 1,50	100	22	12,0	9,0	3R39530	54,09
M 16 x 1,00	100	22	12,0	9,0	3R39531	52,16
M 16 x 1,25	100	22	12,0	9,0	3R39532	57,87
M 16 x 1,50	100	22	12,0	9,0	3R39533	45,47
M 18 x 1,00	110	25	14,0	11,0	3R39534	59,66
M 18 x 1,25	110	25	14,0	11,0	3R39535	68,70
M 18 x 1,50	110	25	14,0	11,0	3R39536	55,10
M 18 x 2,00	125	34	14,0	11,0	3R39537	60,86
M 20 x 1,00	125	25	16,0	12,0	3R39538	80,26
M 20 x 1,25	125	25	16,0	12,0	3R39539	85,88
M 20 x 1,50	125	25	16,0	12,0	3R39540	60,79
M 20 x 2,00	140	34	16,0	12,0	3R39541	70,24
M 21 x 1,50	125	25	16,0	12,0	3R39542	85,88
M 22 x 1,00	125	25	18,0	14,5	3R39543	86,95
M 22 x 1,25	125	25	18,0	14,5	3R39544	100,17
M 22 x 1,50	125	25	18,0	14,5	3R39545	74,29
M 22 x 2,00	140	34	18,0	14,5	3R39546	86,95
M 23 x 1,50	125	25	18,0	14,5	3R39547	114,50
M 24 x 1,00	140	28	18,0	14,5	3R39548	106,34
M 24 x 1,25	140	28	18,0	14,5	3R39549	114,50
M 24 x 1,50	140	28	18,0	14,5	3R39550	86,95
M 24 x 2,00	140	28	18,0	14,5	3R39551	98,98
M 25 x 1,00	140	28	18,0	14,5	3R39552	114,50

Mf MÉTRICA FINA ISO-ROSCA DIN 13
METRIC FINE ISO-THREAD DIN 13
MÉTRIQUE FIN ISO DIN-13

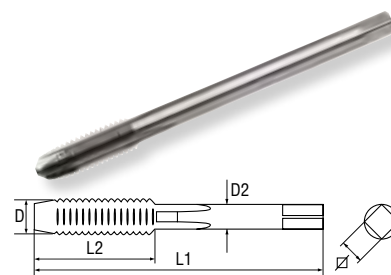


HSS-CO 5%

DIN 374

FORM B

TOL 6H



D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
M 25 x 1,5	140	28	18,0	14,5	3R39553	114,50
M 26 x 1,0	140	28	18,0	14,5	3R3955X	114,50
M 26 x 1,5	140	28	18,0	14,5	3R39554	100,33
M 26 x 2,0	140	28	18,0	14,5	3R39555	114,50
M 27 x 1,0	140	28	20,0	16,0	3R39500	143,11
M 27 x 1,5	140	28	20,0	16,0	3R39556	115,03
M 27 x 2,0	140	28	20,0	16,0	3R39557	128,81
M 28 x 1,0	140	28	20,0	16,0	3R39558	143,11
M 28 x 1,5	140	28	20,0	16,0	3R39559	117,13
M 28 x 2,0	140	28	20,0	16,0	3R39560	128,97
M 29 x 1,5	150	28	22,0	18,0	3R39561	164,59
M 30 x 1,0	150	28	22,0	18,0	3R39562	154,49
M 30 x 1,5	150	28	22,0	18,0	3R39563	126,66
M 30 x 2,0	150	28	22,0	18,0	3R39564	147,13
M 30 x 2,5	180	45	22,0	18,0	3R3956X	164,59
M 30 x 3,0	180	45	22,0	18,0	3R39565	164,59
M 32 x 1,5	150	28	22,0	18,0	3R39566	156,62
M 32 x 2,0	150	28	22,0	18,0	3R39567	214,68
M 32 x 3,0	180	50	22,0	18,0	3R39592	214,68
M 33 x 1,5	160	30	25,0	20,0	3R39593	167,19
M 33 x 2,0	160	30	25,0	20,0	3R39568	214,68
M 33 x 3,0	180	50	25,0	20,0	3R39569	214,68
M 34 x 1,5	170	30	28,0	22,0	3R39570	187,27
M 34 x 2,0	170	30	28,0	22,0	3R39571	200,37
M 35 x 1,5	170	30	28,0	22,0	3R39572	200,63
M 36 x 1,5	170	30	28,0	22,0	3R39573	200,63
M 36 x 2,0	170	30	28,0	22,0	3R39574	254,13
M 36 x 3,0	200	56	28,0	22,0	3R39575	287,57
M 38 x 1,5	170	30	28,0	22,0	3R39576	207,33
M 39 x 1,5	170	30	32,0	24,0	3R39577	293,39
M 39 x 2,0	170	30	32,0	24,0	3R39578	293,39
M 39 x 3,0	200	60	32,0	24,0	3R39579	293,34
M 40 x 1,5	170	30	32,0	24,0	3R39580	267,51
M 40 x 2,0	170	30	32,0	24,0	3R39581	343,48
M 40 x 3,0	200	60	32,0	24,0	3R39582	334,40
M 42 x 1,5	170	30	32,0	24,0	3R39583	280,89
M 42 x 2,0	170	30	32,0	24,0	3R39584	400,75
M 42 x 3,0	200	60	32,0	24,0	3R39585	387,89
M 45 x 1,5	180	32	36,0	29,0	3R39586	334,40
M 45 x 2,0	180	32	36,0	29,0	3R39587	400,75
M 45 x 3,0	200	50	36,0	29,0	3R39588	429,35
M 48 x 1,5	190	32	36,0	36,0	3R39589	479,45
M 48 x 2,0	190	32	36,0	29,0	3R39590	479,45
M 48 x 3,0	225	50	36,0	36,0	3R39591	479,45
M 50 x 1,5	190	32	36,0	29,0	3R39594	555,30
M 50 x 2,0	190	32	36,0	36,0	3R39595	555,30
M 50 x 3,0	225	50	36,0	29,0	3R39596	555,30
M 52 x 1,5	190	32	40,0	32,0	3R39597	612,54
M 52 x 2,0	190	32	40,0	32,0	3R39598	612,54
M 52 x 3,0	225	50	40,0	32,0	3R39599	612,54
M 63 x 1,5	275	50	50,0	39,0	3R3959X	901,63

CONSTRUCCIÓN
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METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

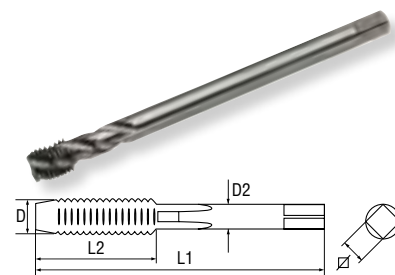
HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

Mf

MÉTRICA FINA ISO-ROSCA DIN 13
METRIC FINE ISO-THREAD DIN 13
MÉTRIQUE FIN ISO DIN-13



D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	Ø (mm)	Cod.	€/Unid.
M 3 x 0,35	56	5	2,2	-	3R39701	30,22
M 4 x 0,35	63	5	2,8	2,1	3R39702	30,22
M 4 x 0,50	63	5	2,8	2,1	3R39703	25,83
M 5 x 0,50	70	5	3,5	2,7	3R39704	26,28
M 5 x 0,75	70	8	3,5	2,7	3R39705	26,28
M 6 x 0,50	80	5	4,5	3,4	3R39706	30,22
M 6 x 0,75	80	8	4,5	3,4	3R39707	23,55
M 7 x 0,75	80	8	5,5	4,3	3R39708	30,22
M 8 x 0,50	80	8	6,0	4,9	3R39709	30,22
M 8 x 0,75	80	8	6,0	4,9	3R39710	30,22
M 8 x 1,00	90	10	6,0	4,9	3R39711	23,40
M 9 x 0,75	80	10	7,0	5,5	3R39712	30,92
M 9 x 1,00	90	10	7,0	5,5	3R39713	30,10
M 10 x 0,75	90	10	7,0	5,5	3R39714	31,03
M 10 x 1,00	90	10	7,0	5,5	3R39715	26,81
M 10 x 1,25	100	16	7,0	5,5	3R39716	29,70
M 11 x 1,00	90	11	8,0	6,2	3R39717	52,35
M 11 x 1,25	90	14	8,0	6,2	3R39718	52,35
M 12 x 0,75	100	10	9,0	7,0	3R39719	52,35
M 12 x 1,00	100	11	9,0	7,0	3R39720	37,45
M 12 x 1,25	100	15	9,0	7,0	3R39721	36,11
M 12 x 1,50	100	15	9,0	7,0	3R39722	34,47
M 13 x 1,00	100	11	11,0	9,0	3R39723	55,06
M 13 x 1,50	100	15	11,0	9,0	3R39724	55,06
M 14 x 0,75	100	10	11,0	9,0	3R39725	55,06
M 14 x 1,00	100	11	11,0	9,0	3R39726	52,32
M 14 x 1,25	100	15	11,0	9,0	3R39727	47,45
M 14 x 1,50	100	15	11,0	9,0	3R39728	42,03
M 15 x 1,00	100	12	12,0	9,0	3R39729	76,04
M 15 x 1,50	100	15	12,0	9,0	3R39730	76,04
M 16 x 1,00	100	12	12,0	9,0	3R39731	76,04
M 16 x 1,25	100	15	12,0	9,0	3R39732	76,04
M 16 x 1,50	100	15	12,0	9,0	3R39733	56,18
M 18 x 1,00	110	13	14,0	11,0	3R39734	81,03
M 18 x 1,25	110	15	14,0	11,0	3R39735	81,03
M 18 x 1,50	110	17	14,0	11,0	3R39736	63,85
M 18 x 2,00	125	20	14,0	11,0	3R39737	81,03
M 20 x 1,00	125	14	16,0	12,0	3R39738	98,24
M 20 x 1,25	125	17	16,0	12,0	3R39739	98,24
M 20 x 1,50	125	17	16,0	12,0	3R39740	68,11
M 20 x 2,00	140	20	16,0	12,0	3R39741	98,24
M 21 x 1,50	125	17	16,0	12,0	3R39742	98,24
M 22 x 1,00	125	14	18,0	14,5	3R39743	113,29
M 22 x 1,25	125	17	18,0	14,5	3R39744	113,29
M 22 x 1,50	125	17	18,0	14,5	3R39745	82,86
M 22 x 2,00	140	20	18,0	14,5	3R39746	120,36
M 23 x 1,50	125	17	18,0	14,5	3R39747	133,47
M 24 x 1,00	140	15	18,0	14,5	3R39748	133,47
M 24 x 1,25	140	17	18,0	14,5	3R39749	133,47
M 24 x 1,50	140	20	18,0	14,5	3R39750	99,41
M 24 x 2,00	140	20	18,0	14,5	3R39751	127,07
M 25 x 1,00	140	15	18,0	14,5	3R39752	133,47

MACHOS MÁQUINA

MACHINE TAPS • TARAUDS MACHINE

Mf MÉTRICA FINA ISO-ROSCA DIN 13

METRIC FINE ISO-THREAD DIN 13
MÉTRIQUE FIN ISO DIN-13

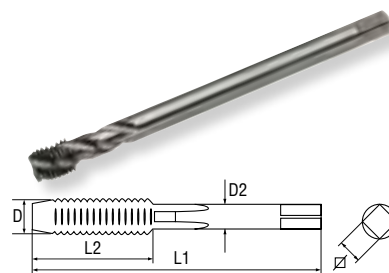


HSS-CO 5%

DIN 374



TOL 6H



D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
M 25 x 1,5	140	20	18,0	14,5	3R39753	133,47
M 26 x 1,0	140	15	18,0	14,5	3R3975X	133,47
M 26 x 1,5	140	20	18,0	14,5	3R39754	140,49
M 26 x 2,0	140	20	18,0	14,5	3R39755	140,49
M 27 x 1,0	140	15	20,0	16,0	3R39700	156,87
M 27 x 1,5	140	20	20,0	16,0	3R39756	168,07
M 27 x 2,0	140	20	20,0	16,0	3R39757	168,07
M 28 x 1,0	140	15	20,0	16,0	3R39758	168,07
M 28 x 1,5	140	20	20,0	16,0	3R39759	168,07
M 28 x 2,0	140	20	20,0	16,0	3R39760	168,07
M 29 x 1,5	150	22	22,0	18,0	3R39761	182,19
M 30 x 1,0	150	17	22,0	18,0	3R39762	182,19
M 30 x 1,5	150	22	22,0	18,0	3R39763	151,36
M 30 x 2,0	150	22	22,0	18,0	3R39764	189,19
M 30 x 2,5	180	27	22,0	18,0	3R3976X	189,19
M 30 x 3,0	180	30	22,0	18,0	3R39765	189,19
M 32 x 1,5	150	22	22,0	18,0	3R39766	224,02
M 32 x 2,0	150	22	22,0	18,0	3R39767	224,02
M 32 x 3,0	180	30	22,0	18,0	3R39792	224,02
M 33 x 1,5	160	24	25,0	20,0	3R39793	224,02
M 33 x 2,0	160	24	25,0	20,0	3R39768	224,02
M 33 x 3,0	180	30	25,0	20,0	3R39769	224,02
M 34 x 1,5	170	24	28,0	22,0	3R39770	226,82
M 34 x 2,0	170	24	28,0	22,0	3R39771	226,82
M 35 x 1,5	170	24	28,0	22,0	3R39772	226,82
M 36 x 1,5	170	24	28,0	22,0	3R39773	286,52
M 36 x 2,0	170	24	28,0	22,0	3R39774	286,52
M 36 x 3,0	200	30	28,0	22,0	3R39775	286,52
M 38 x 1,5	170	24	28,0	22,0	3R39776	302,28
M 39 x 1,5	170	25	32,0	24,0	3R39777	302,28
M 39 x 2,0	170	25	32,0	24,0	3R39778	302,28
M 39 x 3,0	200	30	32,0	24,0	3R39779	302,28
M 40 x 1,5	170	25	32,0	24,0	3R39780	334,39
M 40 x 2,0	170	25	32,0	24,0	3R39781	334,39
M 40 x 3,0	200	30	32,0	24,0	3R39782	334,39
M 42 x 1,5	170	25	32,0	24,0	3R39783	375,95
M 42 x 2,0	170	25	32,0	24,0	3R39784	375,95
M 42 x 3,0	200	30	32,0	24,0	3R39785	375,95
M 45 x 1,5	180	27	36,0	29,0	3R39786	440,15
M 45 x 2,0	180	27	36,0	29,0	3R39787	440,15
M 45 x 3,0	200	30	36,0	29,0	3R39788	440,15
M 48 x 1,5	190	27	36,0	29,0	3R39789	524,32
M 48 x 2,0	190	27	36,0	29,0	3R39790	524,32
M 48 x 3,0	225	33	36,0	29,0	3R39791	524,32
M 50 x 1,5	190	27	36,0	29,0	3R39794	607,25
M 50 x 2,0	190	27	36,0	29,0	3R39795	607,25
M 50 x 3,0	225	33	36,0	29,0	3R39796	607,25
M 52 x 1,5	190	27	40,0	32,0	3R39797	668,77
M 52 x 2,0	190	27	40,0	32,0	3R39798	668,77
M 52 x 3,0	225	33	40,0	32,0	3R39799	668,77
M 63 x 1,5	275	40	50,0	39,0	3R3979X	1.018,02

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

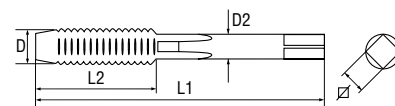
HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

BSW

WHITWORTH BS 84
WHITWORTH BS 84
FILETAGE WHITWORTH BS 84



HSS-CO 5%

DIN 371

FORM B

D Ø x P (")	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
BSW 1/8 x 40	56	11	3,5	2,7	3R70506	17,38
BSW 5/32 x 32	63	13	4,5	3,4	3R70508	17,38
BSW 3/16 x 24	70	15	6,0	4,9	3R70510	17,38
BSW 1/4 x 20	80	17	7,0	5,5	3R70514	19,53
BSW 5/16 x 18	90	20	8,0	6,2	3R70516	23,20
BSW 3/8 x 16	100	22	9,0	7,0	3R70518	25,69
BSW 7/16 x 14	100	22	11,0	9,0	3R70520	32,39
BSW 1/2 x 12	110	25	12,0	9,0	3R70522	32,39



HSS-CO 5%

DIN 376

FORM B

D Ø x P (")	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
BSW 1/4 x 20	80	17	4,5	3,4	3R71514	19,53
BSW 5/16 x 18	90	20	6,0	4,9	3R71516	23,20
BSW 3/8 x 16	100	22	7,0	5,5	3R71518	25,69
BSW 7/16 x 14	100	22	8,0	6,2	3R71520	32,39
BSW 1/2 x 12	110	25	9,0	7,0	3R71522	32,39
BSW 9/16 x 12	110	26	11,0	9,0	3R71524	45,02
BSW 5/8 x 11	110	27	12,0	9,0	3R71526	45,02
BSW 3/4 x 10	125	30	14,0	11,0	3R71530	70,02
BSW 7/8 x 9	140	32	18,0	14,5	3R71534	85,53
BSW 1 x 8	160	36	20,0	16,0	3R71538	104,56
BSW 1.1/8 x 7	180	40	22,0	18,0	3R71542	130,70
BSW 1.1/4 x 7	180	40	22,0	18,0	3R71546	170,54
BSW 1.3/8 x 6	200	50	28,0	22,0	3R71550	313,78
BSW 1.1/2 x 6	200	50	32,0	24,0	3R71554	341,09



CONSTRUCCIÓN
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MADERA
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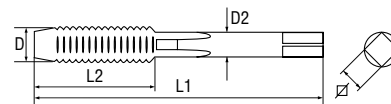
HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

BSW

WHITWORTH BS 84
WHITWORTH BS 84
FILETAGE WHITWORTH BS 84



HSS-CO 5%

DIN 371



D Ø x P (")	L1 (mm)	L2 (mm)	D2 (mm)	Ø (mm)	Cod.	€/Unid.
BSW 1/8 x 40	56	7	3,5	2,7	3R70706	19,81
BSW 5/32 x 32	63	7	4,5	3,4	3R70708	19,81
BSW 3/16 x 24	70	10	6,0	4,9	3R70710	19,81
BSW 1/4 x 20	80	13	7,0	5,5	3R70714	22,73
BSW 5/16 x 18	90	14	8,0	6,2	3R70716	26,17
BSW 3/8 x 16	100	16	9,0	7,0	3R70718	29,47
BSW 7/16 x 14	100	17	11,0	9,0	3R70720	38,69
BSW 1/2 x 12	110	20	12,0	9,0	3R70722	37,57



HSS-CO 5%

DIN 376



D Ø x P (")	L1 (mm)	L2 (mm)	D2 (mm)	Ø (mm)	Cod.	€/Unid.
BSW 1/4 x 20	80	13	4,5	3,4	3R71714	22,73
BSW 5/16 x 18	90	14	6,0	4,9	3R71716	26,17
BSW 3/8 x 16	100	16	7,0	5,5	3R71718	29,47
BSW 7/16 x 14	100	17	8,0	6,2	3R71720	38,69
BSW 1/2 x 12	110	20	9,0	7,0	3R71722	37,57
BSW 9/16 x 12	110	20	11,0	9,0	3R71724	53,63
BSW 5/8 x 11	110	22	12,0	9,0	3R71726	53,75
BSW 3/4 x 10	125	25	14,0	11,0	3R71730	88,26
BSW 7/8 x 9	140	27	18,0	14,5	3R71734	105,22
BSW 1 x 8	160	30	20,0	16,0	3R71738	119,64
BSW 1.1/4 x 7	180	35	22,0	18,0	3R71746	179,10
BSW 1.3/8 x 6	200	40	28,0	22,0	3R71750	413,30
BSW 1.1/2 x 6	200	40	32,0	24,0	3R71754	413,30

CONSTRUCCIÓN
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MADERA
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METAL
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ACCESORIOS
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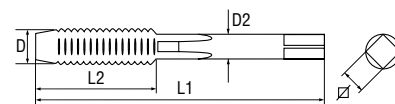
HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

UNC

ROSCA GRUESA UNIFICADA ANSI B 1.1
UNIFIED COARSE THREAD ANSI B 1.1
FILETAGE UNIFIED GROSSE ANSI B 1.1



HSS-CO 5%

DIN 376

FORM B

TOL 2B

	D Ø x P (")	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
UNC Nr.	4 x 40	50	10	3,5	2,7	3R74504	23,77
UNC Nr.	5 x 40	56	11	3,5	2,7	3R74505	23,77
UNC Nr.	6 x 32	56	12	4,0	3,0	3R74506	21,79
UNC Nr.	8 x 32	63	13	4,5	3,4	3R74508	21,79
UNC Nr.	10 x 24	70	15	6,0	4,9	3R74510	23,77
UNC Nr.	12 x 24	70	16	6,0	4,9	3R74512	23,77
UNC	1/4 x 20	80	17	7,0	5,5	3R74514	21,79
UNC	5/16 x 18	90	20	8,0	6,2	3R74516	24,51
UNC	3/8 x 16	100	22	9,0	7,2	3R74518	28,61



HSS-CO 5%

DIN 371

FORM B

TOL 2B

	D Ø x P (")	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
UNC Nr.	4 x 40	50	10	1,8	-	3R75504	23,77
UNC Nr.	5 x 40	56	11	2,2	1,8	3R75505	23,77
UNC Nr.	6 x 32	56	12	2,5	2,1	3R75506	21,79
UNC Nr.	8 x 32	63	13	2,8	2,1	3R75508	21,79
UNC Nr.	10 x 24	70	15	3,5	2,7	3R75510	23,77
UNC Nr.	12 x 24	70	16	3,5	2,7	3R75512	23,77
UNC	1/4 x 20	80	17	4,5	3,4	3R75514	21,79
UNC	5/16 x 18	90	20	6,0	4,9	3R75516	24,51
UNC	3/8 x 16	100	22	7,0	5,5	3R75518	28,61
UNC	7/16 x 14	100	22	8,0	6,2	3R75520	35,95
UNC	1/2 x 13	110	25	9,0	7,0	3R75522	38,97
UNC	9/16 x 12	110	26	11,0	9,0	3R75524	55,25
UNC	5/8 x 11	110	27	12,0	9,0	3R75526	55,25
UNC	3/4 x 10	125	30	14,0	11,0	3R75530	74,90
UNC	7/8 x 9	140	32	18,0	14,5	3R75534	98,19
UNC	1 x 8	160	36	20,0	16,0	3R75538	133,25
UNC	1.1/4 x 7	180	40	22,0	18,0	3R75546	188,78
UNC	1.1/2 x 6	200	50	32,0	24,0	3R75554	390,71
UNC	1.3/4 x 5	220	65	36,0	29,0	3R75562	606,10
UNC	2 x 4.1/2	250	70	40,0	32,0	3R75570	883,90

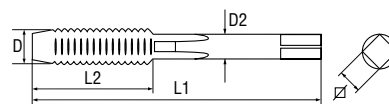


MACHOS MÁQUINA

MACHINE TAPS • TARAUDS MACHINE

UNC ROSCA GRUESA UNIFICADA ANSI B 1.1

UNIFIED COARSE THREAD ANSI B 1.1
ILETAGE UNIFIED GROSSE ANSI B 1.1



HSS-CO 5%

DIN 371



TOL 2B



	D Ø x P (")	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
UNC Nr.	4 x 40	50	6	3,5	2,7	3R74704	28,61
UNC Nr.	5 x 40	56	7	3,5	2,7	3R74705	28,61
UNC Nr.	6 x 32	56	7	3,5	3,0	3R74706	28,61
UNC Nr.	8 x 32	63	8	4,5	3,4	3R74708	28,61
UNC Nr.	10 x 24	70	10	6,0	4,9	3R74710	28,61
UNC Nr.	12 x 24	70	10	6,0	4,9	3R74712	27,67
UNC	1/4 x 20	80	13	7,0	5,5	3R74714	25,73
UNC	5/16 x 18	90	14	8,0	6,2	3R74716	29,17
UNC	3/8 x 16	100	16	9,0	7,0	3R74718	32,27



HSS-CO 5%

DIN 376



TOL 2B



	D Ø x P (")	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
UNC	4 x 40	50	6	1,8	-	3R75704	28,61
UNC Nr.	5 x 40	56	7	2,2	1,8	3R75705	28,61
UNC Nr.	6 x 32	56	7	2,5	2,1	3R75706	28,61
UNC Nr.	8 x 32	63	8	2,8	2,1	3R75708	28,61
UNC Nr.	10 x 24	70	10	3,5	2,7	3R75710	28,61
UNC Nr.	12 x 24	70	10	3,5	2,7	3R75712	27,67
UNC	1/4 x 20	80	13	4,5	3,4	3R75714	25,73
UNC	5/16 x 18	90	14	6,0	4,9	3R75716	29,17
UNC	3/8 x 16	100	16	7,0	5,5	3R75718	32,27
UNC	7/16 x 14	100	17	8,0	6,2	3R75720	45,61
UNC	1/2 x 13	110	20	9,0	7,0	3R75722	48,53
UNC	9/16 x 12	110	20	11,0	9,0	3R75724	67,33
UNC	5/8 x 11	110	22	12,0	9,0	3R75726	65,37
UNC	3/4 x 10	125	25	14,0	11,0	3R75730	87,52
UNC	7/8 x 9	140	27	18,0	14,5	3R75734	135,47
UNC	1 x 8	160	30	20,0	16,0	3R75738	171,09
UNC	1.1/4 x 7	180	35	22,0	18,0	3R75746	243,78
UNC	1.1/2 x 6	200	40	32,0	24,0	3R75754	448,88
UNC	1.3/4 x 5	220	45	36,0	29,0	3R75762	656,61
UNC	2 x 4.1/2	250	50	40,0	32,0	3R75770	959,17

CONSTRUCCIÓN
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MADERA
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ACCESSORIES • ACCESSOIRES

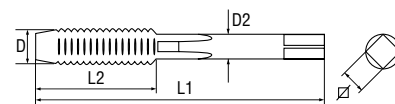
HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

UNF

ROSCA FINA UNIFICADA ANSI B 1.1
UNIFIED FINE THREAD ANSI B 1.1
FILETAGE UNIFIÉ À PAS FINE ANSI B 1.1



HSS-CO 5%

DIN 371

FORM B

TOL 2B

D Ø x P (")	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
UNF Nr. 4 x 48	50	10	3,5	2,7	3R76504	23,77
UNF Nr. 5 x 44	56	11	3,5	2,7	3R76505	23,77
UNF Nr. 6 x 40	56	12	4,0	3,0	3R76506	23,77
UNF Nr. 8 x 36	63	13	4,5	3,4	3R76508	23,77
UNF Nr. 10 x 32	70	15	6,0	4,9	3R76510	23,77
UNF Nr. 12 x 28	70	16	6,0	4,9	3R76512	23,77
UNF 1/4 x 28	80	17	7,0	5,5	3R76514	21,05
UNF 5/16 x 24	90	17	8,0	6,2	3R76516	24,51
UNF 3/8 x 24	100	18	9,0	7,0	3R76518	27,52



HSS-CO 5%

DIN 376

FORM B

TOL 2B

D Ø x P (")	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
UNF 7/16 x 20	100	22	8,0	6,2	3R77520	35,75
UNF 1/2 x 20	100	22	9,0	7,0	3R77522	37,20
UNF 9/16 x 18	100	22	11,0	9,0	3R77524	46,30
UNF 5/8 x 18	100	22	12,0	9,0	3R77526	51,47
UNF 3/4 x 16	110	25	14,0	11,0	3R77530	74,90
UNF 7/8 x 14	140	26	18,0	14,5	3R77534	88,52
UNF 1 x 14	150	28	20,0	16,0	3R77540	111,66
UNF 1 x 12	150	28	20,0	16,0	3R77538	125,83
UNF 1.1/4 x 12	150	30	22,0	18,0	3R77546	171,60
UNF 1.1/2 x 12	170	33	32,0	24,0	3R77554	357,51



CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

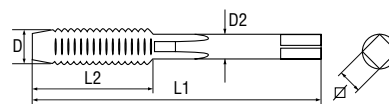
DISPLAYS
DISPLAYS • DISPLAYS

MACHOS MÁQUINA

MACHINE TAPS • TARAUDS MACHINE

UNF

ROSCA FINA UNIFICADA ANSI B 1.1
UNIFIED FINE THREAD ANSI B 1.1
FILETAGE UNIFIÉ À PAS FINE ANSI B 1.1

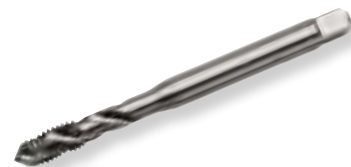


HSS-CO 5%

DIN 371



TOL 2B



D Ø x P (")	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
UNF Nr. 4 x 48	50	6	3,5	2,7	3R76704	29,87
UNF Nr. 5 x 44	56	7	3,5	2,7	3R76705	29,87
UNF Nr. 6 x 40	56	7	4,0	3,0	3R76706	29,87
UNF Nr. 8 x 36	63	8	4,5	3,4	3R76708	29,87
UNF Nr. 10 x 32	70	10	6,0	4,9	3R76710	29,87
UNF Nr. 12 x 28	70	10	6,0	4,9	3R76712	29,87
UNF 1/4 x 28	80	10	7,0	5,5	3R76714	23,62
UNF 5/16 x 24	90	10	8,0	6,2	3R76716	27,52
UNF 3/8 x 24	100	10	9,0	7,0	3R76718	31,65



HSS-CO 5%

DIN 376



TOL 2B



D Ø x P (")	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
UNF 7/16 x 20	100	13	8,0	6,2	3R77720	41,47
UNF 1/2 x 20	100	13	9,0	7,0	3R77722	41,47
UNF 9/16 x 18	100	15	11,0	9,0	3R77724	53,10
UNF 5/8 x 18	100	15	12,0	9,0	3R77726	57,77
UNF 3/4 x 16	110	17	14,0	11,0	3R77730	87,30
UNF 7/8 x 14	140	17	18,0	14,5	3R77734	117,48
UNF 1 x 14	150	20	20,0	16,0	3R77740	146,52
UNF 1 x 12	150	20	20,0	16,0	3R77738	146,52
UNF 1.1/4 x 12	150	22	22,0	18,0	3R77746	207,34
UNF 1.1/2 x 12	170	25	32,0	24,0	3R77754	407,78

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

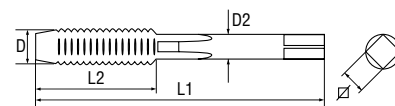
HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

UN ROSCA FINA UNIFICADA ANSI B 1.1

UNIFIED FINE THREAD ANSI B 1.1
FILETAGE UNIFIÉ ANSI B 1.1



8-UN



D Ø x P (")	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
UN 1.1/16 x 8	138	48	20,0	16,0	3R83101	154,33
UN 1.1/8 x 8	138	48	20,0	16,0	3R83102	154,33
UN 1.3/16 x 8	151	51	22,4	18,0	3R83103	181,57
UN 1.1/4 x 8	151	51	22,4	18,0	3R83104	181,57
UN 1.5/16 x 8	162	57	25,0	20,0	3R83105	226,95
UN 1.3/8 x 8	162	57	25,0	20,0	3R83106	226,95
UN 1.1/2 x 8	170	60	28,0	22,4	3R83107	296,56
UN 1.5/8 x 8	170	60	28,0	22,4	3R83108	348,00
UN 1.3/4 x 8	187	67	31,5	25,0	3R83109	399,45
UN 1.7/8 x 8	187	67	31,5	25,0	3R83110	620,35
UN 2 x 8	200	70	35,5	28,0	3R83111	620,35
UN 2.1/8 x 8	200	70	35,5	28,0	3R83112	1.228,60
UN 2.1/4 x 8	221	76	40,0	31,5	3R83113	1.228,60
UN 2.1/2 x 8	224	79	40,0	31,5	3R83115	1.785,40
UN 2.3/4 x 8	234	79	45,0	35,5	3R83116	1.966,96
UN 3 x 8	258	83	50,0	40,0	3R83117	2.178,80
UN 3.1/4 x 8	261	86	50,0	40,0	3R83118	2.178,80
UN 3.1/2 x 8	261	86	50,0	40,0	3R83119	2.572,19
UN 3.3/4 x 8	279	89	56,0	45,0	3R83120	2.965,58
UN 4 x 8	279	89	56,0	45,0	3R83121	2.965,58

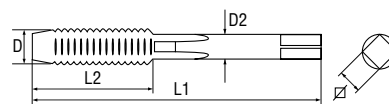
12-UN



D Ø x P (")	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
UN 1.5/8 x 12	170	60	28,0	22,4	3R83301	348,00
UN 1.3/4 x 12	187	67	31,5	25,0	3R83302	399,45
UN 1.7/8 x 12	187	67	31,5	25,0	3R83303	620,35
UN 2 x 12	200	70	35,5	28,0	3R83304	620,35
UN 2.1/8 x 12	200	70	35,5	28,0	3R83305	1.228,60
UN 2.1/4 x 12	221	76	40,0	31,5	3R83306	1.228,60
UN 2.1/2 x 12	224	79	40,0	31,5	3R83308	1.785,40
UN 2.3/4 x 12	234	79	45,0	35,5	3R83309	1.966,96
UN 3 x 12	258	83	50,0	40,0	3R83310	2.178,80
UN 3.1/4 x 12	261	86	50,0	40,0	3R83311	2.178,80
UN 3.1/2 x 12	261	86	50,0	40,0	3R83312	2.572,19
UN 3.3/4 x 12	279	89	56,0	45,0	3R83313	2.965,58
UN 4 x 12	279	89	56,0	45,0	3R83314	2.965,58

UN ROSCA FINA UNIFICADA ANSI B 1.1

UNIFIED FINE THREAD ANSI B 1.1
FILETAGE UNIFIÉ ANSI B 1.1



8-UN



HSS-CO 5%

ISO 529

FORM C/35°

TOL 2B



D Ø x P (")	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
UN 1.1/16 x 8	138	48	20,0	16,0	3R83151	193,67
UN 1.1/8 x 8	138	48	20,0	16,0	3R83152	193,67
UN 1.3/16 x 8	151	51	22,4	18,0	3R83153	226,95
UN 1.1/4 x 8	151	51	22,4	18,0	3R83154	226,95
UN 1.5/16 x 8	162	57	25,0	20,0	3R83155	284,46
UN 1.3/8 x 8	162	57	25,0	20,0	3R83156	284,46
UN 1.1/2 x 8	170	60	28,0	22,4	3R83157	406,45
UN 1.5/8 x 8	170	60	28,0	22,4	3R83158	435,76
UN 1.3/4 x 8	187	67	31,5	25,0	3R83159	499,30
UN 1.7/8 x 8	187	67	31,5	25,0	3R83160	774,69
UN 2 x 8	200	70	35,5	28,0	3R83161	774,69
UN 2.1/8 x 8	200	70	35,5	28,0	3R83162	1.535,75
UN 2.1/4 x 8	221	76	40,0	31,5	3R83163	1.535,75
UN 2.1/2 x 8	224	79	40,0	31,5	3R83165	2.231,75
UN 2.3/4 x 8	234	79	45,0	35,5	3R83166	2.457,19
UN 3 x 8	258	83	50,0	40,0	3R83167	2.723,50
UN 3.1/4 x 8	261	86	50,0	40,0	3R83168	2.723,50
UN 3.1/2 x 8	261	86	50,0	40,0	3R83169	3.207,66
UN 3.3/4 x 8	279	89	56,0	45,0	3R83170	3.706,98
UN 4 x 8	279	89	56,0	45,0	3R83171	3.706,98

12-UN



HSS-CO 5%

ISO 529

FORM C/35°

TOL 2B



D Ø x P (")	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
UN 1.5/8 x 12	170	60	28,0	22,4	3R83351	435,76
UN 1.3/4 x 12	187	67	31,5	25,0	3R83352	499,30
UN 1.7/8 x 12	187	67	31,5	25,0	3R83353	774,69
UN 2 x 12	200	70	35,5	28,0	3R83354	774,69
UN 2.1/8 x 12	200	70	35,5	28,0	3R83355	1.535,75
UN 2.1/4 x 12	221	76	40,0	31,5	3R83356	1.535,75
UN 2.1/2 x 12	224	79	40,0	31,5	3R83358	2.231,75
UN 2.3/4 x 12	234	79	45,0	35,5	3R83359	2.457,19
UN 3 x 12	258	83	50,0	40,0	3R83360	2.723,50
UN 3.1/4 x 12	261	86	50,0	40,0	3R83361	2.723,50
UN 3.1/2 x 12	261	86	50,0	40,0	3R83362	3.207,66
UN 3.3/4 x 12	279	89	56,0	45,0	3R83363	3.706,98
UN 4 x 12	279	89	56,0	45,0	3R83364	3.706,98

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

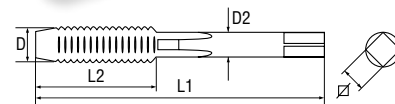
HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

UNEF

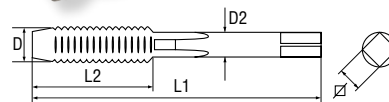
ROSCA EXTRA FINA UNIFICADA ANSI B 1.1
UNIFIED EXTRA FINE THREAD ANSI B 1.1
FILETAGE UNIFIÉ PAS EXTRA FIN ANSI B 1.1



D Ø x P (")	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
UNEF Nr. 12 x 32	62	17	5,6	4,5	3R83320	21,79
UNEF 1/4 x 32	66	19	6,3	5,0	3R83321	19,67
UNEF 5/16 x 32	72	22	8,0	6,3	3R83322	24,82
UNEF 3/8 x 32	80	24	10,0	8,0	3R83323	27,84
UNEF 7/16 x 28	85	25	8,0	6,3	3R83324	33,23
UNEF 1/2 x 28	89	29	9,0	7,1	3R83325	32,98
UNEF 9/16 x 24	95	30	11,2	9,0	3R83326	49,63
UNEF 5/8 x 24	102	32	12,5	10,0	3R83327	49,63
UNEF 11/16 x 24	112	37	14,0	11,2	3R83328	93,81
UNEF 3/4 x 20	112	37	14,0	11,2	3R83329	93,81
UNEF 13/16 x 20	118	38	16,0	12,5	3R83330	114,99
UNEF 7/8 x 20	118	38	16,0	12,5	3R83331	114,99
UNEF 15/16 x 20	130	45	18,0	14,0	3R83332	131,64
UNEF 1" x 20	130	45	18,0	14,0	3R83333	131,64
UNEF 1.1/16 x 18	138	48	20,0	16,0	3R83334	154,33
UNEF 1.1/8 x 18	138	48	20,0	16,0	3R83335	154,33
UNEF 1.3/16 x 18	151	51	22,4	18,0	3R83336	181,57
UNEF 1.1/4 x 18	151	51	22,4	18,0	3R83337	181,57
UNEF 1.5/16 x 18	162	57	25,0	20,0	3R83338	226,95
UNEF 1.3/8 x 18	162	57	25,0	20,0	3R83339	226,95
UNEF 1.7/16 x 18	170	60	28,0	22,4	3R83340	296,56
UNEF 1.1/2 x 18	170	60	28,0	22,4	3R83341	296,56
UNEF 1.9/16 x 18	170	60	28,0	22,4	3R83342	348,00
UNEF 1.5/8 x 18	170	60	28,0	22,4	3R83343	348,00
UNEF 1.11/16 x 18	187	67	31,5	25,0	3R83344	399,45
UNEF 1.3/4 x 18	187	67	31,5	25,0	3R83345	399,45
UNEF 2 x 18	200	70	35,5	28,0	3R83346	620,35

UNEF ROSCA EXTRA FINA UNIFICADA ANSI B 1.1

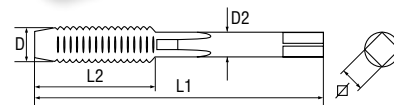
UNIFIED EXTRA FINE THREAD ANSI B 1.1
FILETAGE UNIFIÉ PAS EXTRA FIN ANSI B 1.1



D Ø x P (")	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
UNEF Nr. 12 x 32	62	17	5,6	4,5	3R83370	27,23
UNEF 1/4 x 32	66	19	6,3	5,0	3R83371	24,51
UNEF 5/16 x 32	72	22	8,0	6,3	3R83372	30,87
UNEF 3/8 x 32	80	24	10,0	8,0	3R83373	34,80
UNEF 7/16 x 28	85	25	8,0	6,3	3R83374	41,15
UNEF 1/2 x 28	89	29	9,0	7,1	3R83375	41,15
UNEF 9/16 x 24	95	30	11,2	9,0	3R83376	62,04
UNEF 5/8 x 24	102	32	12,5	10,0	3R83377	62,04
UNEF 11/16 x 24	112	37	14,0	11,2	3R83378	118,01
UNEF 3/4 x 20	112	37	14,0	11,2	3R83379	118,01
UNEF 13/16 x 20	118	38	16,0	12,5	3R83380	143,74
UNEF 7/8 x 20	118	38	16,0	12,5	3R83381	143,74
UNEF 15/16 x 20	130	45	18,0	14,0	3R83382	164,62
UNEF 1 x 20	130	45	18,0	14,0	3R83383	164,62

UNS

ROSCA UNIFICADA ANSI B 1.1
UNIFIED THREAD ANSI B 1.1
FILETAGE UNIFIÉ ANSI B 1.1



D Ø x P (")	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid. €
UNS 1/4 x 24	66	19	6,3	5,0	3R83201	19,67
UNS 1/4 x 36	66	19	6,3	5,0	3R83202	19,67
UNS 1/4 x 40	66	19	6,3	5,0	3R83203	19,67
UNS 3/8 x 27	80	24	10,0	8,0	3R83204	27,84
UNS 7/16 x 24	85	25	8,0	6,3	3R83205	32,98
UNS 1/2 x 24	89	29	9,0	7,1	3R83206	32,98
UNS 5/8 x 27	102	32	12,5	10,0	3R83207	49,63
UNS 3/4 x 24	112	37	14,0	11,2	3R83208	93,81
UNS 7/8 x 18	118	38	16,0	12,5	3R83209	114,99
UNS 1 x 14	130	45	18,0	14,0	3R83210	131,64

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

MACHOS MÁQUINA

MACHINE TAPS • TARAUDS MACHINE

UN ROSCA UNIFICADA ANSI B 1.1

UNIFIED THREAD ANSI B 1.1
FILETAGE UNIFIÉ ANSI B 1.1

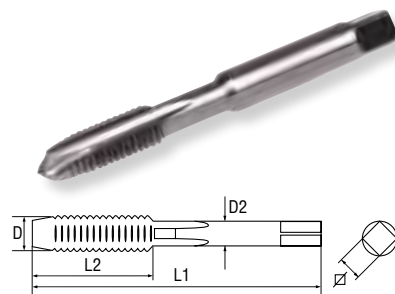


HSS-CO 5%

ISO 529

FORM B

TOL 2B



D Ø x P (")	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
UN 5/16 x 28	72	22	8,0	6,3	3R83221	24,82
UN 3/8 x 20	80	24	10,0	8,0	3R83222	27,84
UN 3/8 x 28	80	24	10,0	8,0	3R83223	27,84
UN 7/16 x 32	85	25	8,0	6,3	3R83224	32,98
UN 1/2 x 32	89	29	9,0	7,1	3R83225	32,98
UN 9/16 x 20	95	30	11,2	9,0	3R83226	49,63
UN 9/16 x 28	95	30	11,2	9,0	3R83227	49,63
UN 9/16 x 32	95	30	11,2	9,0	3R83228	49,63
UN 5/8 x 20	102	32	12,5	10,0	3R83229	49,63
UN 5/8 x 28	102	32	12,5	10,0	3R83230	49,63
UN 11/16 x 20	112	37	14,0	11,2	3R83231	93,81
UN 11/16 x 16	112	37	14,0	11,2	3R83232	93,81
UN 1 x 32	130	45	18,0	14,0	3R83233	131,64

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

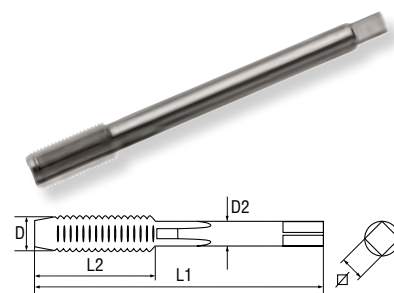
G(BSP) ROSCA GAS DIN ISO 228

PIPE THREAD ISO 228
FILETAGE PAS GAZ DIN ISO 228



HSS-CO 5%

DIN 5156



D Ø x P (")	L1 (mm)	L2 (mm)	D2 (mm)	Ø (mm)	Cod.	€/Unid.
G 1/8 x 28	90	20	7,0	5,5	3R78412	27,33
G 1/4 x 19	100	22	11,0	9,0	3R78414	35,75
G 3/8 x 19	100	22	12,0	9,0	3R78416	45,36
G 1/2 x 14	125	25	12,0	12,0	3R78418	58,55
G 5/8 x 14	125	25	18,0	14,5	3R78420	71,45
G 3/4 x 14	140	28	20,0	16,0	3R78422	89,72
G 7/8 x 14	150	28	22,0	18,0	3R78424	120,63
G 1 x 11	160	30	25,0	20,0	3R78426	135,84
G 1.1/8 x 11	170	30	28,0	22,0	3R78430	212,33
G 1.1/4 x 11	170	30	32,0	24,0	3R78434	249,60
G 1.3/8 x 11	180	32	36,0	29,0	3R78438	311,91
G 1.1/2 x 11	190	32	36,0	29,0	3R78442	397,72
G 1.3/4 x 11	190	32	40,0	32,0	3R78450	473,01
G 2 x 11	220	40	45,0	35,0	3R78454	514,78

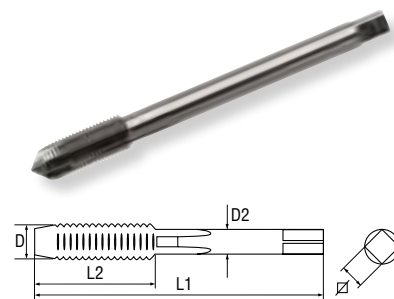
G(BSP) ROSCA GAS DIN ISO 228

PIPE THREAD ISO 228
FILETAGE PAS GAZ DIN ISO 228



HSS-CO 5%

DIN 5156



D Ø x P (")	L1 (mm)	L2 (mm)	D2 (mm)	Ø (mm)	Cod.	€/Unid.
G 1/8 x 28	90	20	7,0	5,5	3R78512	31,33
G 1/4 x 19	100	22	11,0	9,0	3R78514	41,66
G 3/8 x 19	100	22	12,0	9,0	3R78516	50,39
G 1/2 x 14	125	22	16,0	12,0	3R78518	63,04
G 5/8 x 14	125	25	18,0	14,5	3R78520	80,36
G 3/4 x 14	140	28	20,0	16,0	3R78522	99,41
G 7/8 x 14	150	28	22,0	18,0	3R78524	134,83
G 1 x 11	160	30	25,0	20,0	3R78526	150,14
G 1.1/8 x 11	170	30	28,0	22,0	3R78530	242,61
G 1.1/4 x 11	170	30	32,0	24,0	3R78534	279,17
G 1.3/8 x 11	180	32	36,0	29,0	3R78538	357,51
G 1.1/2 x 11	190	32	36,0	29,0	3R78542	500,49
G 1.3/4 x 11	190	32	40,0	32,0	3R78550	524,32
G 2 x 11	220	40	45,0	35,0	3R78554	524,32

G(BSP)

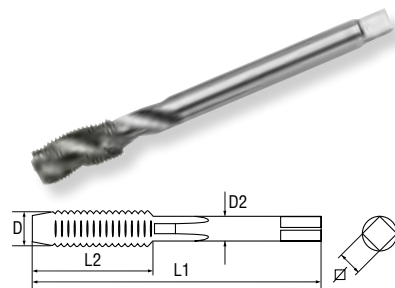
ROSCA GAS DIN ISO 228
PIPE THREAD ISO 228
FILETAGE PAS GAZ DIN ISO 228



HSS-CO 5%

DIN 5156

FORM C/35°



D Ø x P (")	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
G 1/8 x 28	90	20	7,0	5,5	3R78712	32,91
G 1/4 x 19	100	22	11,0	9,0	3R78714	45,77
G 3/8 x 19	100	22	12,0	9,0	3R78716	57,19
G 1/2 x 14	125	25	18,0	12,0	3R78718	71,51
G 5/8 x 14	125	25	18,0	14,5	3R78720	89,23
G 3/4 x 14	140	28	20,0	16,0	3R78722	113,03
G 7/8 x 14	150	28	22,0	18,0	3R78724	150,82
G 1 x 11	160	30	25,0	20,0	3R78726	177,04
G 1.1/8 x 11	170	30	28,0	22,0	3R78730	266,54
G 1.1/4 x 11	170	30	32,0	24,0	3R78734	320,05
G 1.3/8 x 11	180	32	36,0	29,0	3R78738	422,41
G 1.1/2 x 11	190	32	36,0	29,0	3R78742	565,18
G 1.3/4 x 11	190	32	40,0	32,0	3R78750	679,25
G 2 x 11	220	40	45,0	35,0	3R78754	679,25

Rc(BSPT)

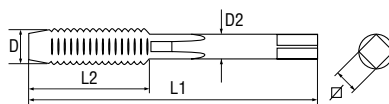
ROSCA INGLESA PARA TUBO, CONICIDAD 1:16
TAPERED PIPE THREAD, TAPER 1:16
FILETAGE PAS GAZ CONIQUE, CONICITÉ 1:16



HSS-CO 5%

DIN 5156

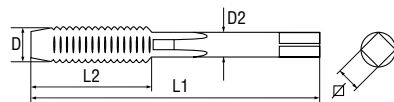
FORM C



D Ø x P (")	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
Rc 1/8 x 28	90	20	7,0	5,5	3R73404	44,44
Rc 1/4 x 19	100	22	11,0	9,0	3R73406	55,93
Rc 3/8 x 19	100	22	12,0	9,0	3R73408	69,60
Rc 1/2 x 14	125	28	16,0	12,0	3R73410	97,88
Rc 3/4 x 14	140	28	20,0	16,0	3R73412	144,48
Rc 1 x 11	160	38	25,0	20,0	3R73414	208,18

NPT

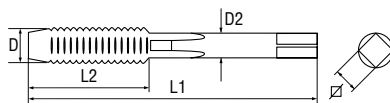
ROSCA INGLESA PARA TUBO, CONICIDAD 1:16
TAPERED PIPE THREAD, TAPER 1:16
FILETAGE NPT CONICITÉ 1:16



D Ø x P (")	L1 (mm)	L2 (mm)	D2 (mm)	Ø (mm)	Cod.	€/Unid.
NPT 1/16 x 27	90	20	6,0	4,9	3R73432	47,45
NPT 1/8 x 27	90	20	7,0	5,5	3R73434	37,08
NPT 1/4 x 18	100	22	11,0	9,0	3R73436	46,67
NPT 3/8 x 18	100	22	12,0	9,0	3R73438	58,09
NPT 1/2 x 14	125	28	16,0	12,0	3R73440	81,68
NPT 3/4 x 14	140	28	20,0	16,0	3R73442	120,57
NPT 1 x 11.5	160	38	25,0	20,0	3R73444	173,73

VG

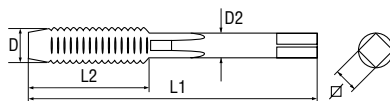
PARA ROSCAS DE VALVULAS DE NEUMÁTICO DIN 7756
FOR TIRE VALVES THREADS DIN 7756
POUR LES VALVES DES PNEUMATIQUES DIN 7756



D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	Ø (mm)	Cod.	€/Unid.
VG 5 X 36	70	12	6,00	2,70	3R30501	141,64
VG 5,2 X 24	80	17	6,00	3,40	3R30502	237,25
VG 6 X 32	80	14	6,00	4,90	3R30503	271,82
VG 8 X 32	80	16	7,00	4,90	3R30504	161,25
VG 10 X 28	90	18	8,00	6,20	3R30505	319,34
VG 12 X 26	100	22	8,00	8,00	3R30506	375,70

BSC

PARA EJES DE PEDALIER
FOR BOTTOM BRACKET
POUR PÉDALIER VÉLO



D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	Ø (mm)	Cod.	€/Unid.
BSC 1/4" X 26	56	14	7	4,9	3R30507	262,99
BSC 5/16" X 26	63	16	6	4,9	3R30508	278,02
BSC 3/8" X 26	63	16	7	5,5	3R30509	291,17
BSC 9/16" X 20 R	70	22	11,00	9,00	3R30510	174,32
BSC 9/16" X 20 L	70	22	11,00	9,00	3R30511	196,11
BSC 1" X 24	70	22	11,00	11,00	3R30512	*

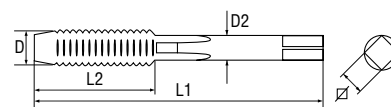
* Consultar precio y disponibilidad / Request price and availability / Consulter le prix et la disponibilité

MACHOS MÁQUINA

MACHINE TAPS • TARAUDS MACHINE

M MÉTRICA ISO-ROSCA DIN 13, IZQUIERDAS

METRIC ISO-THREAD DIN 13, LEFT HAND
MÉTRIQUE DIN-13, GAUCHE



HSS-CO 5%

DIN 371



D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
M 3 x 0,50	56	11	3,5	2,7	3R33426	21,22
M 4 x 0,70	63	13	4,5	3,4	3R33430	21,60
M 5 x 0,80	70	16	6,0	4,9	3R33434	21,89
M 6 x 1,00	80	19	6,0	4,9	3R33438	22,82
M 8 x 1,25	90	22	8,0	6,2	3R33442	27,91
M 10 x 1,50	100	24	10,0	8,0	3R33446	31,91



HSS-CO 5%

DIN 376



D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
M 12 x 1,75	110	29	9,0	7,0	3R34450	39,42
M 14 x 2,00	110	30	11,0	9,0	3R34454	52,68
M 16 x 2,00	110	32	12,0	9,0	3R34458	60,86
M 18 x 2,50	125	34	14,0	11,0	3R34462	90,29
M 20 x 2,50	140	34	16,0	12,0	3R34466	109,63
M 22 x 2,50	140	34	18,0	14,5	3R34470	125,72
M 24 x 3,00	160	38	18,0	14,5	3R34474	139,48

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

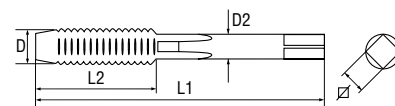
ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

M MÉTRICA ISO-ROSCA DIN 13, **IZQUIERDAS**
METRIC ISO-THREAD DIN 13, LEFT HAND
MÉTRIQUE DIN-13, GAUCHE



HSS-CO 5%

DIN 371

FORM B

TOL 6H



D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
M 3 x 0,50	56	11	3,5	2,7	3R33526	22,95
M 4 x 0,70	63	13	4,5	3,4	3R33530	22,86
M 5 x 0,80	70	16	6,0	4,9	3R33534	23,77
M 6 x 1,00	80	19	6,0	4,9	3R33538	24,90
M 7 x 1,00	80	19	7,0	5,5	3R33540	32,45
M 8 x 1,25	90	22	8,0	6,2	3R33542	28,79
M 10 x 1,50	100	24	10,0	8,0	3R33546	34,62



HSS-CO 5%

DIN 376

FORM B

TOL 6H



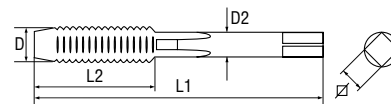
D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
M 3 x 0,50	56	11	2,2	-	3R34526	23,80
M 4 x 0,70	63	13	2,8	2,1	3R34530	23,71
M 5 x 0,80	70	16	3,5	2,7	3R34534	24,65
M 6 x 1,00	80	19	4,5	3,4	3R34538	25,83
M 8 x 1,25	90	22	6,0	4,9	3R34542	29,86
M 10 x 1,50	100	24	7,0	5,5	3R34546	35,90
M 12 x 1,75	110	29	9,0	7,0	3R34550	45,67
M 14 x 2,00	110	30	11,0	9,0	3R34554	58,87
M 16 x 2,00	110	32	12,0	9,0	3R34558	69,33
M 18 x 2,50	125	34	14,0	11,0	3R34562	98,21
M 20 x 2,50	140	34	16,0	12,0	3R34566	115,40
M 22 x 2,50	140	34	18,0	14,5	3R34570	131,77
M 24 x 3,00	160	38	18,0	14,5	3R34574	151,59
M 27 x 3,00	160	38	20,0	16,0	3R34576	225,30
M 30 x 3,50	180	45	22,0	18,0	3R34578	241,81
M 33 x 3,50	180	50	25,0	20,0	3R34580	323,93
M 36 x 4,00	200	56	28,0	22,0	3R34582	532,73
M 39 x 4,00	200	60	32,0	24,0	3R34584	687,20
M 42 x 4,50	200	60	32,0	24,0	3R34586	786,78
M 45 x 4,50	220	65	36,0	29,0	3R34588	893,80
M 48 x 5,00	250	70	36,0	29,0	3R34590	981,69
M 52 x 5,00	250	70	40,0	32,0	3R34592	1.196,13

MACHOS MÁQUINA

MACHINE TAPS • TARAUDS MACHINE

M MÉTRICA ISO-ROSCA DIN 13, IZQUIERDAS

METRIC ISO-THREAD DIN 13, LEFT HAND
MÉTRIQUE DIN-13, GAUCHE



HSS-CO 5%

DIN 371



D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
M 3 x 0,50	56	6	3,5	2,7	3R33726	26,98
M 4 x 0,70	63	7	4,5	3,4	3R33730	26,98
M 5 x 0,80	70	8	6,0	4,9	3R33734	28,33
M 6 x 1,00	80	10	6,0	4,9	3R33738	28,33
M 8 x 1,25	90	14	8,0	6,2	3R33742	34,27
M 10 x 1,50	100	16	10,0	8,0	3R33746	40,06



HSS-CO 5%

DIN 376



D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
M 3 x 0,50	56	6	2,2	-	3R34726	27,98
M 4 x 0,70	63	7	2,8	2,1	3R34730	27,98
M 5 x 0,80	70	8	3,5	2,7	3R34734	29,38
M 6 x 1,00	80	10	4,5	3,4	3R34738	29,38
M 8 x 1,25	90	14	6,0	4,9	3R34742	35,54
M 10 x 1,50	100	16	7,0	5,5	3R34746	41,54
M 12 x 1,75	110	18	9,0	7,0	3R34750	52,46
M 14 x 2,00	110	20	11,0	9,0	3R34754	68,12
M 16 x 2,00	110	22	12,0	9,0	3R34758	82,67
M 18 x 2,50	125	25	14,0	11,0	3R34762	111,83
M 20 x 2,50	140	25	16,0	12,0	3R34766	137,54
M 22 x 2,50	140	27	18,0	14,5	3R34770	157,91
M 24 x 3,00	160	30	18,0	14,5	3R34774	170,98
M 27 x 3,00	160	30	20,0	16,0	3R34776	267,17
M 30 x 3,50	180	35	22,0	18,0	3R34778	279,94
M 33 x 3,50	180	35	25,0	20,0	3R34780	385,47
M 36 x 4,00	200	40	28,0	22,0	3R34782	635,97
M 39 x 4,00	200	40	32,0	24,0	3R34784	691,49
M 42 x 4,50	200	45	32,0	24,0	3R34786	1.117,62
M 45 x 4,50	220	45	36,0	29,0	3R34788	1.268,65
M 48 x 5,00	250	50	36,0	29,0	3R34790	1.389,48
M 52 x 5,00	250	50	40,0	32,0	3R34792	1.691,54

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
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ROSCADO
THREADING • FILETAGE

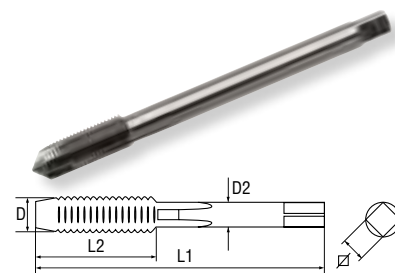
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METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

Mf MÉTRICA ISO-ROSCA DIN 13, **IZQUIERDAS**
METRIC ISO-THREAD DIN 13, LEFT HAND
MÉTRIQUE DIN-13, GAUCHE



D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
M 3 x 0,35	56	9	2,2	-	3R34801	52,34
M 4 x 0,35	63	10	2,8	2,1	3R34802	52,34
M 4 x 0,50	63	10	2,8	2,1	3R34803	46,43
M 5 x 0,50	70	12	3,5	2,7	3R34804	46,43
M 5 x 0,75	70	12	3,5	2,7	3R34805	43,63
M 6 x 0,50	80	14	4,5	3,4	3R34806	52,34
M 6 x 0,75	80	14	4,5	3,4	3R34807	44,35
M 7 x 0,75	80	14	5,5	4,3	3R34808	50,33
M 8 x 0,50	80	19	6,0	4,9	3R34809	52,34
M 8 x 0,75	80	19	6,0	4,9	3R34810	47,82
M 8 x 1,00	90	22	6,0	4,9	3R34811	44,35
M 9 x 0,75	80	19	7,0	5,5	3R34812	52,34
M 9 x 1,00	90	22	7,0	5,5	3R34813	55,26
M 10 x 0,75	90	20	7,0	5,5	3R34814	65,81
M 10 x 1,00	90	20	7,0	5,5	3R34815	48,96
M 10 x 1,25	100	24	7,0	5,5	3R34816	53,15
M 11 x 1,00	90	20	8,0	6,2	3R34817	71,33
M 11 x 1,25	90	22	8,0	6,2	3R34818	75,51
M 12 x 0,75	100	22	9,0	7,0	3R34819	81,35
M 12 x 1,00	100	22	9,0	7,0	3R34820	68,78
M 12 x 1,25	100	22	9,0	7,0	3R34821	68,78
M 12 x 1,50	100	22	9,0	7,0	3R34822	67,11
M 13 x 1,00	100	22	11,0	9,0	3R34823	109,07
M 13 x 1,50	100	22	11,0	9,0	3R34824	109,07
M 14 x 0,75	100	22	11,0	9,0	3R34825	116,69
M 14 x 1,00	100	22	11,0	9,0	3R34826	89,52
M 14 x 1,25	100	22	11,0	9,0	3R34827	83,70
M 14 x 1,50	100	22	11,0	9,0	3R34828	83,70
M 15 x 1,00	100	22	12,0	9,0	3R34829	117,47
M 15 x 1,50	100	22	12,0	9,0	3R34830	113,10
M 16 x 1,00	100	22	12,0	9,0	3R34831	109,07
M 16 x 1,25	100	22	12,0	9,0	3R34832	121,09
M 16 x 1,50	100	22	12,0	9,0	3R34833	95,10
M 18 x 1,00	110	25	14,0	11,0	3R34834	124,74
M 18 x 1,25	110	25	14,0	11,0	3R34835	143,64
M 18 x 1,50	110	25	14,0	11,0	3R34836	115,22
M 18 x 2,00	125	34	14,0	11,0	3R34837	127,25
M 20 x 1,00	125	25	16,0	12,0	3R34838	167,81
M 20 x 1,25	125	25	16,0	12,0	3R34839	179,57
M 20 x 1,50	125	25	16,0	12,0	3R34840	127,11
M 20 x 2,00	140	34	16,0	12,0	3R34841	146,86
M 21 x 1,50	125	25	16,0	12,0	3R34842	179,57
M 22 x 1,00	125	25	18,0	14,5	3R34843	181,80
M 22 x 1,25	125	25	18,0	14,5	3R34844	209,45
M 22 x 1,50	125	25	18,0	14,5	3R34845	159,36
M 22 x 2,00	140	34	18,0	14,5	3R34846	181,80
M 23 x 1,50	125	25	18,0	14,5	3R34847	239,39
M 24 x 1,00	140	28	18,0	14,5	3R34848	222,36
M 24 x 1,25	140	28	18,0	14,5	3R34849	239,39
M 24 x 1,50	140	28	18,0	14,5	3R34850	186,66
M 24 x 2,00	140	28	18,0	14,5	3R34851	206,96

MACHOS MÁQUINA

MACHINE TAPS • TARAUDS MACHINE

Mf MÉTRICA ISO-ROSCA DIN 13, IZQUIERDAS

METRIC ISO-THREAD DIN 13, LEFT HAND
MÉTRIQUE DIN-13, GAUCHE

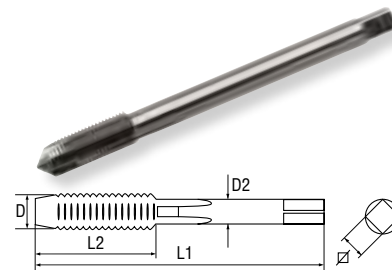


HSS-CO 5%

DIN 374

FORM B

TOL 6H



D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
M 25 x 1,0	140	28	18,0	14,5	3R34852	239,39
M 25 x 1,5	140	28	18,0	14,5	3R34853	239,39
M 26 x 1,0	140	28	18,0	14,5	3R3485X	239,39
M 26 x 1,5	140	28	18,0	14,5	3R34854	209,76
M 26 x 2,0	140	28	18,0	14,5	3R34855	239,39
M 27 x 1,0	140	28	20,0	16,0	3R34800	299,25
M 27 x 1,5	140	28	20,0	16,0	3R34856	240,52
M 27 x 2,0	140	28	20,0	16,0	3R34857	269,34
M 28 x 1,0	140	28	20,0	16,0	3R34858	299,25
M 28 x 1,5	140	28	20,0	16,0	3R34859	240,52
M 28 x 2,0	140	28	20,0	16,0	3R34860	269,67
M 29 x 1,5	150	28	22,0	18,0	3R34861	344,14
M 30 x 1,0	150	28	22,0	18,0	3R34862	323,03
M 30 x 1,5	150	28	22,0	18,0	3R34863	265,97
M 30 x 2,0	150	28	22,0	18,0	3R34864	307,65
M 30 x 2,5	180	45	22,0	18,0	3R3486X	344,14
M 30 x 3,0	180	45	22,0	18,0	3R34865	344,14
M 32 x 1,5	150	28	22,0	18,0	3R34866	329,71
M 32 x 2,0	150	28	22,0	18,0	3R34867	448,87
M 32 x 3,0	180	50	22,0	18,0	3R34892	448,87
M 33 x 1,5	160	30	25,0	20,0	3R34893	349,59
M 33 x 2,0	160	30	25,0	20,0	3R34868	448,87
M 33 x 3,0	180	50	25,0	20,0	3R34869	448,87
M 34 x 1,5	170	30	28,0	22,0	3R34870	417,49
M 34 x 2,0	170	30	28,0	22,0	3R34871	417,49
M 35 x 1,5	170	30	28,0	22,0	3R34872	419,51
M 36 x 1,5	170	30	28,0	22,0	3R34873	523,80
M 36 x 2,0	170	30	28,0	22,0	3R34874	531,38
M 36 x 3,0	200	56	28,0	22,0	3R34875	601,29
M 38 x 1,5	170	30	28,0	22,0	3R34876	554,91
M 39 x 1,5	170	30	32,0	24,0	3R34877	573,33
M 39 x 2,0	170	30	32,0	24,0	3R34878	573,33
M 39 x 3,0	200	60	32,0	24,0	3R34879	573,33
M 40 x 1,5	170	30	32,0	24,0	3R34880	604,19
M 40 x 2,0	170	30	32,0	24,0	3R34881	671,21
M 40 x 3,0	200	60	32,0	24,0	3R34882	699,18
M 42 x 1,5	170	30	32,0	24,0	3R34883	674,20
M 42 x 2,0	170	30	32,0	24,0	3R34884	783,07
M 42 x 3,0	200	60	32,0	24,0	3R34885	811,05
M 45 x 1,5	180	32	36,0	29,0	3R34886	798,66
M 45 x 2,0	180	32	36,0	29,0	3R34887	798,66
M 45 x 3,0	200	50	36,0	29,0	3R34888	839,00
M 48 x 1,5	190	32	36,0	29,0	3R34889	959,43
M 48 x 2,0	190	32	36,0	29,0	3R34890	959,43
M 48 x 3,0	225	50	36,0	29,0	3R34891	959,43
M 50 x 1,5	190	32	36,0	29,0	3R34894	1.112,42
M 50 x 2,0	190	32	36,0	29,0	3R34895	1.112,42
M 50 x 3,0	225	50	36,0	29,0	3R34896	1.112,42
M 52 x 1,5	190	32	40,0	32,0	3R34897	1.226,53
M 52 x 2,0	190	32	40,0	32,0	3R34898	1.226,53
M 52 x 3,0	225	50	40,0	32,0	3R34899	1.226,53

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

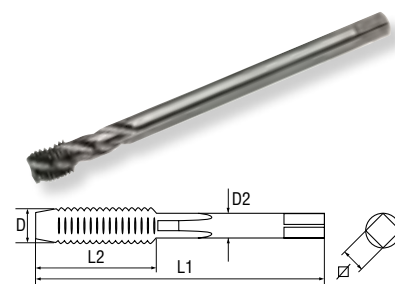
ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

Mf MÉTRICA ISO-ROSCA DIN 13, **IZQUIERDAS**
METRIC ISO-THREAD DIN 13, LEFT HAND
MÉTRIQUE DIN-13, GAUCHE



D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	Ø (mm)	Cod.	€/Unid.
M 3 x 0,35	56	5	2,2	-	3R34901	61,54
M 4 x 0,35	63	5	2,8	2,1	3R34902	61,54
M 4 x 0,50	63	5	2,8	2,1	3R34903	52,60
M 5 x 0,50	70	5	3,5	2,7	3R34904	53,51
M 5 x 0,75	70	8	3,5	2,7	3R34905	53,51
M 6 x 0,50	80	5	4,5	3,4	3R34906	61,54
M 6 x 0,75	80	8	4,5	3,4	3R34907	49,23
M 7 x 0,75	80	8	5,5	4,3	3R34908	61,54
M 8 x 0,50	80	8	6,0	4,9	3R34909	61,54
M 8 x 0,75	80	8	6,0	4,9	3R34910	61,54
M 8 x 1,00	90	10	6,0	4,9	3R34911	48,96
M 9 x 0,75	80	10	7,0	5,5	3R34912	62,97
M 9 x 1,00	90	10	7,0	5,5	3R34913	61,29
M 10 x 0,75	90	10	7,0	5,5	3R34914	63,19
M 10 x 1,00	90	10	7,0	5,5	3R34915	59,18
M 10 x 1,25	100	16	7,0	5,5	3R34916	60,46
M 11 x 1,00	90	11	8,0	6,2	3R34917	106,60
M 11 x 1,25	90	14	8,0	6,2	3R34918	106,60
M 12 x 0,75	100	10	9,0	7,0	3R34919	106,60
M 12 x 1,00	100	11	9,0	7,0	3R34920	76,27
M 12 x 1,25	100	15	9,0	7,0	3R34921	75,51
M 12 x 1,50	100	15	9,0	7,0	3R34922	75,51
M 13 x 1,00	100	11	11,0	9,0	3R34923	112,13
M 13 x 1,50	100	15	11,0	9,0	3R34924	112,13
M 14 x 0,75	100	10	11,0	9,0	3R34925	112,13
M 14 x 1,00	100	11	11,0	9,0	3R34926	106,55
M 14 x 1,25	100	15	11,0	9,0	3R34927	96,61
M 14 x 1,50	100	15	11,0	9,0	3R34928	92,28
M 15 x 1,50	100	15	12,0	9,0	3R34930	154,85
M 16 x 1,00	100	12	12,0	9,0	3R34931	168,61
M 16 x 1,25	100	15	12,0	9,0	3R34932	154,85
M 16 x 1,50	100	15	12,0	9,0	3R34933	119,86
M 18 x 1,00	110	13	14,0	11,0	3R34934	165,00
M 18 x 1,25	110	15	14,0	11,0	3R34935	165,00
M 18 x 1,50	110	17	14,0	11,0	3R34936	136,20
M 18 x 2,00	125	20	14,0	11,0	3R34937	165,00
M 20 x 1,00	125	14	16,0	12,0	3R34938	200,05
M 20 x 1,25	125	17	16,0	12,0	3R34939	200,05
M 20 x 1,50	125	17	16,0	12,0	3R34940	148,30
M 20 x 2,00	140	20	16,0	12,0	3R34941	200,05
M 22 x 1,00	125	14	18,0	14,5	3R34943	230,70
M 22 x 1,25	125	17	18,0	14,5	3R34944	230,70
M 22 x 1,50	125	17	18,0	14,5	3R34945	177,65
M 22 x 2,00	140	20	18,0	14,5	3R34946	245,09
M 24 x 1,00	140	15	18,0	14,5	3R34948	271,80
M 24 x 1,25	140	17	18,0	14,5	3R34949	258,76
M 24 x 1,50	140	20	18,0	14,5	3R34950	212,30
M 24 x 2,00	140	20	18,0	14,5	3R34951	258,76
M 26 x 1,50	140	20	18,0	14,5	3R34954	286,11
M 26 x 2,00	140	20	18,0	14,5	3R34955	286,11
M 27 x 2,00	140	20	20,0	16,0	3R34957	342,26
M 28 x 1,50	140	20	20,0	16,0	3R34959	342,26

MACHOS MÁQUINA

MACHINE TAPS • TARAUDS MACHINE

Mf MÉTRICA ISO-ROSCA DIN 13, IZQUIERDAS

METRIC ISO-THREAD DIN 13, LEFT HAND
MÉTRIQUE DIN-13, GAUCHE

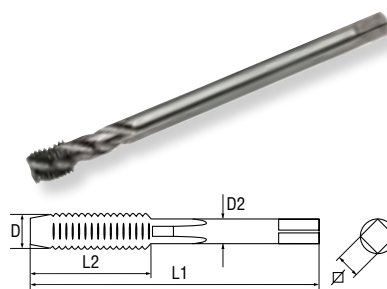


HSS-CO 5%

DIN 374

FORM C/35°

TOL 6H



D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	Ø (mm)	Cod.	€/Unid.
M 28 x 2,00	140	20	20,0	16,0	3R34960	342,26
M 30 x 1,00	150	17	22,0	18,0	3R34962	371,00
M 30 x 1,50	150	22	22,0	18,0	3R34963	308,23
M 30 x 2,00	150	22	22,0	18,0	3R34964	385,25
M 30 x 2,50	180	27	22,0	18,0	3R3496X	385,25
M 30 x 3,00	180	30	22,0	18,0	3R34965	385,25
M 32 x 2,00	150	22	22,0	18,0	3R34967	456,18
M 33 x 2,00	160	24	25,0	20,0	3R34968	456,18
M 34 x 1,50	170	24	28,0	22,0	3R34970	461,90
M 34 x 2,00	170	24	28,0	22,0	3R34971	461,90
M 36 x 1,50	170	24	28,0	22,0	3R34973	583,46
M 36 x 2,00	170	24	28,0	22,0	3R34974	583,46
M 36 x 3,00	200	30	28,0	22,0	3R34975	583,46
M 38 x 1,50	170	24	28,0	22,0	3R34976	615,53
M 39 x 2,00	170	25	32,0	24,0	3R34978	615,53
M 40 x 1,50	170	25	32,0	24,0	3R34980	680,92
M 40 x 2,00	170	25	32,0	24,0	3R34981	680,92
M 40 x 3,00	200	30	32,0	24,0	3R34982	680,49
M 42 x 2,00	170	25	32,0	24,0	3R34984	765,58
M 45 x 1,50	180	27	36,0	29,0	3R34986	896,30
M 45 x 2,00	180	27	36,0	29,0	3R34987	896,30
M 45 x 3,00	200	30	36,0	29,0	3R34988	896,30
M 48 x 2,00	190	27	36,0	29,0	3R34990	1.067,69
M 50 x 1,50	190	27	36,0	29,0	3R34994	1.236,57
M 50 x 2,00	190	27	36,0	29,0	3R34995	1.236,57
M 50 x 3,00	225	33	36,0	29,0	3R34996	1.236,57
M 52 x 1,50	190	27	40,0	32,0	3R34997	1.361,86
M 52 x 2,00	190	27	40,0	32,0	3R34998	1.361,86
M 52 x 3,00	225	33	40,0	32,0	3R34999	1.361,86

G(BSP) ROSCA GAS DIN ISO 228, IZQUIERDAS

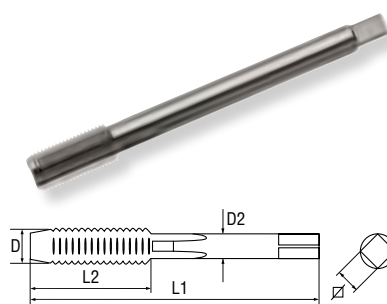
PIPE THREAD DIN ISO 228, LEFT HAND
FILETAGE PAS GAZ DIN ISO 228, GAUCHE



HSS-CO 5%

DIN 5156

FORM C



D Ø x P (")	L1 (mm)	L2 (mm)	D2 (mm)	Ø (mm)	Cod.	€/Unid.
G 1/8 x 28	90	20	7,0	5,5	3R78202	54,50
G 1/4 x 19	100	22	11,0	9,0	3R78203	68,08
G 3/8 x 19	100	22	12,0	9,0	3R78204	89,88
G 1/2 x 14	125	25	16,0	12,0	3R78205	117,11
G 5/8 x 14	125	25	18,0	14,5	3R78206	138,90
G 3/4 x 14	140	28	20,0	16,0	3R78207	177,06
G 1 x 11	160	30	25,0	20,0	3R78208	258,76

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

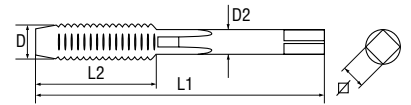
ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

M MÉTRICA ISO-ROSCA DIN 13
METRIC ISO-THREAD DIN 13
MÉTRIQUE DIN-13



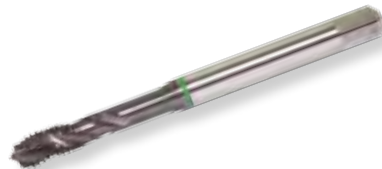
BANDA VERDE PM
GREEN RING PM • BANDE VERT PM



D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	Ø (mm)	Cod.	€
M 3,0 x 0,50	56	9	3,5	2,7	3R30226	29,41
M 4,0 x 0,70	63	12	4,5	3,4	3R30230	30,05
M 5,0 x 0,80	70	13	6	4,9	3R30234	31,72
M 6,0 x 1,00	80	15	6	4,9	3R30238	31,72
M 8,0 x 1,25	90	18	8	6,2	3R30242	36,72
M 10,0 x 1,50	100	20	10	8	3R30246	43,96



D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	Ø (mm)	Cod.	€
M 12,0 x 1,75	110	23	9	7	3R30250	55,96
M 14,0 x 2,00	110	25	11	9	3R30254	70,54
M 16,0 x 2,00	110	25	12	9	3R30258	73,71
M 18,0 x 2,50	125	30	14	11	3R30262	110,65
M 20,0 x 2,50	140	30	16	12	3R30266	114,15



D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	Ø (mm)	Cod.	€
M 3,0 x 0,50	56	5	3,50	2,70	3R30126	33,70
M 4,0 x 0,70	63	7	4,50	3,40	3R30130	33,70
M 5,0 x 0,80	70	8	6,00	4,90	3R30134	34,58
M 6,0 x 1,00	80	10	6,00	4,90	3R30138	35,93
M 8,0 x 1,25	90	13	8,00	6,20	3R30142	41,89
M 10,0 x 1,50	100	15	10,00	8,00	3R30146	49,44



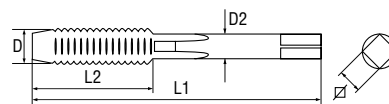
D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	Ø (mm)	Cod.	€
M 12,0 x 1,75	110	18	9,00	7,00	3R30150	63,91
M 14,0 x 2,00	110	20	11,00	9,00	3R30154	79,33
M 16,0 x 2,00	110	20	12,00	9,00	3R30158	87,23
M 18,0 x 2,50	125	25	14,00	11,00	3R30162	126,23
M 20,0 x 2,50	140	25	16,00	12,00	3R30166	130,52

*Para otras medidas consultar / Request for other sizes / Pour d'autres dimensions, nous consulter

MACHOS MÁQUINA BANDA

COLOURED RING MACHINE TAPS • TARAUD MACHINE AVEC BANDE COLORÉE

M MÉTRICA ISO-ROSCA DIN 13
METRIC ISO-THREAD DIN 13
MÉTRIQUE DIN-13



BANDA VERDE - MULTIMATERIAL

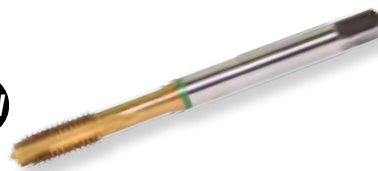
GREEN RING - MULTIMATERIAL • BANDE VERT - MULTIMATERIEL

advance
MAXIMO RENDIMIENTO



HSS-E-V3 **DIN 371** **FORM B** **TOL 6H** **TIN**

NEW



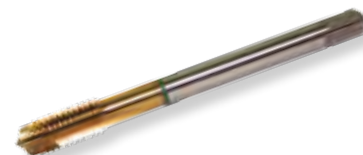
D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€
M 3,0 x 0,50	56	9	3,5	2,7	3R30426	20,51
M 4,0 x 0,70	63	12	4,5	3,4	3R30430	20,75
M 5,0 x 0,80	70	13	6	4,9	3R30434	21,46
M 6,0 x 1,00	80	15	6	4,9	3R30438	21,62
M 8,0 x 1,25	90	18	8	6,2	3R30442	24,96
M 10,0 x 1,50	100	20	10	8	3R30446	29,33

advance
MAXIMO RENDIMIENTO



HSS-E-V3 **DIN 376** **FORM B** **TOL 6H** **TIN**

NEW



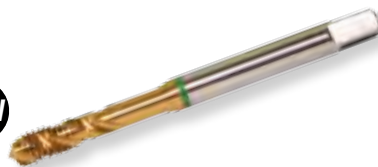
D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€
M 12,0 x 1,75	110	23	9	7	3R30450	37,20
M 14,0 x 2,00	110	25	11	9	3R30454	48,57
M 16,0 x 2,00	110	25	12	11	3R30458	53,66
M 18,0 x 2,50	125	30	14	11	3R30462	76,63
M 20,0 x 2,50	140	30	16	12	3R30466	79,17

advance
MAXIMO RENDIMIENTO



HSS-E-V3 **DIN 371** **FORM C/35°** **TOL 6H** **TIN**

NEW



D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€
M 3,0 x 0,50	56	5	3,5	2,7	3R30326	22,18
M 4,0 x 0,70	63	7	4,5	3,4	3R30330	22,18
M 5,0 x 0,80	70	8	6	4,9	3R30334	22,66
M 6,0 x 1,00	80	10	6	4,9	3R30338	23,77
M 8,0 x 1,25	90	13	8	6,2	3R30342	27,50
M 10,0 x 1,50	100	15	10	8	3R30346	32,35

advance
MAXIMO RENDIMIENTO



HSS-E-V3 **DIN 376** **FORM C/35°** **TOL 6H** **TIN**

NEW



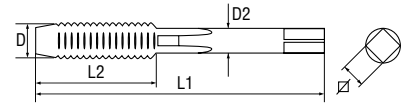
D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€
M 12,0 x 1,75	110	18	9	7	3R30350	42,29
M 14,0 x 2,00	110	20	11	9	3R30354	52,86
M 16,0 x 2,00	110	20	12	9	3R30358	58,11
M 18,0 x 2,50	125	25	14	11	3R30362	83,78
M 20,0 x 2,50	140	25	16	12	3R30366	86,41

*Para otras medidas consultar / Request for other sizes / Pour d'autres dimensions, nous consulter

M MÉTRICA ISO-ROSCA DIN 13

METRIC ISO-THREAD DIN 13
MÉTRIQUE DIN-13

BANDA BLANCA WHITE RING • BANDE BLANC



D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
M 3 x 0,50	56	11	3,5	2,7	3R35226	17,96
M 4 x 0,70	63	13	4,5	3,4	3R35230	17,96
M 5 x 0,80	70	16	6,0	4,9	3R35234	19,25
M 6 x 1,00	80	19	6,0	4,9	3R35238	19,90
M 8 x 1,25	90	22	8,0	6,2	3R35242	22,45
M 10 x 1,50	100	24	10,0	8,0	3R35246	26,96

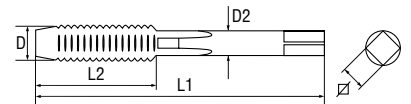


D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
M 12 x 1,75	110	29	9,0	7,0	3R35250	34,66
M 14 x 2,00	110	30	11,0	9,0	3R35254	47,49
M 16 x 2,00	110	32	12,0	9,0	3R35258	53,90
M 18 x 2,50	125	34	14,0	11,0	3R35262	82,14
M 20 x 2,50	140	34	16,0	12,0	3R35266	92,25

M MÉTRICA ISO-ROSCA DIN 13

METRIC ISO-THREAD DIN 13
MÉTRIQUE DIN-13

BANDA BLANCA WHITE RING • BANDE BLANC



D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
M 3 x 0,50	56	6	3,5	2,7	3R36226	22,70
M 4 x 0,70	63	7	4,5	3,4	3R36230	22,70
M 5 x 0,80	70	8	6,0	4,9	3R36234	23,92
M 6 x 1,00	80	10	6,0	4,9	3R36238	23,92
M 8 x 1,25	90	14	8,0	6,2	3R36242	27,85
M 10 x 1,50	100	16	10,0	8,0	3R36246	32,80



D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
M 12 x 1,75	110	18	9,0	7,0	3R36250	40,66
M 14 x 2,00	110	20	11,0	9,0	3R36254	52,88
M 16 x 2,00	110	22	12,0	9,0	3R36258	62,83
M 18 x 2,50	125	25	14,0	11,0	3R36262	83,41
M 20 x 2,50	140	25	16,0	12,0	3R36266	112,97

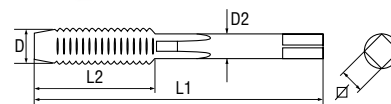
MACHOS MÁQUINA BANDA

COLOURED RING MACHINE TAPS • TARAUD MACHINE AVEC BANDE COLORÉE

Mf MÉTRICA FINA ISO-ROSCA DIN 13

METRIC ISO-THREAD DIN 13
MÉTRIQUE FIN ISO DIN-13

BANDA BLANCA WHITE RING • BANDE BLANC

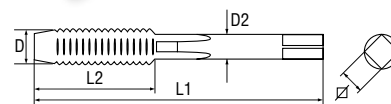


D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
M 5 x 0,50	70	12	3,5	2,7	3R35903	41,22
M 6 x 0,75	80	14	4,5	3,4	3R35904	41,22
M 8 x 0,75	80	19	6,0	4,9	3R35906	41,22
M 8 x 1,00	90	22	6,0	4,9	3R35907	41,22
M 10 x 1,00	90	20	7,0	5,5	3R35909	48,08
M 10 x 1,25	100	24	7,0	5,5	3R35910	48,08
M 12 x 1,25	100	22	9,0	5,5	3R35913	65,94
M 12 x 1,50	100	22	9,0	7,0	3R35914	65,94
M 14 x 1,50	100	22	11,0	9,0	3R35917	82,43
M 16 x 1,50	100	22	12,0	9,0	3R35921	94,80
M 18 x 1,50	110	25	14,0	11,0	3R35925	115,41
M 20 x 1,50	125	25	16,0	12,0	3R35929	127,77

Mf MÉTRICA FINA ISO-ROSCA DIN 13

METRIC ISO-THREAD DIN 13
MÉTRIQUE FIN ISO DIN-13

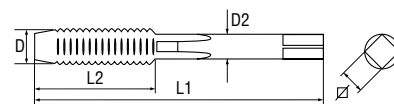
BANDA BLANCA WHITE RING • BANDE BLANC



D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
M 5 x 0,50	70	5	3,5	2,7	3R36903	46,72
M 6 x 0,75	80	8	4,5	3,4	3R36904	46,72
M 8 x 0,75	80	8	6,0	4,9	3R36906	46,72
M 8 x 1,00	90	10	6,0	4,9	3R36907	46,72
M 10 x 1,00	90	10	7,0	5,5	3R36909	56,33
M 10 x 1,25	100	16	7,0	5,5	3R36910	55,51
M 12 x 1,25	100	15	9,0	7,0	3R36913	71,45
M 12 x 1,50	100	15	9,0	7,0	3R36914	71,45
M 14 x 1,50	100	15	11,0	9,0	3R36917	87,93
M 16 x 1,50	100	15	12,0	9,0	3R36921	101,67
M 18 x 1,50	110	17	14,0	11,0	3R36925	126,40
M 20 x 1,50	125	17	16,0	12,0	3R36929	140,14

UNC

ROSCA GRUESA UNIFICADA ANSI B 1.1
 UNIFIED COARSE THREAD ANSI B 1.1
 FILETAGE UNIFIED GROSSE ANSI B 1.1



BANDA BLANCA WHITE RING • BANDE BLANC



D Ø x P (")	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
UNC 1/4 x 20	80	17	7,0	5,5	3R35945	30,22
UNC 5/16 x 18	90	20	8,0	6,2	3R35946	38,47
UNC 3/8 x 16	100	22	9,0	7,0	3R35947	43,97

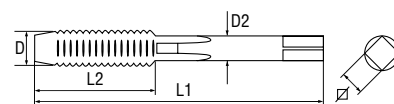


D Ø x P (")	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
UNC 7/16 x 14	100	22	8,0	6,2	3R35948	52,21
UNC 1/2 x 13	110	25	9,0	7,0	3R35949	52,21



UNC

ROSCA GRUESA UNIFICADA ANSI B 1.1
 UNIFIED COARSE THREAD ANSI B 1.1
 FILETAGE UNIFIED GROSSE ANSI B 1.1



BANDA BLANCA WHITE RING • BANDE BLANC



D Ø x P (")	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
UNC 1/4 x 20	80	17	7,0	5,5	3R36945	37,64
UNC 5/16 x 18	90	20	8,0	6,2	3R36946	45,34
UNC 3/8 x 16	100	22	9,0	7,0	3R36947	50,02



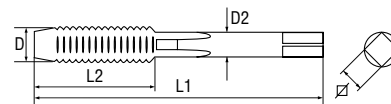
D Ø x P (")	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
UNC 7/16 x 14	100	22	8,0	6,2	3R36948	63,21
UNC 1/2 x 13	110	25	9,0	7,0	3R36949	63,21



MACHOS MÁQUINA BANDA

COLOURED RING MACHINE TAPS • TARAUD MACHINE AVEC BANDE COLORÉE

UNF ROSCA FINA UNIFICADA ANSI B 1.1 UNIFIED FINE THREAD ANSI B 1.1 FILETAGE UNIFIED À PAS FINE ANSI B 1.1



BANDA BLANCA WHITE RING • BANDE BLANC



HSS-CO 5%

DIN 371

FORM B



D Ø x P (")	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
UNF 1/4 x 2 8	80	17	7,0	5,5	3R35965	30,22
UNF 5/16 x 24	90	17	8,0	6,2	3R35966	38,48
UNF 3/8 x 24	100	18	9,0	7,0	3R35967	43,97



HSS-CO 5%

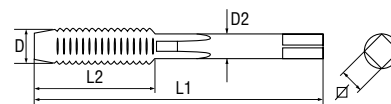
DIN 376

FORM B



D Ø x P (")	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
UNF 7/16 x 20	100	22	8,0	6,2	3R35968	52,21
UNF 1/2 x 20	100	22	9,0	7,0	3R35969	52,21

UNF ROSCA FINA UNIFICADA ANSI B 1.1 UNIFIED FINE THREAD ANSI B 1.1 FILETAGE UNIFIED À PAS FINE ANSI B 1.1



BANDA BLANCA WHITE RING • BANDE BLANC



HSS-CO 5%

DIN 371

FORM C/39°



D Ø x P (")	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
UNF 1/4 x 28	80	10	7,0	5,5	3R36965	37,64
UNF 5/16 x 24	90	10	8,0	6,2	3R36966	45,35
UNF 3/8 x 24	100	10	9,0	7,0	3R36967	50,01



HSS-CO 5%

DIN 376

FORM C/39°



D Ø x P (")	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
UNF 7/16 x 20	100	13	8,0	6,2	3R36968	63,21
UNF 1/2 x 20	100	13	9,0	7,0	3R36969	63,21

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

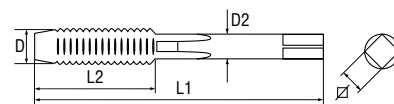
HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

G(BSP)

ROSCA GAS DIN ISO 228
 PIPE THREAD DIN ISO 228
 FILETAGE PAS GAZ DIN ISO 228



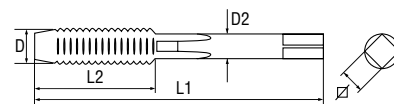
BANDA BLANCA *WHITE RING* • *BANDE BLANC*



D Ø x P (")	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
G 1/8 x 28	90	20	7,0	5,5	3R35992	49,46
G 1/4 x 19	100	22	11,0	9,0	3R35993	60,45
G 3/8 x 19	100	22	12,0	9,0	3R35994	71,44
G 1/2 x 14	125	25	16,0	12,0	3R35995	104,42

G(BSP)

ROSCA GAS DIN ISO 228
 PIPE THREAD DIN ISO 228
 FILETAGE PAS GAZ DIN ISO 228



BANDA BLANCA *WHITE RING* • *BANDE BLANC*

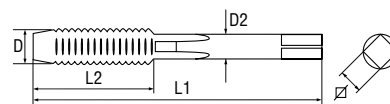


D Ø x P (")	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
G 1/8 x 28	90	20	7,0	5,5	3R36992	54,96
G 1/4 x 19	100	22	11,0	9,0	3R36993	68,70
G 3/8 x 19	100	22	12,0	9,0	3R36994	86,56
G 1/2 x 14	125	25	16,0	12,0	3R36995	120,90

MACHOS MÁQUINA BANDA

COLOURED RING MACHINE TAPS • TARAUD MACHINE AVEC BANDE COLORÉE

M MÉTRICA ISO-ROSCA DIN 13
METRIC ISO-THREAD DIN 13
MÉTRIQUE DIN-13



BANDA NEGRA PM - PARA MATERIALES DUROS

BLACK RING PM - FOR HARD MATERIALS • BANDE NOIR PM - POUR MATÉRIAUX DURS



PM

DIN 371

FORM B

TOL 6H

FUTURA



D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	Ø (mm)	Cod.	€
M 3,0 x 0,50	56	5	3,5	2,7	3R35126	29,09
M 4,0 x 0,70	63	7	4,5	3,4	3R35130	29,81
M 5,0 x 0,80	70	8	6	4,9	3R35134	31,40
M 6,0 x 1,00	80	10	6	4,9	3R35138	31,40
M 8,0 x 1,25	90	13	8	6,2	3R35142	36,33
M 10,0 x 1,50	100	15	10	8	3R35146	43,40



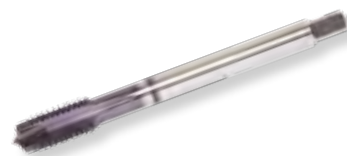
PM

DIN 376

FORM B

TOL 6H

FUTURA



D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	Ø (mm)	Cod.	€
M 12,0 X 1,75	110	23	9	7	3R35150	55,41



PM

DIN 371

FORM C/40°

TOL 6H

FUTURA



D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	Ø (mm)	Cod.	€
M 3,0 x 0,50	56	5	3,5	2,7	3R36126	33,23
M 4,0 x 0,70	63	7	4,5	3,4	3R36130	33,23
M 5,0 x 0,80	70	8	6	4,9	3R36134	33,94
M 6,0 x 1,00	80	10	6	4,9	3R36138	35,45
M 8,0 x 1,25	90	13	8	6,2	3R36142	41,26
M 10,0 x 1,50	100	15	10	8	3R36146	48,81



PM

DIN 376

FORM C/40°

TOL 6H

FUTURA



D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	Ø (mm)	Cod.	€
M 12,0 X 1,75	110	18	9	7	3R36150	63,28



PM

DIN 371

FORM C/15°

TOL 6H

FUTURA



D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	Ø (mm)	Cod.	€
M 5,0 x 0,80	70	8	6	4,9	3R35154	33,94
M 6,0 x 1,00	80	10	6	4,9	3R35158	35,45
M 8,0 x 1,25	90	13	8	6,2	3R35162	41,26
M 10,0 x 1,50	100	15	10	8	3R35166	48,81

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

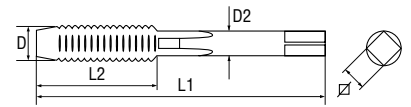
ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

M MÉTRICA ISO-ROSCA DIN 13
METRIC ISO-THREAD DIN 13
MÉTRIQUE DIN-13

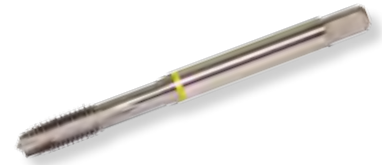


BANDA AMARILLA - PARA ALUMINIO
YELLOW RING - FOR ALUMINIUM • BANDE JAUNE - POUR L'ALUMINIUM



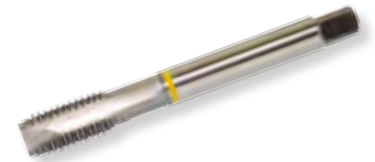
AL HSS-CO 5% DIN 371 FORM B TOL 6H ALUSPEED

D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€
M 3,0 x 0,50	56	9	3,5	2,7	3R35426	25,52
M 4,0 x 0,70	63	12	4,5	3,4	3R35430	25,76
M 5,0 x 0,80	70	13	6	4,9	3R35434	26,55
M 6,0 x 1,00	80	15	6	4,9	3R35438	26,55
M 8,0 x 1,25	90	18	8	6,2	3R35442	31,16
M 10,0 x 1,50	100	20	10	8	3R35446	36,41



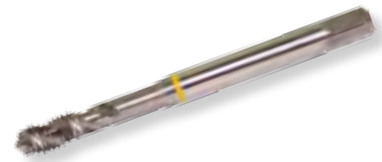
AL HSS-CO 5% DIN 376 FORM B TOL 6H ALUSPEED

D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€
M 12,0 x 1,75	110	23	9	7	3R35450	46,18
M 14,0 x 2,00	110	25	11	9	3R35454	60,33
M 16,0 x 2,00	110	25	12	11	3R35458	66,77
M 18,0 x 2,50	125	30	14	11	3R35462	95,39
M 20,0 x 2,50	140	30	16	12	3R35466	98,57



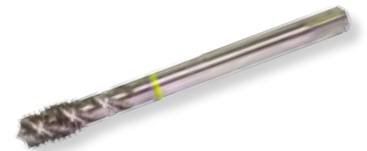
AL HSS-CO 5% DIN 371 FORM C/45° TOL 6H ALUSPEED

D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€
M 3,0 x 0,50	56	5	3,5	2,7	3R36426	27,42
M 4,0 x 0,70	63	7	4,5	3,4	3R36430	27,42
M 5,0 x 0,80	70	8	6	4,9	3R36434	28,14
M 6,0 x 1,00	80	10	6	4,9	3R36438	29,41
M 8,0 x 1,25	90	13	8	6,2	3R36442	34,10
M 10,0 x 1,50	100	15	10	8	3R36446	40,06



AL HSS-CO 5% DIN 376 FORM C/45° TOL 6H ALUSPEED

D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€
M 12,0 x 1,75	110	18	9	7	3R36450	52,62
M 14,0 x 2,00	110	20	11	9	3R36454	65,58
M 16,0 x 2,00	110	20	12	11	3R36458	72,34
M 18,0 x 2,50	125	25	14	11	3R36462	103,90
M 20,0 x 2,50	140	25	16	12	3R36466	107,47

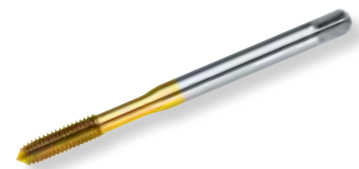
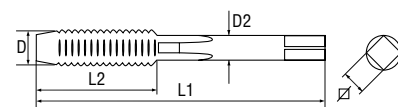


MACHOS MÁQUINA POR LAMINACIÓN

FLUTELESS MACHINE TAPS (FORMING TAPS) • TARAUDS À REFOULER

M MÉTRICA ISO-ROSCA DIN 13

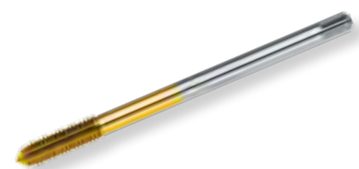
METRIC ISO-THREAD DIN 13
MÉTRIQUE DIN-13



AL HSS-CO 5% TIN DIN 2174 TOL 6HX TOL ISO2X

D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€
M 3,0 x 0,50	56	11	3,5	2,7	3R35530	26,94
M 4,0 x 0,70	63	13	4,5	3,4	3R35532	29,40
M 5,0 x 0,80	70	16	6	4,9	3R35533	31,35
M 6,0 x 1,00	80	19	6	4,9	3R35534	32,58
M 8,0 x 1,25	90	22	8	6,2	3R35535	39,70
M 10,0 x 1,50	100	24	10	8	3R35536	48,27

AL HSS-CO 5% TIN DIN 2174 TOL 6HX TOL ISO2X



D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€
M 12,0 x 1,75	110	28	9	7	3R35537	62,92

DIÁMETRO BROCA PREVIA / RECOMMENDED TAPPING DRILL SIZES / DIAMÈTRES PRÉALABLES AU FILETAGE

Ø M3	Ø M4	Ø M5	Ø M6	Ø M8	Ø M10	Ø M12	Ø M14	Ø M16
2,80	3,70	4,65	5,55	7,45	9,30	11,20	13,00	15,10

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

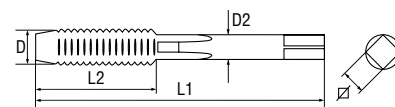
HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

M MÉTRICA ISO-ROSCA DIN 13

METRIC ISO-THREAD DIN 13
MÉTRIQUE DIN-13



CON RANURAS PARA LUBRICACIÓN WITH OIL GROOVE • AVEC RANURE GRAISSAGE



D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€
M 3,0 x 0,50	56	11	3,5	2,7	3R35630	29,40
M 4,0 x 0,70	63	13	4,5	3,4	3R35632	32,09
M 5,0 x 0,80	70	16	6	4,9	3R35633	34,54
M 6,0 x 1,00	80	19	6	4,9	3R35634	35,77
M 8,0 x 1,25	90	22	8	6,2	3R35635	43,37
M 10,0 x 1,50	100	24	10	8	3R35636	52,19



D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€
M 12,0 x 1,75	110	28	9	7	3R35637	66,61

DIÁMETRO BROCA PREVIA / RECOMMENDED TAPPING DRILL SIZES / DIAMÈTRES PRÉALABLES AU FILETAGE

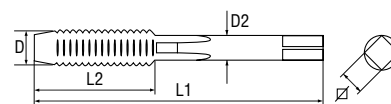
Ø M3	Ø M4	Ø M5	Ø M6	Ø M8	Ø M10	Ø M12	Ø M14	Ø M16
2,80	3,70	4,65	5,55	7,45	9,30	11,20	13,00	15,10

MACHOS TUERQUEROS

MACHINE NUT TAPS • TARAUDS MACHINE POUR ÉCROUS

M MÉTRICA ISO-ROSCA DIN 13

METRIC ISO-THREAD DIN 13
MÉTRIQUE DIN-13



HSS-CO 5%

DIN 357

TOL 6H

TOL ISO2



D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
M 3 x 0,50	70	22	2,2	-	3R37126	29,24
M 4 x 0,70	90	25	2,8	2,1	3R37130	29,24
M 5 x 0,80	100	28	3,5	2,7	3R37134	30,70
M 6 x 1,00	110	32	4,5	3,4	3R37138	30,70
M 8 x 1,25	125	40	6,0	4,9	3R37142	33,93
M 10 x 1,50	140	45	7,0	5,5	3R37146	45,46



HSS-CO 5%

DIN 357

TOL 6H

TOL ISO2



D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
M 12 x 1,75	180	50	9,0	7,0	3R37150	61,38
M 14 x 2,00	200	56	11,0	9,0	3R37154	76,62
M 16 x 2,00	200	63	12,0	9,0	3R37158	94,19
M 18 x 2,50	220	63	14,0	11,0	3R37162	105,38
M 20 x 2,50	250	70	16,0	12,0	3R37166	122,77
M 22 x 2,50	280	80	18,0	14,5	3R37170	142,55
M 24 x 3,00	280	80	18,0	14,5	3R37174	168,18

Materiales tratados superficialmente (galvanizados, cromados...) / For pre plate material for galvanising / Pour matériaux présentant une couche de galvanisation

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

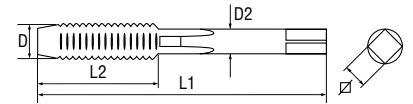
HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

Tr

PUNTA PILOTO, TRAPEZOIDAL DIN 13
 PILOTED, TRAPEZOIDAL THREAD DIN103
 POUR FILETAGE TRAPÉZOIDAL DIN 103



D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
Tr 10 x 2	110	63	7	5,5	3R79108	458,81
Tr 10 x 3	125	75	7	5,5	3R79112	458,81
Tr 12 x 3	165	111	8	6,2	3R79116	394,52
Tr 14 x 3	140	85	10	8,0	3R79120	421,32
Tr 14 x 4	170	112	10	8,0	3R79124	421,32
Tr 16 x 4	180	116	11	9,0	3R79128	458,16
Tr 18 x 4	190	120	12	9,0	3R79132	471,56
Tr 20 x 4	200	124	14	11,0	3R79136	490,07
Tr 22 x 4	210	130	16	12,0	3R79139	636,33
Tr 22 x 5	235	155	16	12,0	3R79140	636,33
Tr 24 x 5	245	160	18	14,5	3R79144	731,89
Tr 26 x 5	255	165	20	16,0	3R79148	763,59
Tr 28 x 5	265	170	22	18,0	3R79152	851,52
Tr 30 x 6	290	185	22	18,0	3R79156	997,77
Tr 32 x 6	300	191	25	20,0	3R79160	1.218,78
Tr 36 x 6	310	200	28	22,0	3R79164	1.247,91

 CONSTRUCCIÓN
 CONSTRUCTION • CONSTRUCTION

 MADERA
 WOOD • BOIS

 METAL
 METAL • MÉTAL

 FRESADO
 MILLING • FRAISAGE

 ROSCADO
 THREADING • FILETAGE

 ACCESORIOS
 ACCESSORIES • ACCESSOIRES

 HEXAGONAL
 HEXAGONAL • HEXAGONAL

 METROLOGÍA
 METROLOGY • MÉTROLOGIE

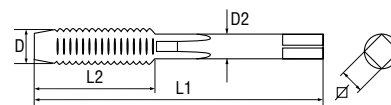
 DISPLAYS
 DISPLAYS • DISPLAYS

MACHOS TUERQUEROS

MACHINE NUT TAPS • TARAUDS MACHINE POUR ÉCROUS

Tr PUNTA PILOTO, TRAPEZOIDAL DIN 13, IZQUIERDAS

PILOTED, TRAPEZOIDAL THREAD DIN103, LEFT HAND
POUR FILETAGE TRAPÉZOÏDAL DIN 103 À GAUCHE



D Ø x P (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
Tr 10 x 2	110	63	7	5,5	3R79108-L	673,37
Tr 10 x 3	125	75	7	5,5	3R79112-L	673,37
Tr 12 x 3	165	111	8	6,2	3R79116-L	578,63
Tr 14 x 3	140	85	10	8,0	3R79120-L	615,35
Tr 14 x 4	170	112	10	8,0	3R79124-L	615,35
Tr 16 x 4	180	116	11	9,0	3R79128-L	671,97
Tr 18 x 4	190	120	12	9,0	3R79132-L	695,42
Tr 20 x 4	200	124	14	11,0	3R79136-L	719,95
Tr 22 x 5	235	155	16	12,0	3R79140-L	934,71
Tr 24 x 5	245	160	18	14,5	3R79144-L	1.070,73
Tr 26 x 5	255	165	20	16,0	3R79148-L	1.119,96
Tr 28 x 5	265	170	22	18,0	3R79152-L	1.246,71
Tr 30 x 6	290	185	22	18,0	3R79156-L	1.463,93
Tr 32 x 6	300	191	25	20,0	3R79160-L	1.786,56
Tr 36 x 6	310	200	28	22,0	3R79164-L	1.830,72

Consultar disponibilidad / Request availability / Consulter la disponibilité

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

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ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

M MÉTRICA ISO-ROSCA DIN 13
METRIC ISO-THREAD DIN 13
MÉTRIQUE DIN-13



HSS-G

DIN 223

TOL
6g



D Ø x P (mm)	Ø Exterior x Ø Espesor Ø Exterior x Ø Thickness (mm)	Cod.	€/Unid.
M 1,0 x 0,25	16 x 5	4R27402	43,29
M 1,1 x 0,25	16 x 5	4R27404	43,29
M 1,2 x 0,25	16 x 5	4R27406	39,58
M 1,4 x 0,25	16 x 5	4R27408	39,58
M 1,6 x 0,35	16 x 5	4R27410	37,10
M 1,7 x 0,35	16 x 5	4R27412	37,10
M 1,8 x 0,35	16 x 5	4R27414	37,10
M 2,0 x 0,40	16 x 5	4R27416	27,21
M 2,2 x 0,45	16 x 5	4R27418	30,91
M 2,3 x 0,40	16 x 5	4R27420	30,91
M 2,5 x 0,45	16 x 5	4R27422	30,91
M 2,6 x 0,45	16 x 5	4R27424	30,91
M 3,0 x 0,50	20 x 5	4R27426	21,02
M 3,5 x 0,60	20 x 5	4R27428	21,02
M 4,0 x 0,70	20 x 5	4R27430	21,02
M 4,5 x 0,75	20 x 7	4R27432	21,02
M 5,0 x 0,80	20 x 7	4R27434	21,02
M 5,5 x 0,90	20 x 7	4R27436	21,02
M 6,0 x 1,00	20 x 7	4R27438	21,02
M 7,0 x 1,00	25 x 9	4R27440	21,02
M 8,0 x 1,25	25 x 9	4R27442	21,02
M 9,0 x 1,25	25 x 9	4R27444	21,02
M 10,0 x 1,50	30 x 11	4R27446	24,74

D Ø x P (mm)	Ø Exterior x Ø Espesor Ø Exterior x Ø Thickness (mm)	Cod.	€/Unid.
M 11 x 1,50	30 x 11	4R27448	24,74
M 12 x 1,75	38 x 14	4R27450	28,44
M 14 x 2,00	38 x 14	4R27454	28,44
M 15 x 2,00	38 x 14	4R27456	48,49
M 16 x 2,00	45 x 18	4R27458	41,00
M 18 x 2,50	45 x 18	4R27462	41,00
M 19 x 2,50	45 x 18	4R27464	41,00
M 20 x 2,50	45 x 18	4R27466	41,00
M 22 x 2,50	55 x 22	4R27470	71,40
M 24 x 3,00	55 x 22	4R27474	71,40
M 27 x 3,00	65 x 25	4R27476	102,89
M 30 x 3,50	65 x 25	4R27478	102,89
M 33 x 3,50	65 x 25	4R27480	102,89
M 36 x 4,00	65 x 25	4R27482	102,89
M 39 x 4,00	75 x 30	4R27484	160,76
M 42 x 4,50	75 x 30	4R27486	160,76
M 45 x 4,50	90 x 36	4R27488	265,88
M 48 x 5,00	90 x 36	4R27490	265,88
M 52 x 5,00	90 x 36	4R27492	265,88
M 56 x 5,50	105 x 36	4R27494	569,99
M 60 x 5,50	105 x 36	4R27496	569,99
M 64 x 6,00	120 x 36	4R27498	745,35
M 68 x 6,00	120 x 36	4R27499	745,35

DIN 223 = DIN EN 22568

COJINETES CIRCULARES

ROUND DIES • FILIÈRES RONDES

M MÉTRICA ISO-ROSCA DIN 13

METRIC ISO-THREAD DIN 13
MÉTRIQUE DIN-13

DIÁMETRO EXTERIORES ESPECIALES

EXTERNAL SPECIFIC DIAMETERS • DIMÈTRES EXTÉRIEURES SPÉCIALES



HSS-G



D Ø x P (mm)	Ø Exterior x Ø Espesor Ø Exterior x Ø Thickness (mm)	Cod.	€/Unid.
M 3 x 0,5	25 x 9	4R27826	21,40
M 4 x 0,7	25 x 9	4R27830	21,40
M 5 x 0,8	25 x 9	4R27834	21,40

D Ø x P (mm)	Ø Exterior x Ø Espesor Ø Exterior x Ø Thickness (mm)	Cod.	€/Unid.
M 6 x 1,0	25 x 9	4R27838	21,40
M 10 x 1,50	25 x 9	4R27846	21,40
M 12 x 1,75	25 x 9	4R27850	21,40



HSS-G



D Ø x P (mm)	Ø Exterior x Ø Espesor Ø Exterior x Ø Thickness (mm)	Cod.	€/Unid.
M 3 x 0,50	25,4	4R27926	21,40
M 4 x 0,70	25,4	4R27930	21,40
M 5 x 0,80	25,4	4R27934	21,40
M 6 x 1,00	25,4	4R27938	21,40
M 8 x 1,25	25,4	4R27942	21,40
M 10 x 1,50	25,4	4R27946	21,40

D Ø x P (mm)	Ø Exterior x Ø Espesor Ø Exterior x Ø Thickness (mm)	Cod.	€/Unid.
M 12 x 1,75	25,4	4R27950	21,40
M 14 x 2,00	38,1	4R27954	34,63
M 16 x 2,00	38,1	4R27958	34,63
M 18 x 2,50	38,1	4R27962	34,63
M 20 x 2,50	38,1	4R27966	34,63

TOLERANCIA 6e SPECIAL TOLERANCE • TOLERANCE SPÉCIALE



HSS-G

DIN 223



D Ø x P (mm)	Ø Exterior x Ø Espesor Ø Exterior x Ø Thickness (mm)	Cod.	€/Unid.
M 3 x 0,50	20 x 5	4R27503	23,12
M 4 x 0,70	20 x 5	4R27505	23,12
M 5 x 0,80	20 x 7	4R27507	23,12
M 6 x 1,00	20 x 7	4R27509	23,13
M 8 x 1,25	25 x 9	4R27511	23,12
M 10 x 1,50	30 x 11	4R27513	27,22

D Ø x P (mm)	Ø Exterior x Ø Espesor Ø Exterior x Ø Thickness (mm)	Cod.	€/Unid.
M 12 x 1,75	38 x 14	4R27515	34,12
M 14 x 2,00	38 x 14	4R27516	42,67
M 16 x 2,00	45 x 18	4R27517	72,74
M 18 x 2,50	45 x 18	4R27518	72,74
M 20 x 2,50	45 x 18	4R27519	72,74

DIN 223 = DIN EN 22568

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

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HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

Mf MÉTRICA FINA ISO-ROSCA DIN 13

METRIC ISO-THREAD DIN 13
MÉTRIQUE FIN ISO DIN-13



D Ø x P (mm)	Ø Exterior x Ø Espesor Ø Exterior x Ø Thickness (mm)	Cod.	€/Unid.
M 2,5 x 0,35	16 x 5	4R26404	31,79
M 2,6 x 0,35	16 x 5	4R26405	31,79
M 3,0 x 0,35	20 x 5	4R26408	28,97
M 3,5 x 0,35	20 x 5	4R26409	28,97
M 4,0 x 0,35	20 x 5	4R26410	28,97
M 4,0 x 0,50	20 x 5	4R26412	28,97
M 4,5 x 0,50	20 x 5	4R26413	28,97
M 5,0 x 0,50	20 x 5	4R26414	28,97
M 5,0 x 0,75	20 x 7	4R26416	28,97
M 5,5 x 0,50	20 x 5	4R26415	28,97
M 6,0 x 0,50	20 x 5	4R26417	28,97
M 6,0 x 0,75	20 x 7	4R26418	28,97
M 7,0 x 0,50	25 x 9	4R26419	28,97
M 7,0 x 0,75	25 x 9	4R26420	24,24
M 8,0 x 0,50	25 x 9	4R26422	28,97
M 8,0 x 0,75	25 x 9	4R26424	24,24
M 8,0 x 1,00	25 x 9	4R26426	24,24
M 9,0 x 0,50	25 x 9	4R26427	32,50
M 9,0 x 0,75	25 x 9	4R26428	32,50
M 9,0 x 1,00	25 x 9	4R26430	27,31
M 10,0 x 0,50	30 x 11	4R26431	33,81
M 10,0 x 0,75	30 x 11	4R26432	33,81
M 10,0 x 1,00	30 x 11	4R26436	32,74
M 10,0 x 1,25	30 x 11	4R26438	32,74
M 11,0 x 1,00	30 x 11	4R26440	40,30
M 11,0 x 1,25	30 x 11	4R26442	40,30
M 12,0 x 0,50	38 x 10	4R26445	40,30
M 12,0 x 0,75	38 x 10	4R26443	40,30
M 12,0 x 1,00	38 x 10	4R26444	41,62
M 12,0 x 1,25	38 x 10	4R26446	41,62
M 12,0 x 1,50	38 x 10	4R26448	40,30
M 13,0 x 0,50	38 x 10	4R26447	55,96
M 13,0 x 0,75	38 x 10	4R26449	55,96
M 13,0 x 1,00	38 x 10	4R26450	44,77
M 13,0 x 1,50	38 x 10	4R26451	44,77
M 14,0 x 0,50	38 x 10	4R26455	69,96
M 14,0 x 0,75	38 x 10	4R26452	69,96
M 14,0 x 1,00	38 x 10	4R26453	40,30
M 14,0 x 1,25	38 x 10	4R26454	40,30
M 14,0 x 1,50	38 x 10	4R26456	40,30
M 15,0 x 0,75	38 x 10	4R26457	72,75
M 15,0 x 1,00	38 x 10	4R26458	55,54
M 15,0 x 1,50	38 x 10	4R26460	55,54
M 16,0 x 0,50	45 x 14	4R26461	71,22
M 16,0 x 0,75	45 x 14	4R26463	71,22
M 16,0 x 1,00	45 x 14	4R26462	55,54
M 16,0 x 1,25	45 x 14	4R26464	55,54
M 16,0 x 1,50	45 x 14	4R26466	50,36
M 17,0 x 1,00	45 x 14	4R26468	87,75
M 17,0 x 1,50	45 x 14	4R26469	87,75

D Ø x P (mm)	Ø Exterior x Ø Espesor Ø Exterior x Ø Thickness (mm)	Cod.	€/Unid.
M 18 x 0,50	45 x 14	4R26467	87,75
M 18 x 0,75	45 x 14	4R26473	87,75
M 18 x 1,00	45 x 14	4R26470	50,36
M 18 x 1,25	45 x 14	4R26471	50,36
M 18 x 1,50	45 x 14	4R26472	51,57
M 18 x 2,00	45 x 14	4R26474	56,65
M 19 x 1,00	45 x 14	4R26475	87,75
M 19 x 1,50	45 x 14	4R26476	59,96
M 20 x 0,50	45 x 14	4R26477	87,75
M 20 x 0,75	45 x 14	4R26479	87,75
M 20 x 1,00	45 x 14	4R26478	56,65
M 20 x 1,25	45 x 14	4R26480	62,96
M 20 x 1,50	45 x 14	4R26484	51,57
M 20 x 2,00	45 x 14	4R26486	62,96
M 21 x 1,00	45 x 14	4R26487	89,88
M 21 x 1,50	45 x 14	4R26488	89,88
M 22 x 0,50	55 x 16	4R26489	125,78
M 22 x 0,75	55 x 16	4R26491	125,78
M 22 x 1,00	55 x 16	4R26490	88,13
M 22 x 1,25	55 x 16	4R26492	95,67
M 22 x 1,50	55 x 16	4R26494	97,15
M 22 x 2,00	55 x 16	4R26496	114,51
M 23 x 1,00	55 x 16	4R26497	125,78
M 23 x 1,50	55 x 16	4R26498	95,67
M 24 x 0,50	55 x 16	4R26601	125,78
M 24 x 0,75	55 x 16	4R26603	125,78
M 24 x 1,00	55 x 16	4R26600	88,13
M 24 x 1,25	55 x 16	4R26602	95,67
M 24 x 1,50	55 x 16	4R26604	88,13
M 24 x 2,00	55 x 16	4R26606	88,13
M 25 x 1,00	55 x 16	4R26607	107,02
M 25 x 1,50	55 x 16	4R26608	107,02
M 26 x 1,00	55 x 16	4R26610	107,02
M 26 x 1,50	55 x 16	4R26612	107,02
M 26 x 2,00	55 x 16	4R26614	107,02
M 27 x 1,00	65 x 18	4R26616	118,91
M 27 x 1,50	65 x 18	4R26617	118,91
M 27 x 2,00	65 x 18	4R26618	118,91
M 28 x 1,00	65 x 18	4R26620	118,91
M 28 x 1,50	65 x 18	4R26622	118,91
M 28 x 2,00	65 x 18	4R26624	118,91
M 29 x 1,50	65 x 18	4R26626	125,92
M 30 x 1,00	65 x 18	4R26628	125,92
M 30 x 1,50	65 x 18	4R26630	116,72
M 30 x 2,00	65 x 18	4R26632	125,92
M 30 x 2,50	65 x 18	4R26633	125,92
M 30 x 3,00	65 x 25	4R26634	125,92
M 32 x 1,00	65 x 18	4R26639	193,05
M 32 x 1,50	65 x 18	4R26636	116,72
M 32 x 2,00	65 x 18	4R26635	125,92

DIN 223 = DIN EN 22568

COJINETES CIRCULARES

ROUND DIES • FILIÈRES RONDES

Mf MÉTRICA FINA ISO-ROSCA DIN 13

METRIC ISO-THREAD DIN 13
MÉTRIQUE FIN ISO DIN-13



HSS-G

DIN 223

TOL 6g



D Ø x P (mm)	Ø Exterior x Ø Espesor Ø Exterior x Ø Thickness (mm)	Cod.	€/Unid.
M 32 x 3,0	65 x 25	4R26637	125,92
M 33 x 1,5	65 x 18	4R26638	116,72
M 33 x 2,0	65 x 18	4R26640	125,92
M 33 x 3,0	65 x 25	4R26642	125,92
M 34 x 1,0	65 x 18	4R26643	193,05
M 34 x 1,5	65 x 18	4R26644	123,21
M 34 x 2,0	65 x 18	4R26646	132,90
M 35 x 1,0	65 x 18	4R26647	193,05
M 35 x 1,5	65 x 18	4R26648	123,21
M 35 x 2,0	65 x 18	4R26649	193,05
M 36 x 1,0	65 x 18	4R26651	193,05
M 36 x 1,5	65 x 18	4R26650	124,40
M 36 x 2,0	65 x 18	4R26652	124,40
M 36 x 3,0	65 x 25	4R26654	131,06
M 37 x 1,5	65 x 18	4R26653	309,50
M 38 x 1,0	75 x 20	4R26655	309,50
M 38 x 1,5	75 x 20	4R26656	198,70
M 38 x 2,0	75 x 20	4R26657	198,70
M 38 x 3,0	75 x 30	4R26659	309,50
M 39 x 1,5	75 x 20	4R26658	189,83
M 39 x 2,0	75 x 20	4R26660	189,83
M 39 x 3,0	75 x 30	4R26662	189,83
M 40 x 1,0	75 x 20	4R26663	189,83
M 40 x 1,5	75 x 20	4R26664	189,83
M 40 x 2,0	75 x 20	4R26666	189,83
M 40 x 3,0	75 x 30	4R26668	189,83
M 42 x 1,0	75 x 20	4R26669	189,83
M 42 x 1,5	75 x 20	4R26670	189,83
M 42 x 2,0	75 x 20	4R26672	189,83
M 42 x 3,0	75x30	4R26674	189,83
M 44 x 1,5	90 x 22	4R26671	421,77
M 44 x 2,0	90 x 22	4R26673	421,77
M 45 x 1,0	90 x 22	4R26675	421,77
M 45 x 1,5	90 x 22	4R26676	312,23
M 45 x 2,0	90 x 22	4R26678	312,23
M 45 x 3,0	90 x 22	4R26680	312,23
M 46 x 1,5	90 x 22	4R26681	421,77
M 48 x 1,0	90 x 22	4R26683	421,77
M 48 x 1,5	90 x 22	4R26682	312,23
M 48 x 2,0	90 x 22	4R26684	312,23
M 48 x 3,0	90 x 36	4R26686	312,23
M 50 x 1,5	90 x 22	4R26688	312,23
M 50 x 2,0	90 x 22	4R26690	312,23
M 50 x 3,0	90 x 36	4R26692	312,23
M 52 x 1,5	90 x 22	4R26694	312,23
M 52 x 2,0	90 x 22	4R26696	312,23
M 52 x 3,0	90 x 36	4R26698	312,23
M 54 x 1,0	105 x 22	4R28267	615,25
M 54 x 1,5	105 x 22	4R28150	615,25
M 54 x 2,0	105 x 22	4R28151	615,25

D Ø x P (mm)	Ø Exterior x Ø Espesor Ø Exterior x Ø Thickness (mm)	Cod.	€/Unid.
M 54 x 3,0	105 x 36	4R28152	615,25
M 54 x 4,0	105 x 36	4R28153	615,25
M 55 x 1,5	105 x 22	4R28154	615,25
M 55 x 2,0	105 x 22	4R28155	615,25
M 55 x 3,0	105 x 36	4R28156	615,25
M 55 x 4,0	105 x 36	4R28157	615,25
M 56 x 1,0	105 x 22	4R28268	615,25
M 56 x 1,5	105 x 22	4R28158	615,25
M 56 x 2,0	105 x 22	4R28159	615,25
M 56 x 3,0	105 x 36	4R28160	615,25
M 56 x 4,0	105 x 36	4R28161	615,25
M 58 x 1,0	105 x 22	4R28269	615,25
M 58 x 1,5	105 x 22	4R28162	615,25
M 58 x 2,0	105 x 22	4R28163	615,25
M 58 x 3,0	105 x 36	4R28164	615,25
M 58 x 4,0	105 x 36	4R28165	615,25
M 60 x 1,5	105 x 22	4R28166	615,25
M 60 x 2,0	105 x 22	4R28167	615,25
M 60 x 3,0	105 x 36	4R28168	615,25
M 60 x 4,0	105 x 36	4R28169	615,25
M 62 x 1,5	105 x 22	4R28170	615,25
M 62 x 2,0	105 x 22	4R28171	615,25
M 62 x 3,0	105 x 36	4R28172	615,25
M 62 x 4,0	105 x 36	4R28173	615,25
M 63 x 1,5	105 x 22	4R28174	615,25
M 64 x 1,5	120 x 22	4R28175	695,51
M 64 x 2,0	120 x 22	4R28176	695,51
M 64 x 3,0	120 x 36	4R28177	695,51
M 64 x 4,0	120 x 36	4R28178	695,51
M 65 x 1,5	120 x 22	4R28179	695,51
M 65 x 2,0	120 x 22	4R28180	695,51
M 65 x 3,0	120 x 36	4R28181	695,51
M 65 x 4,0	120 x 36	4R28182	695,51
M 68 x 1,5	120 x 22	4R28183	695,51
M 68 x 2,0	120 x 22	4R28184	695,51
M 68 x 3,0	120 x 36	4R28185	695,51
M 68 x 4,0	120 x 36	4R28186	695,51
M 70 x 1,5	120 x 22	4R28187	695,51
M 70 x 2,0	120 x 22	4R28188	695,51
M 70 x 3,0	120 x 36	4R28189	695,51
M 70 x 4,0	120 x 36	4R28190	695,51
M 72 x 1,5	120 x 22	4R28191	695,51
M 72 x 2,0	120 x 22	4R28192	695,51
M 72 x 3,0	120 x 36	4R28193	695,51
M 72 x 4,0	120 x 36	4R28194	695,51
M 74 x 1,5	120 x 22	4R28195	695,51
M 74 x 2,0	120 x 22	4R28196	695,51
M 74 x 3,0	120 x 36	4R28197	695,51
M 74 x 4,0	120 x 36	4R28198	695,51
M 75 x 1,5	120 x 22	4R28199	695,51

DIN 223 = DIN EN 22568

Mf MÉTRICA FINA ISO-ROSCA DIN 13

METRIC ISO-THREAD DIN 13
MÉTRIQUE FIN ISO DIN-13



HSS-G

DIN 223

TOL
6g



D Ø x P (mm)	Ø Exterior x Ø Espesor Ø Exterior x Ø Thickness (mm)	Cod.	€/Unid.
M 75 x 2,0	120 x 22	4R28200	695,51
M 75 x 3,0	120 x 36	4R28201	695,51
M 75 x 4,0	120 x 36	4R28202	695,51
M 76 x 1,5	120 x 22	4R28203	695,51
M 76 x 2,0	120 x 22	4R28204	695,51
M 76 x 3,0	120 x 36	4R28205	695,51
M 76 x 4,0	120 x 36	4R28206	695,51
M 78 x 1,5	120 x 22	4R28207	695,51
M 78 x 2,0	120 x 22	4R28208	695,51
M 78 x 3,0	120 x 36	4R28209	695,51
M 78 x 4,0	120 x 36	4R28210	695,51
M 80 x 1,5	120 x 22	4R28211	695,51
M 80 x 2,0	120 x 22	4R28212	695,51
M 80 x 3,0	120 x 36	4R28213	695,51
M 80 x 4,0	120 x 36	4R28214	695,51
M 82 x 1,5	130 x 25	4R28215	882,74
M 82 x 2,0	130 x 25	4R28216	882,74
M 82 x 3,0	130 x 36	4R28217	882,74
M 82 x 4,0	130 x 36	4R28218	882,74
M 84 x 1,5	130 x 25	4R28219	882,74
M 84 x 2,0	130 x 25	4R28220	882,74
M 84 x 3,0	130 x 36	4R28221	882,74
M 84 x 4,0	130 x 36	4R28222	882,74
M 85 x 1,5	130 x 25	4R28223	882,74
M 85 x 2,0	130 x 25	4R28224	882,74
M 85 x 3,0	130 x 36	4R28225	882,74
M 85 x 4,0	130 x 36	4R28226	882,74
M 86 x 1,5	140 x 22	4R28227	1.102,11
M 86 x 2,0	140 x 22	4R28228	1.102,11
M 86 x 3,0	140 x 22	4R28229	1.102,11
M 86 x 4,0	140 x 22	4R28230	1.102,11
M 88 x 1,5	140 x 22	4R28231	1.102,11
M 88 x 2,0	140 x 22	4R28232	1.102,11
M 88 x 3,0	140 x 22	4R28233	1.102,11

D Ø x P (mm)	Ø Exterior x Ø Espesor Ø Exterior x Ø Thickness (mm)	Cod.	€/Unid.
M 88 x 4,0	140 x 22	4R28234	1.102,11
M 90 x 1,5	140 x 22	4R28235	1.102,11
M 90 x 2,0	140 x 22	4R28236	1.102,11
M 90 x 3,0	140 x 22	4R28237	1.102,11
M 90 x 4,0	140 x 22	4R28238	1.102,11
M 92 x 1,5	140 x 22	4R28239	1.102,11
M 92 x 2,0	140 x 22	4R28240	1.102,11
M 92 x 3,0	140 x 22	4R28241	1.102,11
M 92 x 4,0	140 x 22	4R28242	1.102,11
M 95 x 1,5	140 x 22	4R28243	1.102,11
M 95 x 2,0	140 x 22	4R28244	1.102,11
M 95 x 3,0	140 x 22	4R28245	1.102,11
M 95 x 4,0	140 x 22	4R28246	1.102,11
M 96 x 1,5	140 x 22	4R28247	1.102,11
M 96 x 2,0	140 x 22	4R28248	1.102,11
M 96 x 3,0	140 x 22	4R28249	1.102,11
M 96 x 4,0	140 x 22	4R28250	1.102,11
M 98 x 1,5	150 x 25	4R28251	1.324,14
M 98 x 2,0	150 x 25	4R28252	1.324,14
M 98 x 3,0	150 x 25	4R28253	1.324,14
M 98 x 4,0	150 x 25	4R28254	1.324,14
M 100 x 1,5	150 x 25	4R28255	1.324,14
M 100 x 2,0	150 x 25	4R28256	1.324,14
M 100 x 3,0	150 x 25	4R28257	1.324,14
M 100 x 4,0	150 x 25	4R28258	1.324,14
M 105 x 1,5	150 x 25	4R28259	1.324,14
M 105 x 2,0	150 x 25	4R28260	1.324,14
M 105 x 3,0	150 x 25	4R28261	1.324,14
M 105 x 4,0	150 x 25	4R28262	1.324,14
M 110 x 1,5	160 x 25	4R28263	1.444,49
M 110 x 2,0	160 x 25	4R28264	1.444,49
M 110 x 3,0	160 x 25	4R28265	1.444,49
M 110 x 4,0	160 x 25	4R28266	1.444,49

DIN 223 = DIN EN 22568

COJINETES CIRCULARES

ROUND DIES • FILIÈRES RONDES

BSW ROSCA WITHWORTH BS 84

WITHWORTH THREAD BS 84
FILETAGE WHITWORTH BS 84



HSS-G

DIN 223



D Ø x P (")	Ø Exterior x Ø Espesor Ø Exterior x Ø Thickness (mm)	Cod.	€/Unid.
BSW 1/16 x 60	16 x 5	4R22402	31,48
BSW 3/32 x 48	16 x 5	4R22404	36,52
BSW 1/8 x 40	20 x 5	4R22406	31,48
BSW 5/32 x 32	20 x 5	4R22408	31,48
BSW 3/16 x 24	20 x 7	4R22410	31,48
BSW 7/32 x 24	20 x 7	4R22412	31,48
BSW 1/4 x 20	20 x 7	4R22414	32,32
BSW 5/16 x 18	25 x 9	4R22416	32,32
BSW 3/8 x 16	30 x 11	4R22418	32,32
BSW 7/16 x 14	30 x 11	4R22420	32,32
BSW 1/2 x 12	38 x 14	4R22422	38,78
BSW 9/16 x 12	38 x 14	4R22424	45,26
BSW 5/8 x 11	45 x 18	4R22426	51,71
BSW 3/4 x 10	45 x 18	4R22430	51,71
BSW 7/8 x 9	55 x 22	4R22434	77,57

D Ø x P (")	Ø Exterior x Ø Espesor Ø Exterior x Ø Thickness (mm)	Cod.	€/Unid.
BSW 1 x 8	55 x 22	4R22438	77,57
BSW 1.1/8 x 7	65 x 25	4R22442	129,29
BSW 1.1/4 x 7	65 x 25	4R22446	129,29
BSW 1.3/8 x 6	65 x 25	4R22450	129,29
BSW 1.1/2 x 6	65 x 25	4R22452	129,29
BSW 1.1/2 x 6	75 x 30	4R22454	204,28
BSW 1.5/8 x 5	75 x 30	4R22458	206,85
BSW 1.3/4 x 5	90 x 36	4R22462	297,35
BSW 1.7/8 x 4.1/2	90 x 36	4R22466	310,28
BSW 2 x 4.1/2	90 x 36	4R22470	310,28
BSW 2.1/4 x 4	105 x 36	4R22472	1.005,46
BSW 2.1/2 x 4	105 x 36	4R22474	1.005,46
BSW 2.3/4 x 3.1/2	120 x 36	4R22476	1.235,28
BSW 3 x 3.1/2	120 x 36	4R22478	1.235,28

DIN 223 = DIN EN 22568

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

BSF

ROSCA BRITÁNICA STANDARD FINA BS 84
BRITISH STANDARD FINE THREAD BS 84
FILETAGE BRITANIQUE BSF, BS 84



HSS-G

DIN 223



D Ø x P (")	Ø Exterior x Ø Espesor Ø Exterior x Ø Thickness (mm)	Cod.	€/Unid.
BSF 3/16 x 32	20 x 7	4R22810	34,28
BSF 1/4 x 26	20 x 7	4R22814	34,28
BSF 5/16 x 22	25 x 9	4R22816	34,28
BSF 3/8 x 20	30 x 11	4R22818	37,41
BSF 7/16 x 18	30 x 11	4R22820	34,28
BSF 1/2 x 16	38 x 10	4R22822	51,43

D Ø x P (")	Ø Exterior x Ø Espesor Ø Exterior x Ø Thickness (mm)	Cod.	€/Unid.
BSF 9/16 x 16	38 x 10	4R22824	54,57
BSF 5/8 x 14	45 x 14	4R22826	78,16
BSF 3/4 x 12	45 x 14	4R22830	78,16
BSF 7/8 x 11	55 x 22	4R22834	96,67
BSF 1" x 10	55 x 20	4R22838	96,67

DIN 223 = DIN EN 22568

BA

ROSCA BA, BS 93
BA THREAD BS93
FILÉTAGE BA, BS 93



HSS-G

BS1127



D Ø x P (mm)	Ø Exterior x Ø Espesor Ø Exterior x Ø Thickness (mm)	Cod.	€/Unid.
BA 0	20.6 x 6.35	4R89000	27,98
BA 1	20.6 x 6.35	4R89001	27,98
BA 2	20.6 x 6.35	4R89002	27,98
BA 3	20.6 x 6.35	4R89003	27,98

D Ø x P (mm)	Ø Exterior x Ø Espesor Ø Exterior x Ø Thickness (mm)	Cod.	€/Unid.
BA 4	20.6 x 6.35	4R89004	27,98
BA 5	20.6 x 6.35	4R89005	27,98
BA 6	20.6 x 6.35	4R89006	27,98

COJINETES CIRCULARES

ROUND DIES • FILIÈRES RONDES

UNC ROSCA GRUESA UNIFICADA ANSI B 1.1.

UNIFIED COARSE THREAD, ANSI B.1.1
FILETAGE UNIFIED GROSSE ANSI B 1.1



HSS-G

DIN 223

D Ø x P (")	Ø Exterior x Ø Espesor Ø Exterior x Ø Thickness (mm)	Cod.	€/Unid.
Nr. 1 x 64	16 x 5	4R23401	39,04
Nr. 2 x 56	16 x 5	4R23402	39,04
Nr. 3 x 48	16 x 5	4R23403	39,04
Nr. 4 x 40	20 x 5	4R23404	28,45
Nr. 5 x 40	20 x 5	4R23405	28,45
Nr. 6 x 32	20 x 7	4R23406	28,45
Nr. 8 x 32	20 x 7	4R23408	28,45
Nr. 10 x 24	20 x 7	4R23410	28,45
Nr. 12 x 24	20 x 7	4R23412	28,45
Nr. 1/4 x 20	20 x 7	4R23414	28,45
Nr. 5/16 x 18	25 x 9	4R23416	28,45
Nr. 3/8 x 16	30 x 11	4R23418	28,45
Nr. 7/16 x 14	30 x 11	4R23420	34,62
Nr. 1/2 x 13	38 x 14	4R23422	34,62

D Ø x P (")	Ø Exterior x Ø Espesor Ø Exterior x Ø Thickness (mm)	Cod.	€/Unid.
9/16 x 12	38 x 14	4R23424	42,04
5/8 x 11	45 x 18	4R23426	55,65
3/4 x 10	45 x 18	4R23430	55,65
7/8 x 9	55 x 22	4R23434	80,39
1 x 8	55 x 22	4R23438	80,39
1.1/8 x 7	65 x 25	4R23442	123,67
1.1/4 x 7	65 x 25	4R23446	123,67
1.3/8 x 6	65 x 25	4R23450	123,67
1.1/2 x 6	65 x 25	4R23452	123,67
1.1/2 x 6	75 x 30	4R23454	247,33
1.5/8 x 5	75 x 30	4R23458	247,33
1.3/4 x 5	90 x 36	4R23462	370,99
1.7/8 x 4.1/2	90 x 36	4R23466	370,99
2 x 4.1/2	90 x 36	4R23470	370,99

DIN 223 = DIN EN 22568

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

UNF

ROSCA FINA UNIFICADA ANSI B.1.1
UNIFIED FINE THREAD, ANSI B.1.1
FILETAGE UNIFIÉ À PAS FINE ANSI B 1.1



HSS-G

DIN 223



	D Ø x P (")	Ø Exterior x Ø Espesor Ø Exterior x Ø Thickness (mm)	Cod.	€/Unid.
Nr.	0 x 80	16 x 5	4R24400	39,75
Nr.	1 x 72	16 x 5	4R24401	39,75
Nr.	2 x 64	16 x 5	4R24402	39,75
Nr.	3 x 56	16 x 5	4R24403	48,07
Nr.	4 x 48	20 x 5	4R24404	28,97
Nr.	5 x 44	20 x 5	4R24405	28,97
Nr.	6 x 40	20 x 5	4R24406	28,97
Nr.	8 x 36	20 x 7	4R24408	28,97
Nr.	10 x 32	20 x 7	4R24410	28,97
Nr.	12 x 28	20 x 7	4R24412	28,97
Nr.	1/4 x 28	20 x 7	4R24414	28,97
Nr.	5/16 x 24	25 x 9	4R24416	29,74
Nr.	3/8 x 24	30 x 11	4R24418	29,74

	D Ø x P (")	Ø Exterior x Ø Espesor Ø Exterior x Ø Thickness (mm)	Cod.	€/Unid.
	7/16 x 20	30 x 11	4R24420	32,32
	1/2 x 20	38 x 10	4R24422	38,78
	9/16 x 18	38 x 10	4R24424	45,26
	5/8 x 18	45 x 14	4R24426	58,17
	3/4 x 16	45 x 14	4R24430	58,17
	7/8 x 14	55 x 16	4R24434	77,57
	1 x 12	55 x 16	4R24438	77,57
	1 x 14	55 x 16	4R24440	77,57
	1.1/8 x 12	65 x 18	4R24442	129,29
	1.1/4 x 12	65 x 18	4R24446	129,29
	1.3/8 x 12	65 x 18	4R24450	129,29
	1.1/2 x 12	65 x 18	4R24452	129,29
	1.1/2 x 12	75 x 20	4R24454	206,85

DIN 223 = DIN EN 22568

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

COJINETES CIRCULARES

ROUND DIES • FILIÈRES RONDES

UNEF ROSCA GRUESA UNIFICADA ANSI B 1.1.

UNIFIED COARSE THREAD, ANSI B.1.1
FILETAGE UNIFIÉ PAS FIN ANSI B 1.1



HSS-G

DIN 223

D Ø x P (")	Ø Exterior x Ø Espesor Ø Exterior x Ø Thickness (mm)	Cod.	€/Unid.
UNEF Nr. 12 x 32	20 x 7	4R24612	34,97
UNEF 1/4 x 32	20 x 7	4R24614	34,97
UNEF 5/16 x 32	25 x 9	4R24615	44,51
UNEF 3/8 x 32	30 x 11	4R24616	50,87
UNEF 7/16 x 28	30 x 11	4R24620	50,87
UNEF 1/2 x 28	38 x 10	4R24621	76,31
UNEF 9/16 x 24	25 x 9	4R24625	76,31
UNEF 5/8 x 24	30 x 11	4R24626	120,82
UNEF 11/16 x 24	25 x 9	4R24627	120,82
UNEF 3/4 x 20	30 x 11	4R24633	120,82
UNEF 13/16 x 20	55 x 16	4R24634	143,07

D Ø x P (")	Ø Exterior x Ø Espesor Ø Exterior x Ø Thickness (mm)	Cod.	€/Unid.
UNEF 7/8 x 20	55 x 16	4R24635	143,07
UNEF 15/16 x 20	55 x 16	4R24636	143,07
UNEF 1 x 20	55 x 16	4R24637	143,07
UNEF 1.1/16 x 18	65 x 18	4R24645	228,91
UNEF 1.1/8 x 18	65 x 18	4R24646	228,91
UNEF 1.3/16 x 18	65 x 18	4R24647	228,91
UNEF 1.1/4 x 18	65 x 18	4R24648	228,91
UNEF 1.5/16 x 18	65 x 18	4R24649	228,91
UNEF 1.3/8 x 18	65 x 18	4R24650	228,91
UNEF 1.7/16 x 18	75 x 20	4R24651	286,14
UNEF 1.1/2 x 18	75 x 20	4R24652	286,14

DIN 223 = DIN EN 22568

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

G(BSP)

ROSCA FINA UNIFICADA ANSI B.1.1
 UNIFIED FINE THREAD, ANSI B.1.1
 FILETAGE PAS GAZ DIN ISO 228


HSS-G
DIN 5158

D Ø x P (")	Ø Exterior x Ø Espesor Ø Exterior x Ø Thickness (mm)	Cod.	€/Unid.
G 1/8 x 28	30 x 11	4R25412	37,77
G 1/4 x 19	38 x 10	4R25414	35,25
G 3/8 x 19	45 x 14	4R25416	50,36
G 1/2 x 14	45 x 14	4R25418	50,36
G 5/8 x 14	55 x 16	4R25420	75,55
G 3/4 x 14	55 x 16	4R25422	82,26
G 7/8 x 14	65 x 18	4R25424	113,59
G 1 x 11	65 x 18	4R25426	113,59
G 1.1/8 x 11	75 x 20	4R25430	155,12
G 1.1/4 x 11	75 x 20	4R25434	155,12
G 1.3/8 x 11	90 x 22	4R25438	239,75

D Ø x P (")	Ø Exterior x Ø Espesor Ø Exterior x Ø Thickness (mm)	Cod.	€/Unid.
G 1.1/2 x 11	90 x 22	4R25442	239,75
G 1.5/8 x 11	90 x 22	4R25446	252,59
G 1.3/4 x 11	105 x 22	4R25450	421,41
G 2 x 11	90 x 22	4R25452	274,88
G 2 x 11	105 x 22	4R25454	436,99
G 2.1/4 x 11	120 x 22	4R25458	928,62
G 2.1/2 x 11	120 x 22	4R25462	928,62
G 2.3/4 x 11	120 x 22	4R25466	928,62
G 3 x 11	130 x 25	4R25470	1.021,47
G 3.1/2 x 11	150 x 25	4R25474	1.644,96
G 4 x 11	160 x 25	4R25478	2.122,52

DIN 223 = DIN EN 22568

R(BSPT)

ROSCA INGLESA PARA TUBO, CONICIDAD 1:16
 TAPERED PIPE THREAD, TAPER 1:16
 FILETAGE PAS GAZ CONIQUE, CONICITÉ 1:16


HSS-G


D Ø x P (")	Ø Exterior x Ø Espesor Ø Exterior x Ø Thickness (mm)	Cod.	€/Unid.
PT 1/8 x 28	38 x 11	4R97006	44,0
PT 1/4 x 19	38 x 16	4R97014	44,0
PT 3/8 x 19	50 x 18	4R97020	90,4
PT 1/2 x 14	50 x 22	4R97022	90,4

D Ø x P (")	Ø Exterior x Ø Espesor Ø Exterior x Ø Thickness (mm)	Cod.	€/Unid.
PT 3/4 x 14	50 x 24	4R97030	90,4
PT 1 x 11	63 x 28	4R97040	150,8
PT 1.1/4 x 11	75 x 32	4R97048	203,6

PG

ROSCA PARA TUBOS BLINDADOS DIN 40 430
 ARMOURED TUBE THREAD DIN 40 430
 FILETAGE ÉLECTRIQUE DIN 40 430


HSS-G
DIN 40434

D Ø x P (")	Ø Exterior x Ø Espesor Ø Exterior x Ø Thickness (mm)	Cod.	€/Unid.
PG 7 x 20	38 x 10	4R25807	66,92
PG 9 x 18	45 x 14	4R25809	81,67
PG 11 x 18	45 x 14	4R25811	83,06
PG 13.5 x 18	45 x 14	4R25813	83,06
PG 16 x 18	55 x 16	4R25816	96,71

D Ø x P (")	Ø Exterior x Ø Espesor Ø Exterior x Ø Thickness (mm)	Cod.	€/Unid.
PG 21 x 16	65 x 18	4R25821	149,68
PG 29 x 16	65 x 18	4R25829	149,68
PG 36 x 16	90 x 22	4R25836	327,61
PG 42 x 16	105 x 22	4R25842	379,81
PG 48 x 16	105 x 22	4R25848	418,43

COJINETES CIRCULARES

ROUND DIES • FILIÈRES RONDES

NPT

ROSCA AMERICANA PARA TUBO, CONICIDAD 1:16
 AMERICAN TAPERED PIPE THREAD, TAPER 1:16
 FILETAGE NPT CONICITÉ 1:16



HSS-G

D Ø x P (")	Ø Exterior x Ø Espesor Ø Exterior x Ø Thickness (mm)	Cod.	€/Unid.
NPT 1/16 x 27	25 x 9	4R23610	73,40
NPT 1/8 x 27	30 x 11	4R23612	79,27
NPT 1/4 x 18	38 x 14	4R23614	83,33
NPT 3/8 x 18	45 x 14	4R23616	108,06
NPT 1/2 x 14	45 x 18	4R23618	108,06
NPT 5/8 x 14	55 x 22	4R23620	194,87

D Ø x P (")	Ø Exterior x Ø Espesor Ø Exterior x Ø Thickness (mm)	Cod.	€/Unid.
NPT 3/4 x 14	55 x 22	4R23622	146,81
NPT 7/8 x 14	65 x 25	4R23624	285,25
NPT 1 x 11.5	65 x 25	4R23626	201,19
NPT 1.1/4 x 11.5	75 x 26	4R23634	278,21
NPT 1.1/2 x 11.5	90 x 27	4R23642	408,25
NPT 2 x 11.5	105 x 28	4R23654	540,23

DIN 223 = DIN EN 22568

VG

PARA ROSCAS DE VÁLVULAS DE NEUMÁTICO
 FOR TIRE VALVES THREADS
 POUR LES VALVES DES PNEUMATIQUES



HSS-G

TOL
6g

D Ø x P (")	Ø Exterior x Ø Espesor Ø Exterior x Ø Thickness (mm)	Cod.	€/Unid.
VG 5 X 36	20 x 7	4R21501	262,26
VG 5,2 X 24	20 x 7	4R21502	280,99
VG 6 X 32	20 x 7	4R21503	298,98

D Ø x P (")	Ø Exterior x Ø Espesor Ø Exterior x Ø Thickness (mm)	Cod.	€/Unid.
VG 8 X 32	25 x 9	4R21504	299,72
VG 10 X 28	30 x 11	4R21505	337,19
VG 12 X 26	30 x 11	4R21506	412,13

BSC

PARA EJES DE PEDALIER
 FOR BOTTOM BRACKET
 POUR PÉDALIER VÉLO



HSS-G

TOL
6g

D Ø x P (")	Ø Exterior x Ø Espesor Ø Exterior x Ø Thickness (mm)	Cod.	€/Unid.
BSC 1/4" X 26	20,6 X 6,35	4R21507	*
BSC 5/16" X 26	25,4 X 9,5	4R21508	*
BSC 3/8" X 26	25,4 X 9,5	4R21509	*

D Ø x P (")	Ø Exterior x Ø Espesor Ø Exterior x Ø Thickness (mm)	Cod.	€/Unid.
BSC 9/16" X 20 R	38,1 X 12,7	4R21510	*
BSC 9/16" X 20 L	38,1 X 12,7	4R21511	*
BSC 1" X 24	55 X 16	4R21512	*

* Consultar precio y disponibilidad / Request price and availability / Consulter le prix et la disponibilité

NPTF

ROSCA AMERICANA PARA TUBO, CONICIDAD 1:16
AMERICAN TAPERED PIPE THREAD, TAPER 1:16
FILETAGE NPT CONICITÉ 1:16



D Ø x P (")	Ø Exterior x Ø Espesor Ø Exterior x Ø Thickness (mm)	Cod.	€/Unid.
NPTF 1/8 x 27	50 x 11	4R98072	91,49
NPTF 1/4 x 18	50 x 14	4R98074	91,49
NPTF 3/8 x 18	50 x 14	4R98076	91,49

D Ø x P (")	Ø Exterior x Ø Espesor Ø Exterior x Ø Thickness (mm)	Cod.	€/Unid.
NPTF 1/2 x 14	50 x 18	4R98078	91,49
NPTF 3/4 x 14	50 x 22	4R98080	91,49
NPTF 1 x 11.5	50 x 25	4R98082	91,49

DIN 223 = DIN EN 22568

M

MÉTRICA ISO-ROSCA DIN 13
METRIC ISO-THREAD DIN 13
MÉTRIQUE DIN-13



D Ø x P (mm)	Ø Exterior x Ø Espesor Ø Exterior x Ø Thickness (mm)	Cod.	€/Unid.
M 3 x 0,50	20 x 5	4R57426	29,10
M 4 x 0,70	20 x 5	4R57430	29,10
M 5 x 0,80	20 x 7	4R57434	29,10
M 6 x 1,00	20 x 7	4R57438	29,10
M 8 x 1,25	25 x 9	4R57442	33,30
M 10 x 1,50	30 x 11	4R57446	44,52
M 12 x 1,75	38 x 14	4R57450	53,09
M 14 x 2,00	38 x 14	4R57454	53,09

D Ø x P (mm)	Ø Exterior x Ø Espesor Ø Exterior x Ø Thickness (mm)	Cod.	€/Unid.
M 16 x 2,0	45 x 18	4R57458	93,19
M 18 x 2,5	45 x 18	4R57462	93,19
M 20 x 2,5	45 x 18	4R57466	93,19
M 22 x 2,5	55 x 22	4R57470	146,28
M 24 x 3,0	55 x 22	4R57474	146,28
M 27 x 3,0	65 x 25	4R57476	213,40
M 30 x 3,5	65 x 25	4R57478	213,40

DIN 223 = DIN EN 22568

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION
MADERA
WOOD • BOIS
METAL
METAL • METAL
FRESADO
MILLING • FRAISAGE
ROSCADO
THREADING • FILETAGE
ACCESORIOS
ACCESSORIES • ACCESSOIRES
HEXAGONAL
HEXAGONAL • HEXAGONAL
METROLOGÍA
METROLOGY • MÉTROLOGIE
DISPLAYS
DISPLAYS • DISPLAYS

COJINETES CIRCULARES

ROUND DIES • FILIÈRES RONDES

Mf MÉTRICA FINA ISO-ROSCA DIN 13

METRIC ISO-THREAD DIN 13
MÉTRIQUE FIN ISO DIN-13



HSS-CO 5%

DIN 223

TOL 6g



D Ø x P (mm)	Ø Exterior x Ø Espesor Ø Exterior x Ø Thickness (mm)	Cod.	€/Unid.
M 6 x 0,75	20 x 7	4R56418	37,83
M 8 x 0,75	25 x 9	4R56424	31,66
M 8 x 1,00	25 x 9	4R56426	31,66
M 10 x 1,00	30 x 11	4R56436	43,17
M 10 x 1,25	30 x 11	4R56438	43,17
M 12 x 1,00	38 x 10	4R56444	52,93
M 12 x 1,25	38 x 10	4R56446	52,93
M 12 x 1,50	38 x 10	4R56448	52,93
M 14 x 1,25	38 x 10	4R56454	52,93

D Ø x P (mm)	Ø Exterior x Ø Espesor Ø Exterior x Ø Thickness (mm)	Cod.	€/Unid.
M 14 x 1,5	38 x 10	4R56456	52,93
M 16 x 1,5	45 x 14	4R56466	77,35
M 18 x 1,5	45 x 14	4R56472	77,79
M 18 x 2,0	45 x 14	4R56474	80,86
M 20 x 1,5	45 x 14	4R56484	77,35
M 20 x 2,0	45 x 14	4R56486	89,63
M 22 x 1,5	55 x 16	4R56494	149,51
M 24 x 1,5	55 x 16	4R56604	149,51

DIN 223 = DIN EN 22568

G(BSP) ROSCA GAS DIN ISO 228

PIPE TRHEAD DIN ISO 228
FILETAGE PAS GAZ DIN ISO 228



HSS-CO 5%

DIN 5158



D Ø x P (")	Ø Exterior x Ø Espesor Ø Exterior x Ø Thickness (mm)	Cod.	€/Unid.
G 1/8 x 28	30 x 11	4R55412	60,59
G 1/4 x 19	38 x 10	4R55414	56,56
G 3/8 x 19	45 x 14	4R55416	80,77

D Ø x P (")	Ø Exterior x Ø Espesor Ø Exterior x Ø Thickness (mm)	Cod.	€/Unid.
G 1/2 x 14	45 x 14	4R55418	80,77
G 3/4 x 14	55 x 16	4R55422	126,27
G 1 x 11	65 x 18	4R55426	173,64

DIN 5158 = DIN EN 24231

M

MÉTRICA ISO-ROSCA DIN 13 IZQUIERDAS
 METRIC ISO THREAD DIN 13 LEFT HAND
 MÉTRIQUE DIN-13 À GAUCHE

HSS-G
DIN 223
**TOL
6g**


D Ø x P (mm)	Ø Exterior x Ø Espesor Ø Exterior x Ø Thickness (mm)	Cod.	€/Unid.
M 2 x 0,40	16 x 5	4R27216	54,42
M 3 x 0,50	20 x 5	4R27226	42,04
M 4 x 0,70	20 x 5	4R27230	42,04
M 5 x 0,80	20 x 7	4R27234	42,04
M 6 x 1,00	20 x 7	4R27238	42,04
M 8 x 1,25	25 x 9	4R27242	43,13
M 10 x 1,50	30 x 11	4R27246	49,49
M 12 x 1,75	38 x 14	4R27250	56,88
M 14 x 2,00	38 x 14	4R27254	56,88
M 16 x 2,00	45 x 18	4R27258	96,97
M 18 x 2,50	45 x 18	4R27262	96,97
M 20 x 2,50	45 x 18	4R27266	96,97

D Ø x P (mm)	Ø Exterior x Ø Espesor Ø Exterior x Ø Thickness (mm)	Cod.	€/Unid.
M 22 x 2,5	55 x 22	4R27270	142,81
M 24 x 3,0	55 x 22	4R27274	142,81
M 27 x 3,0	65 x 25	4R27276	205,79
M 30 x 3,5	65 x 25	4R27278	205,79
M 33 x 3,5	65 x 25	4R27280	205,79
M 36 x 4,0	65 x 25	4R27282	205,79
M 39 x 4,0	75 x 30	4R27284	321,52
M 42 x 4,5	75 x 30	4R27286	321,52
M 45 x 4,5	90 x 36	4R27288	531,76
M 48 x 5,0	90 x 36	4R27290	531,76
M 52 x 5,0	90 x 36	4R27292	531,76

DIN 223 = DIN EN 22568

COJINETES CIRCULARES

ROUND DIES • FILIÈRES RONDES

Mf MÉTRICA FINA ISO ROSCA DIN 13 IZQUIERDAS

METRIC FINE ISO THREAD DIN 13 LEFT HAND
MÉTRIQUE FIN ISO DIN-13 À GAUCHE



HSS-G

DIN 223

TOL
6g

D Ø x P (mm)	Ø Exterior x Ø Espesor Ø Exterior x Ø Thickness (mm)	Cod.	€/Unid.
M 6 x 0,75	20 x 7	4R26207	56,91
M 8 x 0,75	25 x 9	4R26210	47,61
M 8 x 1,00	25 x 9	4R26211	47,61
M 10 x 1,00	30 x 11	4R26215	64,33
M 10 x 1,25	30 x 11	4R26216	64,33
M 12 x 1,00	38 x 10	4R26220	81,77
M 12 x 1,25	38 x 10	4R26221	81,77
M 12 x 1,50	38 x 10	4R26222	81,77
M 14 x 1,25	38 x 10	4R26227	81,77

D Ø x P (mm)	Ø Exterior x Ø Espesor Ø Exterior x Ø Thickness (mm)	Cod.	€/Unid.
M 14 x 1,5	38 x 10	4R26228	81,77
M 16 x 1,0	45 x 14	4R26231	101,30
M 16 x 1,5	45 x 14	4R26233	101,30
M 18 x 1,5	45 x 14	4R26236	101,30
M 20 x 1,5	45 x 14	4R26240	101,30
M 22 x 1,5	55 x 16	4R26245	173,14
M 24 x 1,5	55 x 16	4R26250	173,14
M 24 x 2,0	55 x 16	4R26251	173,14
M 30 x 2,0	65 x 18	4R26264	247,33

DIN 223 = DIN EN 22568

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

BSW

ROSCA WITHWORTH BS 84 **IZQUIERDAS**
WITHWORTH THREAD BS 84 LEFT HAND
FILETAGE WHITWORTH BS 84 A GAUCHE



HSS-G

DIN 223

D Ø x P (")	Ø Exterior x Ø Espesor Ø Exterior x Ø Thickness (mm)	Cod.	€/Unid.
1/8 x 40	20 x 5	4R22206	61,84
5/32 x 32	20 x 5	4R22208	61,84
3/16 x 24	20 x 7	4R22210	61,84
1/4 x 20	20 x 7	4R22214	61,84
5/16 x 18	25 x 9	4R22216	61,84
3/8 x 16	30 x 11	4R22218	61,84
7/16 x 14	30 x 11	4R22220	61,84

D Ø x P (")	Ø Exterior x Ø Espesor Ø Exterior x Ø Thickness (mm)	Cod.	€/Unid.
1/2 x 12	38 x 14	4R22222	75,55
9/16 x 12	38 x 14	4R22224	86,56
5/8 x 11	45 x 18	4R22226	98,94
3/4 x 10	45 x 18	4R22230	98,94
7/8 x 9	55 x 22	4R22234	151,09
1 x 8	55 x 22	4R22238	151,09

DIN 223 = DIN EN 22568

UNC

ROSCA GRUESA UNIFICADA ANSI B 1.1. **IZQUIERDAS**
UNIFIED COARSE THREAD, ANSI B.1.1 LEFT HAND
FILETAGE UNIFIED GROSSE ANSI B 1.1 A GAUCHE



HSS-G

DIN 223

D Ø x P (")	Ø Exterior x Ø Espesor Ø Exterior x Ø Thickness (mm)	Cod.	€/Unid.
UNC Nr. 6 x 32	20 x 7	4R23206	61,54
UNC Nr. 8 x 32	20 x 7	4R23208	61,54
UNC Nr. 10 x 32	20 x 7	4R23210	61,54
UNC 1/4 x 20	20 x 7	4R23214	61,54
UNC 5/16 x 18	25 x 9	4R23216	61,54
UNC 3/8 x 16	30 x 11	4R23218	61,54
UNC 7/16 x 14	38 x 14	4R23220	74,90

D Ø x P (")	Ø Exterior x Ø Espesor Ø Exterior x Ø Thickness (mm)	Cod.	€/Unid.
UNC 1/2 x 13	38 x 14	4R23222	74,90
UNC 9/16 x 12	38 x 14	4R23224	90,95
UNC 5/8 x 11	45 x 18	4R23226	120,37
UNC 3/4 x 10	45 x 18	4R23230	120,37
UNC 7/8 x 9	55 x 22	4R23234	173,89
UNC 1 x 8	55 x 22	4R23238	173,89

DIN 223 = DIN EN 22568

COJINETES CIRCULARES

ROUND DIES • FILIÈRES RONDES

UNF

ROSCA FINA UNIFICADA ANSI B.1.1 **IZQUIERDAS**
 UNIFIED FINE THREAD, ANSI B.1.1 LEFT HAND
 FILETAGE UNIFIED GROSSE ANSI B 1.1 A GAUCHE



HSS-G

DIN 223

D Ø x P (")	Ø Exterior x Ø Espesor Ø Exterior x Ø Thickness (mm)	Cod.	€/Unid.
UNF Nr. 10 x 32	20 x 7	4R24210	61,54
UNF 1/4 x 28	20 x 7	4R24214	61,54
UNF 5/16 x 24	25 x 9	4R24216	61,54
UNF 3/8 x 24	30 x 11	4R24218	61,54
UNF 7/16 x 20	30 x 11	4R24220	66,87
UNF 1/2 x 20	38 x 10	4R24222	80,25

D Ø x P (")	Ø Exterior x Ø Espesor Ø Exterior x Ø Thickness (mm)	Cod.	€/Unid.
UNF 9/16 x 18	38 x 10	4R24224	93,64
UNF 5/8 x 18	45 x 14	4R24226	120,37
UNF 3/4 x 16	45 x 14	4R24230	120,37
UNF 7/8 x 14	55 x 16	4R24234	160,52
UNF 1 x 12	55 x 16	4R24238	160,52

DIN 223 = DIN EN 22568

G(BSP)

ROSCA GAS DIN ISO 228 **IZQUIERDAS**
 PIPE TRHEAD DIN ISO 228
 FILETAGE PAS GAZ DIN ISO 228 A GAUCHE



HSS-G

DIN 5158

D Ø x P (")	Ø Exterior x Ø Espesor Ø Exterior x Ø Thickness (mm)	Cod.	€/Unid.
G 1/8 x 28	30 x 11	4R25212	80,26
G 1/4 x 19	38 x 10	4R25214	92,21
G 3/8 x 19	45 x 14	4R25216	107,01
G 1/2 x 14	45 x 14	4R25218	107,01
G 5/8 x 14	55 x 16	4R25220	160,51
G 3/4 x 14	55 x 16	4R25222	165,86
G 7/8 x 14	65 x 18	4R25224	241,33
G 1 x 11	65 x 18	4R25226	241,33

D Ø x P (")	Ø Exterior x Ø Espesor Ø Exterior x Ø Thickness (mm)	Cod.	€/Unid.
G 1.1/8 x 11	75 x 20	4R25230	329,57
G 1.1/4 x 11	75 x 20	4R25234	329,57
G 1.3/8 x 11	90 x 22	4R25238	509,36
G 1.1/2 x 11	90 x 22	4R25242	509,36
G 1.5/8 x 11	90 x 22	4R25246	509,36
G 1.3/4 x 11	105 x 22	4R25250	771,36
G 2 x 11	105 x 22	4R25254	799,86

DIN 5158 = DIN EN 24231

M MÉTRICA ISO-ROSCA DIN 13
 METRIC ISO-THREAD DIN 13
 MÉTRIQUE DIN-13



HSS-G

DIN 382

TOL
6g



D Ø x P (mm)	Ø Exterior x Ø Espesor Ø Exterior x Ø Thickness (mm)	Cod.	€/Unid.
M 3,0 x 0,50	19 x 5	4R27126	27,41
M 3,5 x 0,60	19 x 5	4R27128	27,41
M 4,0 x 0,70	19 x 5	4R27130	27,41
M 5,0 x 0,80	19 x 7	4R27134	27,41
M 6,0 x 1,00	19 x 7	4R27138	27,41
M 7,0 x 1,00	22 x 9	4R27140	29,42
M 8,0 x 1,25	22 x 9	4R27142	29,42
M 9,0 x 1,25	22 x 9	4R27144	29,42
M 10,0 x 1,50	27 x 11	4R27146	35,10
M 11,0 x 1,50	27 x 11	4R27148	35,10
M 12,0 x 1,75	36 x 14	4R27150	48,49
M 14,0 x 2,00	36 x 14	4R27154	48,49
M 16,0 x 2,00	41 x 18	4R27158	68,54
M 18,0 x 2,50	41 x 18	4R27162	68,54
M 20,0 x 2,50	41 x 18	4R27166	68,54

D Ø x P (mm)	Ø Exterior x Ø Espesor Ø Exterior x Ø Thickness (mm)	Cod.	€/Unid.
M 22 x 2,5	50 x 22	4R27170	114,81
M 24 x 3,0	50 x 22	4R27174	134,76
M 27 x 3,0	60 x 25	4R27176	210,41
M 30 x 3,5	60 x 25	4R27178	210,41
M 33 x 3,5	60 x 25	4R27180	210,41
M 36 x 4,0	60 x 25	4R27182	210,41
M 39 x 4,0	70 x 30	4R27184	343,72
M 42 x 4,5	70 x 30	4R27186	343,72
M 45 x 4,5	85 x 36	4R27188	484,06
M 48 x 5,0	85 x 36	4R27190	484,06
M 52 x 5,0	85 x 36	4R27192	484,06
M 56 x 5,5	100 x 36	4R27194	847,14
M 60 x 5,5	100 x 36	4R27196	847,14
M 64 x 6,0	100 x 36	4R27198	847,14
M 68 x 6,0	115 x 36	4R27199	1.098,74

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

COJINETES HEXAGONALES

HEXAGONAL DIES • FILIÈRES HEXAGONALES

Mf MÉTRICA FINA ISO-ROSCA DIN 13

METRIC ISO-THREAD DIN 13
MÉTRIQUE FIN ISO DIN-13



HSS-G

DIN 382

TOL
6g



D Ø x P (mm)	Ø Exterior x Ø Espesor Ø Exterior x Ø Thickness (mm)	Cod.	€/Unid.
M 3 x 0,35	19 x 5	4R26108	52,83
M 4 x 0,35	19 x 5	4R26110	52,83
M 4 x 0,50	19 x 5	4R26112	52,83
M 5 x 0,50	19 x 5	4R26114	52,83
M 5 x 0,75	19 x 7	4R26116	52,83
M 6 x 0,50	19 x 5	4R26117	52,83
M 6 x 0,75	19 x 7	4R26118	52,83
M 7 x 0,75	22 x 9	4R26120	56,17
M 8 x 0,50	22 x 9	4R26122	56,17
M 8 x 0,75	22 x 9	4R26124	56,17
M 8 x 1,00	22 x 9	4R26126	56,17
M 9 x 0,75	22 x 9	4R26128	56,17
M 9 x 1,00	22 x 9	4R26130	56,17
M 10 x 0,75	27 x 11	4R26132	56,17
M 10 x 1,00	27 x 11	4R26136	56,17
M 10 x 1,25	27 x 11	4R26138	56,17
M 11 x 1,00	27 x 11	4R26140	77,57
M 11 x 1,25	27 x 11	4R26142	77,57
M 12 x 0,75	36 x 10	4R26143	77,57
M 12 x 1,00	36 x 10	4R26144	77,57
M 12 x 1,25	36 x 10	4R26146	77,57
M 12 x 1,50	36 x 10	4R26148	77,57
M 13 x 1,00	36 x 10	4R26150	87,95
M 13 x 1,50	36 x 10	4R26151	87,95
M 14 x 0,75	36 x 10	4R26152	87,95
M 14 x 1,00	36 x 10	4R26153	87,95
M 14 x 1,25	36 x 10	4R26154	87,95
M 14 x 1,50	36 x 10	4R26156	87,95
M 15 x 1,00	36 x 10	4R26158	105,65
M 15 x 1,50	36 x 10	4R26160	105,65
M 16 x 1,00	41 x 14	4R26162	108,20
M 16 x 1,25	41 x 14	4R26164	108,20
M 16 x 1,50	41 x 14	4R26166	108,20
M 18 x 1,00	41 x 14	4R26170	114,68
M 18 x 1,25	41 x 14	4R26171	114,68
M 18 x 1,50	41 x 14	4R26172	114,68
M 18 x 2,00	41 x 14	4R26174	114,68
M 20 x 1,00	41 x 14	4R26178	114,68
M 20 x 1,25	41 x 14	4R26180	114,68
M 20 x 1,50	41 x 14	4R26184	114,68
M 20 x 2,00	41 x 14	4R26186	114,68
M 21 x 1,50	41 x 14	4R26188	166,53
M 22 x 1,00	50 x 16	4R26190	166,53
M 22 x 1,25	50 x 16	4R26192	166,53
M 22 x 1,50	50 x 16	4R26194	166,53
M 22 x 2,00	50 x 16	4R26196	166,53
M 23 x 1,50	50 x 16	4R26198	166,53
M 24 x 1,00	50 x 16	4R26700	165,42
M 24 x 1,25	50 x 16	4R26702	165,42
M 24 x 1,50	50 x 16	4R26704	165,42
M 24 x 2,00	50 x 16	4R26706	165,42

D Ø x P (mm)	Ø Exterior x Ø Espesor Ø Exterior x Ø Thickness (mm)	Cod.	€/Unid.
M 25 x 1,0	50 x 16	4R26707	239,04
M 25 x 1,5	50 x 16	4R26708	239,04
M 26 x 1,0	50 x 16	4R26710	239,04
M 26 x 1,5	50 x 16	4R26712	239,04
M 26 x 2,0	50 x 16	4R26714	239,04
M 27 x 1,0	60 x 18	4R26717	248,58
M 27 x 1,5	60 x 18	4R26716	248,58
M 27 x 2,0	60 x 18	4R26718	248,58
M 28 x 1,0	60 x 18	4R26720	248,58
M 28 x 1,5	60 x 18	4R26722	248,58
M 28 x 2,0	60 x 18	4R26724	248,58
M 29 x 1,5	60 x 18	4R26726	248,58
M 30 x 1,0	60 x 18	4R26728	248,58
M 30 x 1,5	60 x 18	4R26730	248,58
M 30 x 2,0	60 x 18	4R26732	248,58
M 30 x 3,0	60 x 25	4R26734	248,58
M 32 x 1,5	60 x 18	4R26736	248,58
M 32 x 2,0	60 x 18	4R26735	248,58
M 32 x 3,0	60 x 25	4R26737	248,58
M 33 x 1,5	60 x 18	4R26738	248,58
M 33 x 2,0	60 x 18	4R26740	248,58
M 33 x 3,0	60 x 25	4R26742	248,58
M 34 x 1,5	60 x 18	4R26744	248,58
M 34 x 2,0	60 x 18	4R26746	248,58
M 35 x 1,5	60 x 18	4R26748	248,58
M 36 x 1,5	60 x 18	4R26750	248,58
M 36 x 2,0	60 x 18	4R26752	248,58
M 36 x 3,0	60 x 25	4R26754	248,58
M 38 x 1,5	70 x 20	4R26756	413,80
M 39 x 1,5	70 x 20	4R26758	413,80
M 39 x 2,0	70 x 20	4R26760	413,80
M 39 x 3,0	70 x 30	4R26762	413,80
M 40 x 1,5	70 x 20	4R26764	413,80
M 40 x 2,0	70 x 20	4R26766	413,80
M 40 x 3,0	70 x 30	4R26768	413,80
M 42 x 1,5	70 x 20	4R26770	413,80
M 42 x 2,0	70 x 20	4R26772	413,80
M 42 x 3,0	70 x 30	4R26774	413,80
M 45 x 1,5	85 x 22	4R26776	604,90
M 45 x 2,0	85 x 22	4R26778	604,90
M 45 x 3,0	85 x 36	4R26780	604,90
M 48 x 1,5	85 x 22	4R26782	604,90
M 48 x 2,0	85 x 22	4R26784	604,90
M 48 x 3,0	85 x 36	4R26786	604,90
M 50 x 1,5	85 x 22	4R26788	604,90
M 50 x 2,0	85 x 22	4R26790	604,90
M 50 x 3,0	85 x 36	4R26792	604,90
M 52 x 1,5	85 x 22	4R26794	604,90
M 52 x 2,0	85 x 22	4R26796	604,90
M 52 x 3,0	85 x 36	4R26798	604,90

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

BSW

ROSCA WITHWORTH BS 84
 WITHWORTH THREAD BS 84
 FILETAGE WHITWORTH BS 84



HSS-G

DIN 382

D Ø x P (")	Ø Exterior x Ø Espesor Ø Exterior x Ø Thickness (mm)	Cod.	€/Unid.
BSW 1/8 x 40	19 x 5	4R22106	35,10
BSW 3/16 x 24	19 x 7	4R22110	35,10
BSW 1/4 x 20	19 x 7	4R22114	35,10
BSW 5/16 x 18	22 x 9	4R22116	36,78
BSW 3/8 x 16	27 x 11	4R22118	43,62
BSW 7/16 x 14	27 x 11	4R22120	43,62
BSW 1/2 x 12	36 x 14	4R22122	52,83
BSW 9/16 x 12	36 x 14	4R22124	52,83
BSW 5/8 x 11	41 x 18	4R22126	73,55
BSW 3/4 x 10	41 x 18	4R22130	73,55
BSW 7/8 x 9	50 x 22	4R22134	149,68

D Ø x P (")	Ø Exterior x Ø Espesor Ø Exterior x Ø Thickness (mm)	Cod.	€/Unid.
BSW 1" x 8	50 x 22	4R22138	149,68
BSW 1.1/8 x 7	60 x 25	4R22142	229,30
BSW 1.1/4 x 7	60 x 25	4R22146	229,30
BSW 1.3/8 x 6	60 x 25	4R22150	229,30
BSW 1.1/2 x 6	70 x 30	4R22154	270,53
BSW 2 x 4.1/2	85 x 36	4R22170	334,40
BSW 2.1/4 x 4	100 x 22	4R22172	1.243,41
BSW 2.1/2 x 4	115 x 22	4R22174	1.243,41
BSW 2.3/4 x 3.1/2	115 x 36	4R22176	1.546,28
BSW 3 x 3.1/2	115 x 36	4R22178	1.546,28

BSF

ROSCA BRITÁNICA STANDARD FINA BS 84
 BRITISH STANDARD FINE THREAD BS 84
 FILETAGE BRITANIQUE BSF, BS 84



HSS-G

DIN 382

D Ø x P (")	Ø Exterior x Ø Espesor Ø Exterior x Ø Thickness (mm)	Cod.	€/Unid.
BSF 3/16 x 32	19 x 7	4R22510	39,25
BSF 1/4 x 26	19 x 7	4R22514	39,25
BSF 5/16 x 22	22 x 9	4R22516	43,50
BSF 3/8 x 20	27 x 11	4R22518	53,17
BSF 7/16 x 18	27 x 11	4R22520	53,17
BSF 1/2 x 16	36 x 10	4R22522	83,39

D Ø x P (")	Ø Exterior x Ø Espesor Ø Exterior x Ø Thickness (mm)	Cod.	€/Unid.
BSF 9/16 x 16	36 x 10	4R22524	83,39
BSF 5/8 x 14	41 x 14	4R22526	127,38
BSF 3/4 x 12	41 x 14	4R22530	127,38
BSF 7/8 x 11	50 x 16	4R22534	149,68
BSF 1 x 10	50 x 16	4R22538	149,68

COJINETES HEXAGONALES

HEXAGONAL DIES • FILIÈRES HEXAGONALES

G(BSP) ROSCA GAS DIN ISO 228

PIPE TRHEAD DIN ISO 228
FILETAGE PAS GAZ DIN ISO 228



HSS-G

DIN 382

D Ø x P (")	Ø Exterior x Ø Espesor Ø Exterior x Ø Thickness (mm)	Cod.	€/Unid.
G 1/8 x 28	27 x 11	4R25512	49,16
G 1/4 x 19	36 x 10	4R25514	65,66
G 3/8 x 19	41 x 14	4R25516	84,58
G 1/2 x 14	41 x 14	4R25518	84,58
G 5/8 x 14	50 x 16	4R25520	143,22
G 3/4 x 14	50 x 16	4R25522	143,22
G 7/8 x 14	60 x 18	4R25524	190,96
G 1 x 11	60 x 18	4R25526	190,96

D Ø x P (")	Ø Exterior x Ø Espesor Ø Exterior x Ø Thickness (mm)	Cod.	€/Unid.
G 1.1/8 x 11	70 x 20	4R25530	283,28
G 1.1/4 x 11	70 x 20	4R25534	283,28
G 1.3/8 x 11	85 x 22	4R25538	466,02
G 1.1/2 x 11	85 x 22	4R25542	466,02
G 1.5/8 x 11	85 x 22	4R25546	466,02
G 1.3/4 x 11	100 x 22	4R25550	700,20
G 2 x 11	100 x 22	4R25554	700,20

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

ESTUCHE MACHOS MANO

HAND TAPS SET • COFFRET TARAUDS Á MAIN


3RH352 - 3RC352

3RB352 - 3RB529

Calidad / Quality	Machos / Taps	Brocas / Drill Bits	Giramachos / Tap Wrenche	Cod.	€/Unid.
HSS-G Machos Mano Hand Taps	M 3 - 4 - 5 - 6 - 8 - 10 - 12	-	-	3RH352	124,45
HSS-CO 5% Machos Mano Hand Taps	M 3 - 4 - 5 - 6 - 8 - 10 - 12	-	-	3RC352	210,69
HSS-G Macho Nº 3 Tap Nº 3	M 3 - 4 - 5 - 6 - 8 - 10 - 12	M 2,5 - 3,3 - 4,2 - 5,0 - 6,8 - 8,5 - 10,2	Nº 1.1/2	3RB352	82,60
HSS-CO 5% DIN 352/B	M 3 - 4 - 5 - 6 - 8 - 10 - 12	M 2,5 - 3,3 - 4,2 - 5,0 - 6,8 - 8,5 - 10,2	Nº 1.1/2	3RB529	97,33

ESTUCHES MACHOS MÁQUINA

MACHINE TAPS SETS • COFFRETS TARAUDS MACHINE


3RM001

3RM002

3RM003

3RM004

Calidad / Quality	Machos / Taps	Cod.	€/Unid.
HSS-CO 5% FORM B	M 3 - 4 - 5 - 6 8 - 10 - 12	3RM001	122,34
HSS-CO 5% FORM C/35°	M 3 - 4 - 5 - 6 8 - 10 - 12	3RM002	135,26

Calidad / Quality	Machos / Taps	Cod.	€/Unid.
TIN FORM B	M 3 - 4 - 5 - 6 8 - 10 - 12	3RM003	205,95
TIN FORM C/35°	M 3 - 4 - 5 - 6 8 - 10 - 12	3RM004	266,41

ESTUCHES Y CONJUNTOS

SETS AND ASSORTMENTS • COFFRETS ET ENSEMBLES

ESTUCHES MACHOS MÁQUINA CON BROCA

MACHINE TAPS AND DRILL BITS SETS

COFFRETS TARAUDS MACHINE ET FORETS MÉTAUX



3RM011



3RM012

Calidad / Quality	Machos / Taps	Brocas / Drill Bits	Giramachos / Tap Wrenche	Cod.	€/Unid.
HSS-CO 5%	M 3 - 4 - 5 - 6 - 8 - 10 - 12	M 2,5 - 3,3 - 4,2 - 5,0 - 6,8 - 8,5 - 10,2	-	3RM011	134,37
HSS-CO 5%	M 3 - 4 - 5 - 6 - 8 - 10 - 12	M 2,5 - 3,3 - 4,2 - 5,0 - 6,8 - 8,5 - 10,2	-	3RM012	161,60

ESTUCHES MACHOS MÁQUINA DE BANDA

COLOR RING MACHINE TAPS SETS

COFFRETS TARAUDS MACHINE BANDE COLORÉE



3RM021



3RM022



3RM023



3RM024



3RM025



3RM026

Calidad / Quality	Banda/Ring	Machos/Taps	Cod.	€/Unid.
PM		M 3 - 4 - 5 - 6 8 - 10 - 12	3RM021	259,54
PM		M 3 - 4 - 5 - 6 8 - 10 - 12	3RM022	293,16
HSS-E-V3		M 3 - 4 - 5 - 6 8 - 10 - 12	3RM023	175,84

Calidad / Quality	Banda/Ring	Machos/Taps	Cod.	€/Unid.
HSS-E-V3		M 3 - 4 - 5 - 6 8 - 10 - 12	3RM024	192,93
HSS-CO 5%		M 3 - 4 - 5 - 6 8 - 10 - 12	3RM025	159,15
HSS-CO 5%		M 3 - 4 - 5 - 6 8 - 10 - 12	3RM026	194,55

M

MÉTRICA ISO-ROSCA DIN 13

METRIC ISO-THREAD DIN 13
MÉTRIQUE DIN-13


HSS-G

Machos Mano y Cojinetes <i>Hand Taps and Dies</i>	Giramachos <i>Tap Holder</i>	Volvedor <i>Tap Wrenche (mm)</i>	Giramachos con Criquet <i>Tap Holder with Ratchet</i>	Cod.	€/Unid.
M 3 - 4 - 5 - 6 - 8 - 10 - 12 14 - 16 - 18 - 20 - 22 - 24	Nº 1 + 4	20 x 5 - 20 x 7 - 25 x 9 - 30 x 11 38 x 14 - 45 x 18 - 55 x 22	-	3R48006	1.318,84
M 5 - 6 - 8 - 10 - 12 - 14 - 16 18 - 20 - 22 - 24 - 27 - 30	Nº 1 + Nº 3 + 5	20 x 7 - 25 x 9 - 30 x 11 - 38 x 14 45 x 18 - 55 x 22 - 65 x 25	-	3R48007	2.177,88

3R49101P

NEW

HSS-G

Machos Mano y Cojinetes <i>Hand Taps and Dies</i>	Brocas <i>Drill Bits (mm)</i>	Giramachos <i>Tap Holder</i>	Volvedor <i>Tap Wrenche (mm)</i>	Giramachos con Criquet <i>Tap Holder with Ratchet</i>	Cod.	€/Unid.
M 3-4-5-6-8-10-12	2,5 - 3,3 - 4,2 - 5,0 - 6,8 - 8,5 - 10,2	Nº 1 + Nº 2	20x5 - 20x7 - 25x9 - 30x11 - 38x14	N.º 1	3R49101	336,96
M 3-4-5-6-8-10-12	2,5 - 3,3 - 4,2 - 5,0 - 6,8 - 8,5 - 10,2	Nº 1 + Nº 2	20x5 - 20x7 - 25x9 - 30x11 - 38x14	N.º 1	3R49101P	309,15
M 3-4-5-6-8-10-12	-	Nº 1 + Nº 2	20x5 - 20x7 - 25x9 - 30x11 - 38x14	-	3R49107	305,73
M 3-4-5-6-8-10-12	2,5 - 3,3 - 4,2 - 5,0 - 6,8 - 8,5 - 10,2	Nº 1 + Nº 2	20x5 - 20x7 - 25x9 - 30x11 - 38x14	-	3R49111	325,65

HSS-CO 5%

Machos Mano y Cojinetes <i>Hand Taps and Dies</i>	Brocas <i>Drill Bits (mm)</i>	Giramachos <i>Tap Holder</i>	Volvedor <i>Tap Wrenche (mm)</i>	Giramachos con Criquet <i>Tap Holder with Ratchet</i>	Cod.	€/Unid.
M 3 - 4 - 5 - 6 - 8 - 10 - 12	2,5 - 3,3 - 4,2 - 5,0 6,8 - 8,5 - 10,2	Nº 1 + Nº 2	20 x 5 - 20 x 7 - 25 x 9 30 x 11 - 38 x 14	Nº 1	3R49151	527,20

HSS-G

IZQUIERDAS

Machos Mano y Cojinetes <i>Hand Taps and Dies</i>	Brocas <i>Drill Bits (mm)</i>	Giramachos <i>Tap Holder</i>	Volvedor <i>Tap Wrenche (mm)</i>	Giramachos con Criquet <i>Tap Holder with Ratchet</i>	Cod.	€/Unid.
M 3 - 4 - 5 - 6 - 8 - 10 - 12	2,5 - 3,3 - 4,2 - 5,0 6,8 - 8,5 - 10,2	Nº 1 + Nº 2	20 x 5 - 20 x 7 - 25 x 9 30 x 11 - 38 x 14	Nº 1	3R49171	600,60

ESTUCHES Y CONJUNTOS

SETS AND ASSORTMENTS • COFFRETS ET ENSEMBLES

M CONJUNTO M3 – M12, Ref. 3R12

M3 – M12 SET, REF. 3R12
COFFRET M3 – M12, REF. 3R12



HSS-G

Machos Mano y Cojinetes Hand Taps and Dies	Giramachos Tap Holder	Volvedor Tap Wrenche (mm)	Giramachos con Criquet Tap Holder with Ratchet	Cod.	€/Unid.
M 3 - 4 - 5 - 6 - 8 - 10 - 12	Nº 1	25 x 9	Nº 1	3R49501	208,82

M MÉTRICA ISO-ROSCA DIN 13

MÉTRIC ISO-THREAD DIN 13
MÉTRIQUE DIN-13



HSS-G

Machos Mano y Cojinetes Hand Taps and Dies	Giramachos Tap Holder	Volvedor Tap Wrenche (mm)	Giramachos con Criquet Tap Holder with Ratchet	Cod.	€/Unid.
M 3 - 4 - 5 - 6 - 8 - 10 12 - 14 - 16 - 18 - 20	Nº 1 + Nº 3	20 x 5 - 20 x 7 - 25 x 9 30 x 11 - 38 x 14 - 45 x 18	Nº 1 - Nº 2	3R49201	703,73
M 5 - 6 - 8 - 10 12 - 14 - 16 - 18 - 20	Nº 1 + Nº 3	20 x 7 - 25 x 9 30 x 11 - 38 x 14 - 45 x 18	Nº 1 + Nº 2	3R49301	681,85

HSS-CO 5%

Machos Mano y Cojinetes Hand Taps and Dies	Giramachos Tap Holder	Volvedor Tap Wrenche (mm)	Giramachos con Criquet Tap Holder with Ratchet	Cod.	€/Unid.
M 3 - 4 - 5 - 6 - 8 - 10 12 - 14 - 16 - 18 - 20	Nº 1 + Nº 3	20 x 5 - 20 x 7 - 25 x 9 30 x 11 - 38 x 14 - 45 x 18	-	3R49251	1.138,68

HSS-G



IZQUIERDAS

Machos Mano y Cojinetes Hand Taps and Dies	Giramachos Tap Holder	Volvedor Tap Wrenche (mm)	Giramachos con Criquet Tap Holder with Ratchet	Cod.	€/Unid.
M 3 - 4 - 5 - 6 - 8 - 10 12 - 14 - 16 - 18 - 20	Nº 1 + Nº 3	20 x 5 - 20 x 7 - 25 x 9 30 x 11 - 38 x 14 - 45 x 18	-	3R49271	1.546,98

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

M

MÉTRICA ISO-529 FORMA B
 METRIC ISO-529 B FORM
 MÉTRIQUE ISO-529 FORME B


HSS-G

Machos Mano y Cojinetes / Hand Taps and Dies	Brocas / Drill Bits (mm)	Cod.	€/Unid.
M 3 - 4 - 5 - 6 - 8 - 10	2,5 - 3,3 - 4,2 - 5,0 - 6,8 - 8,5	3R80501	153,70

Mf

MÉTRICA ISO-ROSCA DIN 13
 METRIC ISO-THREAD DIN 13
 MÉTRIQUE DIN-13


HSS-G

Machos Mano y Cojinetes Hand Taps and Dies	Giramachos Tap Holder	Volvedor Tap Wrenche (mm)	Giramachos con Criquet Tap Holder with Ratchet	Cod.	€/Unid.
Mf 3 x 0,35 - 4 x 0,5 - 5 x 0,5 - 6 x 0,75 8 x 0,75 - 8 x 1,0 - 10 x 1,0 - 12 x 1,5	Nº 1 + Nº 2	20 x 5 - 25 x 9 - 30 x 11 - 38 x 10	Nº 1	3R48010	607,74
Mf 6 x 0,75 - 8 x 0,75 - 8 x 1,0 - 10 x 1,0 12 x 1,0 - 12 x 1,5 - 14 x 1,25 - 14 x 1,5 16 x 1,5 - 18 x 1,5 - 20 x 1,5	Nº 1 + Nº 3	20 x 7 - 25 x 9 - 30 x 11 38 x 10 - 45 x 14	-	3R48011	1.026,02
Mf 6 x 0,75 - 8 x 0,75 - 8 x 1,0 - 10 x 1,0 12 x 1,0 - 12 x 1,5 - 14 x 1,25 - 14 x 1,5 16 x 1,5 - 18 x 1,5 - 20 x 1,5 - 22 x 1,5 - 24 x 1,5	Nº 1 + Nº 4	20 x 7 - 25 x 9 - 30 x 11 38 x 10 - 45 x 14 - 55 x 16	-	3R48012	1.389,48

ESTUCHES Y CONJUNTOS

SETS AND ASSORTMENTS • COFFRETS ET ENSEMBLES

G(BSP)

ROSCA GAS DIN ISO 228
PIPE THREAD ISO 228
FILETAGE PAS GAZ DIN ISO 228



HSS-G

Machos Mano y Cojinetes Hand Taps and Dies	Giramachos Tap Holder	Volvedor Tap Wrenche (mm)	Giramachos con Criquet Tap Holder with Ratchet	Cod.	€/Unid.
G 1/8 - 1/4 - 3/8 - 1/2 - 3/4 - 1"	Nº 1 + Nº 3 + Nº 5	30 x 11 - 38 x 10 - 45 x 14 - 55 x 16 - 65 x 18	-	3R48020	1.122,50
G 1/8 - 1/4 - 3/8 - 1/2 - 5/8 - 3/4 - 7/8 - 1"	Nº 1 + Nº 3 + Nº 5	31 x 11 - 38 x 10 - 45 x 14 - 55 x 16 - 65 x 18	-	3R48021	1.513,19
G 1/4 - 3/8 - 1/2 - 3/4 - 1" - 1 1/4 - 1 1/2"	Nº 2 + Nº 4 + Nº 7	38 x 10 - 45 x 14 - 65 x 18 - 75 x 20 - 90 x 22	-	3R48022	2.995,80

NPT

ROSCA INGLESA PARA TUBO, CONOCIDAD 1:16
TAPERED PIPE THREAD, TAPER 1:16
FILETAGE NPT CONICITÉ 1:16

HSS-G

Machos Mano y Cojinetes Hand Taps and Dies	Giramachos Tap Holder	Volvedor Tap Wrenche (mm)	Giramachos con Criquet Tap Holder with Ratchet	Cod.	€/Unid.
NPT 1/8 - 1/4 - 3/8 - 1/2 - 3/4 - 1"	Nº 1 + Nº 3 + Nº 5	31 x 11 - 38 x 14 - 45 x 18 55 x 22 - 65 x 25	-	3R48025	1.502,04
NPT 1/8 - 1/4 - 3/8 - 1/2 - 3/4 - 1" 1 1/4 - 1 1/2 - 2"	Nº 2 + Nº 4 + Nº 7	30 x 11 - 38 x 14 - 45 x 18 - 55 x 22 65 x 25 - 75 x 30 - 90 x 36 - 105 x 36	-	3R48027	4.978,36

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

BSW

ROSCA WHITWORTH BS 84
 WITHWORTH THREAD BS 84
 WHITWORTH BS 84


HSS-G

Machos Mano y Cojinetes <i>Hand Taps and Dies</i>	Giramachos <i>Tap Holder</i>	Volvedor <i>Tap Wrenche (mm)</i>	Giramachos con Criquet <i>Tap Holder with Ratchet</i>	Cod.	€/Unid.
BSW 1/8 - 3/16 - 1/4 - 5/16 - 3/8 - 7/16 - 1/2	Nº 1 + Nº 2	20 x 5 - 20 x 7 - 25 x 9 - 30 x 11 - 38 x 14	Nº 1	3R48030	617,25
BSW 1/4 - 5/16 - 3/8 - 7/16 - 1/2	Nº 1 + Nº 2	20 x 7 - 25 x 9 - 30 x 11 - 38 x 14	Nº 1	3R48031	505,36
BSW 1/4 - 5/16 - 3/8 - 7/16 - 1/2 - 5/8 - 3/4	Nº 1 + Nº 3	20 x 7 - 25 x 9 - 30 x 11 - 38 x 14 - 45 x 18	-	3R48032	913,24
BSW 1/4 - 5/16 - 3/8 - 7/16 - 1/2 5/8 - 3/4 - 7/8 - 1"	Nº 1 + Nº 4	20 x 7 - 25 x 9 - 30 x 11 - 38 x 14 45 x 18 - 55 x 22	-	3R48034	1.331,98
BSW 1/4 - 5/16 - 3/8 - 7/16 - 1/2 - 5/8 3/4 - 7/8 - 1" - 1" 1/8 - 1" 1/4 - 1" 3/8 - 1" 1/2	Nº 1 + Nº 3 + Nº 5	20 x 7 - 25 x 9 - 30 x 11 - 38 x 14 45 x 18 - 55 x 22 - 65 x 25	-	3R48035	3.182,56

BSF

ROSCA BRITÁNICA STANDARD FINA BS 84
 BRITISH STANDARD FINE THREAD BS 84
 BRITISH STANDARD FINE THREAD BS 84

HSS-G

Machos Mano y Cojinetes <i>Hand Taps and Dies</i>	Giramachos <i>Tap Holder</i>	Volvedor <i>Tap Wrenche (mm)</i>	Giramachos con Criquet <i>Tap Holder with Ratchet</i>	Cod.	€/Unid.
BSF 1/4 - 5/16 - 3/8 - 7/16 - 1/2	Nº 1 + Nº 2	20 x 7 - 25 x 9 - 30 x 11 - 38 x 10	Nº 1	3R48041	523,81
BSF 1/4 - 5/16 - 3/8 - 7/16 - 1/2 - 5/8 - 3/4	Nº 1 + Nº 3	21 x 7 - 25 x 9 - 30 x 11 - 38 x 10 - 45 x 14	-	3R48042	906,90
BSF 1/4 - 5/16 - 3/8 - 7/16 - 1/2 - 5/8 - 3/4 - 7/8 - 1"	Nº 1 + Nº 4	22 x 7 - 25 x 9 - 30 x 11 - 38 x 10 - 45 x 14 - 55 x 16	-	3R48044	1.498,84

BSW/BSF

HSS-G

Machos Mano y Cojinetes <i>Hand Taps and Dies</i>	Giramachos <i>Tap Holder</i>	Volvedor <i>Tap Wrenche (mm)</i>	Giramachos con Criquet <i>Tap Holder with Ratchet</i>	Cod.	€/Unid.
BSW/BSF 1/4 - 5/16 - 3/8 - 7/16 - 1/2 - 5/8 - 3/4	Nº 1 + Nº 3	20 x 7 - 25 x 9 - 30 x 11 - 38 x 14 - 45 x 18	-	3R48046	1.696,46

ESTUCHES Y CONJUNTOS

SETS AND ASSORTMENTS • COFFRETS ET ENSEMBLES

UNC

ROSCA GRUESA UNIFICADA ANSI B 1.1
UNIFIED COARSE THREAD ANSI B 1.1
FILETAGE UNIFIED GROSSE ANSI B 1.1



HSS-G

Machos Mano y Cojinetes <i>Hand Taps and Dies</i>	Giramachos <i>Tap Holder</i>	Volvedor <i>Tap Wrenche (mm)</i>	Giramachos con Criquet <i>Tap Holder with Ratchet</i>	Cod.	€/Unid.
UNC 1/4 - 5/16 - 3/8 - 7/16 - 1/2	Nº 1 + Nº 2	20 x 70 - 25 x 9 - 30 x 11 - 38 x 14	Nº 1	3R48050	553,23
UNC 1/4 - 5/16 - 3/8 - 7/16 - 1/2 - 5/8 - 3/4	Nº 1 + Nº 3	20 x 70 - 25 x 9 - 30 x 11 38 x 14 - 45 x 18	-	3R48051	969,44

UNF

ROSCA FINA UNIFICADA ANSI B 1.1
UNIFIED FINE THREAD ANSI B 1.1
FILETAGE UNIFIED GROSSE ANSI B 1.1

HSS-G

Machos Mano y Cojinetes <i>Hand Taps and Dies</i>	Giramachos <i>Tap Holder</i>	Volvedor <i>Tap Wrenche (mm)</i>	Giramachos con Criquet <i>Tap Holder with Ratchet</i>	Cod.	€/Unid.
UNF 1/4 - 5/16 - 3/8 - 7/16 - 1/2	Nº 1 + Nº 2	20 x 7 - 25 x 9 - 30 x 11 - 38 x 10	Nº 1	3R48060	468,58
UNF 1/4 - 5/16 - 3/8 - 7/16 - 1/2 - 5/8 - 3/4	Nº 1 + Nº 3	20 x 7 - 25 x 9 - 30 x 11 38 x 10 - 45 x 14	-	3R48061	816,35
UNF 1/4 - 5/16 - 3/8 - 7/16 - 1/2 5/8 - 3/4 - 7/8 - 1"	Nº 1 + Nº 4	20 x 7 - 25 x 9 - 30 x 11 38 x 10 - 45 x 14 - 55 x 16	-	3R48063	1.164,98

UNC/UNF

HSS-G

Machos Mano y Cojinetes <i>Hand Taps and Dies</i>	Giramachos <i>Tap Holder</i>	Volvedor <i>Tap Wrenche (mm)</i>	Giramachos con Criquet <i>Tap Holder with Ratchet</i>	Cod.	€/Unid.
UNC/UNF 1/4 - 5/16 - 3/8 - 7/16 - 1/2 - 5/8 - 3/4	Nº 1 + Nº 3	20 x 7 - 25 x 9 - 30 x 11 - 38 x 14 - 45 x 18	-	3R48066	1.696,45

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

M/Mf MALETIN AUTOMOCION REF.6000

THREADING SET REF.6000 FOR AUTOMOTIVE
ENSEMBLE FILETTAGE POUR GARAGE REF.6000



Basic

Cod.	€/Unid.
6000FIAT	477,97

Contenido / Contains / Contenu

Machos Mano -2 machos- y Cojinetes / Hand Taps -2 taps- and Dies							
METRICA DIN352 / METRIC DIN352			METRICA FINA DIN2181 / FINE METRIC DIN2181				
2 x 0,40	7 x 1,00	12 x 1,75	6 x 0,75	9 x 1,00	11 x 1,00	12 x 1,50	16 x 1,50
3 x 0,50	8 x 1,25	14 x 2,00	7 x 0,75	10 x 0,75	11 x 1,25	14 x 1,00	18 x 1,50
4 x 0,70	9 x 1,25	16 x 2,00	8 x 0,75	10 x 1,00	12 x 0,75	14 x 1,25	
5 x 0,80	10 x 1,50		8 x 1,00	10 x 1,25	12 x 1,00	14 x 1,50	
6 x 1,00	11 x 1,50		9 x 0,75	11 x 0,75	12 x 1,25	16 x 1,00	
Volvedor / Tap Wrenche (mm)							
25,4 - 38,1							
Giramachos / Tap Holder							
Nº 1 + Nº 3 + Nº 1 con crique / Nº 1 + Nº 3 + Nº 1 with ratchet							
TOTAL 110 pcs							

M

Basic

Machos Mano y Cojinetes Hand Taps and Dies	Giramachos Tap Holder	Volvedor Tap Wrenche (mm)	Cod.	€/Unid.
M 3 - 4 - 5 - 6 - 7 - 8	Nº 2	25,4	600000M3	189,10
M 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10	Nº 2	25,4	600000M4	233,06
M 12 - 14 - 16 - 18 - 20	Nº 3	38,1 - 50,8	600000M7	294,30
M 12 - 14 - 18 - 20 - 22 - 24	Nº 4	38,1 - 50,8	600000M8	470,95
M 6 - 8 - 10 - 12 - 14 - 16 - 18 - 20	Nº 1 + Nº 3	25,4 - 38,1 - 50,8	60000S35	404,89

Hasta fin de existencias / Until end of stock / Jusqu'à épuisement des stocks

ESTUCHES Y CONJUNTOS

SETS AND ASSORTMENTS • COFFRETS ET ENSEMBLES

BSW

Basic



Machos Mano y Cojinetes Hand Taps and Dies	Giramachos Tap Holder	Volvedor Tap Wrenche (mm)	Cod.	€/Unid.
BSW 1/2"x12 - 9/16"x12 - 5/8"x11 3/4"x10 - 7/8"x9 - 1"x8	Nº 4	38,1 - 50,8	600000W8	460,29
BSW 1/8"x40 - 3/16"x24 1/4"x20 - 5/16"x18 - 3/8"x16	Nº 2	25,4	600000W4	211,42
BSW 1/4"x20 - 5/16"x18 - 3/8"x16 - 7/16"x14 1/2"x12 - 9/16"x12 - 5/8"x11	Nº 3	25,4 - 38,1	600000W7	298,02
BSW 1/4"x20 - 5/16"x18 - 3/8"x16 - 7/16"x14 1/2"x12 - 9/16"x12 - 5/8"x11 - 3/4"x10	Nº 2 + Nº 4	25,4 - 38,1	600000W9	364,04
BSW 1/4"x20 - 5/16"x18 - 3/8"x16 - 7/16"x14 1/2"x12 - 9/16"x12 - 5/8"x11 - 3/4"x10 - 7/8"x9 - 1"x8	Nº 2 + Nº 4	25,4 - 38,1 - 50,8	600000W1	600,98
BSW 1/8"x40 - 5/32"x32 - 3/16"x24 - 1/4"x20 - 5/16"x18 - 3/8"x16 - 7/16"x14 - 1/2"x12	Nº 1 + Nº 2	25,4 - 38,1	60000S20	360,47

Hasta fin de existencias / Until end of stock / Jusqu'à épuisement des stocks

G(BSP)

Basic



Machos Mano y Cojinetes Hand Taps and Dies	Giramachos Tap Holder	Volvedor Tap Wrenche (mm)	Cod.	€/Unid.
BSP 1/8"x28 - 1/4"x19 - 3/8"x19 - 1/2"x14 5/8"x14 - 3/4"x14 - 7/8"x14 - 1"x11	Nº 3 + Nº 6	38,1 - 50,8 - 63,5 mm.	6000GAS1	765,64

Hasta fin de existencias / Until end of stock / Jusqu'à épuisement des stocks

UNF

Basic



Machos Mano y Cojinetes Hand Taps and Dies	Giramachos Tap Holder	Volvedor Tap Wrenche (mm)	Cod.	€/Unid.
UNF 3/16"x32 - 1/4"x28 - 5/16"x24 3/8"x24 - 7/16"x20	Nº 2	25,4 - 38,1 mm.	6000SAE1	158,38
UNF 1/2"x20 - 5/8"x18 - 3/4"x16 7/8"x14 - 1"x12	Nº 4	38,1 - 50,8	6000SAE2	379,14

Hasta fin de existencias / Until end of stock / Jusqu'à épuisement des stocks

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

DISPLAYS
DISPLAYS • DISPLAYS

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HEXAGONAL • HEXAGONAL

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ACCESSORIES • ACCESSOIRES

ROSCADO
THREADING • FILETAGE

FRESADO
MILLING • FRAISAGE

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METAL • MÉTAL

MADERA
WOOD • BOIS

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION





CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

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HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

MODO DE USO

OPERATING INSTRUCTIONS • INSTRUCTIONS D'UTILISATION



TALADRADO
 DRILLING
 PÉRÇAGE



COMPROBACIÓN
 CHECK
 VÉRIFICATION



ROSCADO
 THREADING
 TARAUDAGE



INSTALACIÓN DEL INSERTO
 INSERT INSTALLATION
 INSTALLATION DU FILET



ELIMINACIÓN DEL ARRASTRE
 TANG REMOVAL
 CASSER LA LANGUETTE DE MONTAGE

INFORMACIÓN TÉCNICA PARA INSTALACIÓN DE INSERTOS DIN 8140

TECHNICAL DATA SHEET FOR THE INSTALLATION OF WIRE THREAD INSERTS DIN8140
 INFORMATION TECHNIQUE POUR L'INSTALLATION DES FILETS RAPPORTÉS DIN 8140

D Ø X P (mm)	TALARADO / DRILLING / PRÉÇAGE					ROSCADO / THREADING / FILETAGE			
	C	LONGITUD (S) / LENGTH (S) / LONGUEUR (S)					B	A	
		1,0 x Ø	1,5 x Ø	2,0 x Ø	2,5 x Ø	3,0 x Ø		mm	mín.
M / MF	mm								
M 2,0 x 0,40	2,10	3,80	4,80	5,80	6,80	7,80	2,52	2,09	2,18
M 2,5 x 0,45	2,60	4,53	5,77	7,02	8,27	9,52	3,08	2,60	2,70
M 3,0 x 0,50	3,20	5,25	6,75	8,25	9,75	11,25	3,65	3,11	3,22
M 3,5 x 0,60	3,70	6,20	7,95	9,70	11,45	13,20	4,28	3,63	3,76
M 4,0 x 0,70	4,20	7,15	9,15	11,15	13,15	15,15	4,91	4,15	4,29
M 5,0 x 0,80	5,20	8,60	11,10	13,60	16,10	18,60	6,04	5,17	5,33
M 6,0 x 1,00	6,30	10,50	13,50	16,50	19,50	22,50	7,30	6,22	6,41
M 7,0 x 1,00	7,30	11,50	15,00	18,50	22,00	25,52	8,30	7,22	7,41
M 8,0 x 1,25	8,30	13,63	17,62	21,62	25,62	29,62	9,62	8,27	8,48
M 8,0 x 1,00	8,30	12,50	16,50	20,50	24,50	28,50	9,30	8,22	8,41
M 9,0 x 1,25	9,30	14,63	19,12	23,62	28,13	32,62	10,62	9,27	9,48
M 10,0 x 1,50	10,40	13,50	21,75	26,75	31,75	36,75	11,95	10,32	10,56
M 10,0 x 1,25	10,30	15,63	20,62	25,62	30,62	35,62	11,62	10,27	10,48
M 10,0 x 1,00	10,30	14,50	19,50	24,50	29,50	34,50	11,30	10,22	10,41
M 11,0 x 1,50	11,40	17,75	23,25	28,75	34,25	39,75	12,95	11,33	11,56
M 12,0 x 1,75	12,40	19,87	25,87	31,87	37,87	43,87	14,27	12,38	12,64
M 12,0 x 1,50	12,40	18,75	24,75	30,75	36,75	42,75	14,10	12,32	12,56
M 12,0 x 1,25	12,30	17,62	23,62	29,62	35,62	41,62	13,62	12,27	12,48
M 12,0 x 1,00	12,30	16,50	22,50	28,50	34,50	40,50	13,30	12,22	12,41
M 14,0 x 2,00	14,50	23,00	30,00	37,00	44,00	51,00	16,60	14,43	14,73
M 14,0 x 1,50	14,40	20,75	27,75	34,75	41,75	48,75	15,95	14,35	14,56
M 14,0 x 1,25	14,40	19,62	26,62	33,62	40,62	47,62	15,62	14,27	14,48
M 14,0 x 1,00	14,30	18,50	25,50	32,50	39,50	46,50	15,30	14,22	14,41
M 16,0 x 2,00	16,50	25,00	33,00	41,00	49,00	57,00	18,60	16,43	16,73
M 16,0 x 1,50	16,40	22,75	30,75	38,75	46,75	54,75	17,95	16,32	16,56
M 18,0 x 2,50	18,60	29,25	38,25	47,25	56,25	65,25	21,25	18,54	18,90
M 18,0 x 2,00	18,50	27,00	36,00	45,00	54,00	63,00	20,60	18,43	18,73
M 18,0 x 1,50	18,50	24,75	33,75	42,75	51,75	60,75	19,95	18,32	18,56
M 20,0 x 2,50	20,60	31,25	41,25	51,25	61,25	71,25	23,25	20,54	20,90
M 20,0 x 2,00	20,50	29,00	39,00	49,00	59,00	69,00	22,60	20,43	20,73
M 20,0 x 1,50	20,50	26,75	36,75	46,75	56,75	66,75	21,95	20,32	20,56
M 22,0 x 2,50	22,60	33,25	44,25	55,25	66,25	77,25	25,25	22,54	22,90
M 22,0 x 2,00	22,50	31,00	42,00	53,00	64,00	75,00	24,60	22,43	22,73
M 22,0 x 1,50	22,50	28,75	39,75	50,75	61,75	72,75	23,95	22,32	22,56
M 24,0 x 3,00	24,75	37,50	49,50	61,50	73,50	85,50	27,90	24,65	25,05
M 24,0 x 2,00	24,50	33,00	45,00	57,00	69,00	81,00	26,60	24,43	24,73
M 24,0 x 1,50	24,50	30,75	42,75	54,75	66,75	78,75	26,02	24,33	24,56

- C** Diámetro de broca previa / Recommended drill diameter / Perçage avant trou
- S** Longitud de taladrado / Drilling Length / Longueur perçage
- B** Ø mayor de rosca / Maximum diameter of thread / Diametre maximum du filet
- A** Ø menor de rosca / Minimum diameter of thread / Diametre minimum du filet
- Q** Longitud nominal / Nominal Length / Longueur nominale
- d1** exterior del casquillo / External Ø of wire insert / Diametre extérieur di filet rapporté
- W** N° de hilos / N° of coils / Nombre de spires

INFORMACIÓN TÉCNICA INSERTOS DE ROSCADO

WIRE THREAD INSERTS TECHNICAL INFORMATION • INFORMATION TECHNIQUE FILETS RAPPORTÉS

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

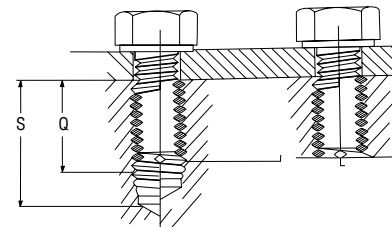
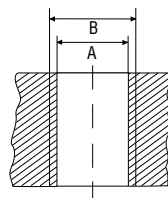
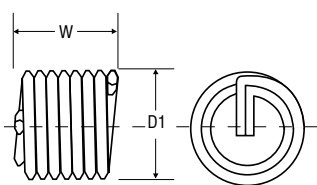
ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

ROSCADO / THREADING / FILETAGE					INSERTO / INSERTS / FILETS RAPPORTÉS						
LONGITUD ÚTIL (Q) / LENGTH (Q) / LONGEUR (Q)					D1		Nº DE HILOS (W) / Nº OF COILS (W) / LONGEUR (W)				
1,0 x Ø	1,5 x Ø	2,0 x Ø	2,5 x Ø	3,0 x Ø	mín.	máx.	1,0 x Ø	1,5 x Ø	2,0 x Ø	2,5 x Ø	3,0 x Ø
2,00	3,00	4,00	5,00	6,00	2,60	2,80	2,90	4,90	6,90	8,90	10,90
2,50	3,75	5,00	6,25	7,50	3,20	3,70	3,50	5,90	8,10	10,50	12,90
3,00	4,50	6,00	7,50	9,00	3,80	4,35	3,90	6,30	8,70	11,10	13,50
3,50	5,25	7,00	8,75	10,50	4,55	4,75	3,70	6,30	8,70	11,20	13,30
4,00	6,00	8,00	10,00	12,00	5,05	5,60	3,70	6,10	8,40	10,90	13,20
5,00	7,50	10,00	12,50	15,00	6,25	6,80	4,30	6,90	9,70	12,30	14,80
6,00	9,00	12,00	15,00	18,00	7,40	7,95	4,20	6,90	9,60	12,30	14,60
7,00	10,50	14,00	17,50	21,00	8,65	9,20	5,30	8,20	11,10	14,30	17,40
8,00	12,00	16,00	20,00	24,00	9,80	10,35	4,70	7,40	10,60	13,50	16,40
8,00	12,00	16,00	20,00	24,00	9,70	10,25	6,10	9,50	12,90	16,50	19,90
9,00	13,50	18,00	22,50	27,00	10,85	11,10	5,30	8,60	11,90	15,30	18,10
10,00	15,00	20,00	25,00	30,00	11,95	12,50	5,00	8,10	11,20	14,20	17,20
10,00	15,00	20,00	25,00	30,00	12,10	12,65	6,00	9,70	13,10	16,90	20,10
10,00	15,00	20,00	25,00	30,00	12,10	12,50	7,60	12,10	16,30	20,70	25,00
11,00	16,50	22,00	27,50	33,00	13,10	13,50	5,60	9,00	12,30	15,70	19,10
12,00	18,00	24,00	30,00	36,00	14,30	15,00	5,20	8,40	11,70	14,70	18,00
12,00	18,00	24,00	30,00	36,00	14,25	14,95	6,20	9,80	13,50	17,10	20,80
12,00	18,00	24,00	30,00	36,00	14,30	15,00	7,40	11,60	15,90	20,00	24,30
12,00	18,00	24,00	30,00	36,00	14,40	14,80	9,30	14,50	19,50	24,80	30,00
14,00	21,00	28,00	35,00	42,00	16,65	17,35	5,60	8,80	12,00	15,20	18,40
14,00	21,00	28,00	35,00	42,00	15,96	16,64	7,40	11,70	15,70	19,90	24,10
14,00	21,00	28,00	35,00	42,00	15,74	16,00	8,40	12,55	18,20	23,10	28,00
14,00	21,00	28,00	35,00	42,00	15,35	15,65	11,20	19,05	12,20	29,20	35,20
16,00	24,00	32,00	40,00	48,00	18,90	19,60	6,50	10,10	13,80	17,50	21,10
16,00	24,00	32,00	40,00	48,00	18,10	18,40	8,70	13,60	18,10	22,90	27,60
18,00	27,00	36,00	45,00	54,00	21,30	22,00	5,60	9,00	12,30	15,70	19,00
18,00	27,00	36,00	45,00	54,00	20,80	21,45	7,10	11,40	15,20	19,20	23,20
18,00	27,00	36,00	45,00	54,00	20,15	20,80	9,50	15,10	20,20	25,50	30,80
20,00	30,00	40,00	50,00	60,00	23,55	24,40	6,30	10,00	13,70	17,40	21,10
20,00	30,00	40,00	50,00	60,00	22,80	23,45	8,00	12,60	16,80	21,20	25,60
20,00	30,00	40,00	50,00	60,00	22,20	22,80	10,70	17,10	22,40	28,30	34,20
22,00	33,00	44,00	55,00	66,00	25,90	26,90	6,90	10,90	15,00	19,10	23,10
22,00	33,00	44,00	55,00	66,00	24,85	25,50	8,70	14,20	18,50	23,40	28,30
22,00	33,00	44,00	55,00	66,00	24,20	24,60	11,70	18,35	24,50	30,90	37,30
24,00	36,00	48,00	60,00	72,00	28,00	29,00	6,20	10,00	14,00	17,90	21,90
24,00	36,00	48,00	60,00	72,00	26,85	27,50	9,60	15,50	20,20	25,10	30,00
24,00	36,00	48,00	60,00	72,00	26,20	26,80	12,90	20,00	26,70	33,60	40,50



INFORMACIÓN TÉCNICA PARA INSTALACIÓN DE INSERTOS DIN 8140

TECHNICAL DATA SHEET FOR THE INSTALLATION OF WIRE THREAD INSERTS DIN8140
 INFORMATION TECHNIQUE POUR L'INSTALLATION DES FILETS RAPPORTÉS DIN 8140

D Ø x P (")	TALARADO / DRILLING / PREÇAGE						ROSCADO / THREADING / FILETAGE		
	C	LONGITUD (S) / LENGTH (S) / LONGEUR (S)					B	A	
UNC	mm	1,0 x Ø	1,5 x Ø	2,0 x Ø	2,5 x Ø	3,0 x Ø	mm	mín.	máx.
Nr. 2 x 56	2,40	4,80	5,90	7,00	8,10	9,20	2,84	2,29	2,44
Nr. 4 x 40	3,00	6,30	7,70	9,20	10,60	12,10	3,67	3,00	3,10
Nr. 5 x 40	3,40	6,60	8,20	9,80	11,10	13,00	4,00	3,33	3,48
Nr. 6 x 32	3,70	7,70	9,50	11,20	13,20	14,70	4,54	3,68	3,81
Nr. 8 x 32	4,40	8,40	10,50	12,50	14,70	16,80	5,11	4,34	4,45
Nr. 10 x 24	5,10	5,20	12,30	14,70	17,20	19,50	6,20	5,05	5,21
Nr. 12 x 24	5,70	5,80	13,30	16,10	18,80	21,60	6,86	5,72	5,84
1/4 x 20	6,70	6,70	15,70	18,90	22,10	25,40	8,00	6,63	6,86
5/16 x 18	8,30	8,30	19,20	23,20	27,10	31,00	9,77	8,26	8,48
3/8 x 16	9,90	9,90	21,60	26,40	31,10	35,80	11,59	9,88	10,11
7/16 x 14	11,60	11,60	25,00	30,50	36,10	41,60	13,47	11,51	11,76
1/2 x 13	13,00	13,00	28,40	34,70	41,10	47,40	15,23	13,13	13,39
9/16 x 12	14,80	14,80	30,80	37,90	45,00	52,20	17,04	14,76	15,01
5/8 x 11	16,50	16,50	35,00	43,00	50,90	58,90	18,87	16,38	16,66
3/4 x 10	19,75	19,75	39,80	49,30	58,80	68,50	22,35	19,61	19,89
7/8 x 9	23,00	23,00	46,40	57,60	68,70	79,70	25,89	22,83	23,16
1 x 8	26,25	26,25	51,20	63,90	76,60	89,30	29,52	26,09	26,47
1.1/8 x 7	29,50	29,50	58,10	72,40	86,70	101,00	33,29	29,36	29,74
1.1/4 x 7	33,00	33,00	62,80	78,70	94,70	110,60	36,46	32,54	32,92
1.3/8 x 6	36,00	36,00	69,20	86,70	104,50	121,50	40,42	35,84	36,35
1.1/2 x 6	39,50	39,50	74,00	93,00	112,50	131,10	43,60	39,01	39,52

UNF	mm	1,0 x Ø	1,5 x Ø	2,0 x Ø	2,5 x Ø	3,0 x Ø	mm	mín.	máx.
Nr. 4 x 40	3,00	5,600	6,655	8,500	9,900	11,200	3,53	2,972	3,048
Nr. 6 x 32	3,70	5,900	8,103	10,400	12,200	13,900	4,33	3,658	3,759
Nr. 8 x 36	4,40	8,000	9,423	12,100	14,300	16,400	5,08	4,318	4,420
Nr. 10 x 32	5,10	9,000	10,820	13,800	16,300	18,600	5,86	5,004	5,105
1/4 x 28	6,60	11,500	13,614	17,800	21,000	24,300	7,53	6,553	6,706
5/16 x 24	8,20	13,000	16,662	21,000	24,900	28,800	9,31	8,179	8,331
3/8 x 24	9,80	14,600	19,050	24,200	28,900	33,600	10,90	9,754	9,906
7/16 x 20	11,50	17,300	22,377	28,400	34,000	39,500	12,76	11,405	11,582
1/2 x 20	13,00	18,900	24,765	31,600	38,000	44,300	14,35	12,979	13,157
9/16 x 18	14,80	21,600	27,762	35,900	43,000	50,200	16,12	14,605	14,783
5/8 x 18	16,25	23,200	30,150	39,100	47,000	55,000	17,70	16,180	16,358
3/4 x 16	19,50	26,400	35,712	45,400	55,000	64,600	21,11	19,406	19,583
7/8 x 14	22,75	30,500	41,504	52,800	63,900	74,900	24,58	22,606	22,835
1 x 12	26,00	34,700	47,625	60,100	72,800	85,500	28,15	25,857	26,111
1.1/8 x 12	29,00	37,900	52,375	66,500	80,800	95,100	31,33	29,032	29,312
1.1/4 x 12	32,50	41,100	57,150	72,800	88,800	104,700	34,50	32,207	32,487
1.3/8 x 12	35,50	44,200	61,925	79,200	96,550	114,000	37,68	35,382	35,662
1.1/2 x 12	38,50	47,400	66,675	85,500	104,550	123,600	40,85	38,557	38,837

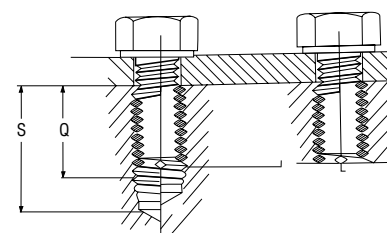
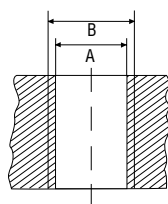
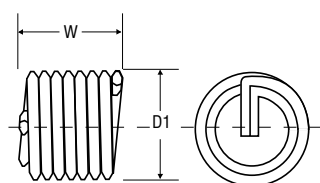
- C** Diámetro de broca previa / Recommended drill diameter / Perçage avant trou
- S** Longitud de taladrado / Drilling Length / Longueur perçage
- B** Ø mayor de rosca / Maximum diameter of thread / Diametre maximum du filet
- A** Ø menor de rosca / Minimum diameter of thread / Diametre minimum du filet
- Q** Longitud nominal / Nominal Length / Longueur nominale
- d1** exterior del casquillo / External Ø of wire insert / Diametre extérieur di filet rapporté
- W** N° de hilos / N° of coils / Nombre de spires

INFORMACIÓN TÉCNICA INSERTOS DE ROSCADO

WIRE THREAD INSERTS TECHNICAL INFORMATION • INFORMATION TECHNIQUE FILETS RAPPORTÉS

ROSCADO / THREADING / FILETAGE					INSERTO / INSERTS / FILETS RAPPORTÉS							
LONGITUD ÚTIL (Q) / LENGTH (Q) / LONGEUR (Q)					D1		Nº DE HILOS (W) / Nº OF COILS (W) / LONGEUR (W)					
1,0 x Ø	1,5 x Ø	2,0 x Ø	2,5 x Ø	3,0 x Ø	mín.	máx.	1,0 x Ø	1,5 x Ø	2,0 x Ø	2,5 x Ø	3,0 x Ø	
2,20	3,30	4,40	5,50	6,60	2,69	2,90	3,00	5,25	7,40	9,60	11,80	
2,90	4,27	5,80	7,20	8,70	3,66	4,04	2,80	4,70	6,80	8,80	10,80	
3,20	4,80	6,40	7,90	9,60	3,99	4,39	3,30	5,50	7,80	10,00	10,30	
3,50	5,26	7,00	8,80	10,50	4,52	4,90	2,80	4,70	6,70	8,70	10,70	
4,20	6,25	8,40	10,50	12,60	5,21	5,59	3,50	6,00	8,30	10,70	13,10	
4,80	7,24	9,60	12,10	14,40	6,20	6,58	2,90	5,00	7,10	9,20	11,30	
5,50	8,23	11,00	13,70	16,50	6,86	7,24	3,50	5,90	8,30	10,70	13,10	
6,40	9,53	12,70	15,90	19,20	7,87	8,38	3,40	5,70	8,00	10,30	12,60	
7,90	11,91	15,90	19,80	23,70	9,65	10,16	4,00	6,60	9,30	11,90	14,50	
9,50	14,27	19,10	23,80	28,50	11,48	11,99	4,40	7,20	10,10	12,90	15,70	
11,10	16,66	22,20	27,80	33,30	13,36	14,00	4,50	7,40	10,30	13,10	15,90	
12,70	19,05	25,40	31,80	38,10	15,16	15,80	4,80	7,90	10,90	13,90	16,90	
14,30	21,44	28,60	35,70	42,90	16,99	17,63	5,10	8,30	11,50	14,70	17,90	
15,90	23,80	31,80	39,70	47,70	18,85	19,48	5,30	9,30	11,80	15,00	18,20	
19,10	28,58	38,10	47,60	57,30	22,38	23,01	5,90	9,40	13,00	16,60	20,20	
22,20	33,32	44,50	55,60	66,60	25,78	26,16	6,30	10,10	13,70	17,40	21,10	
25,40	38,10	50,80	63,50	76,20	29,34	29,72	6,40	10,30	14,00	17,80	21,60	
28,60	42,85	57,20	71,50	85,80	33,71	34,11	6,30	9,90	13,80	17,60	21,40	
31,80	47,63	63,50	79,50	95,40	37,01	37,39	7,10	11,25	15,40	19,60	23,70	
34,90	52,37	69,90	87,25	104,70	40,89	41,40	6,60	10,50	14,40	18,30	22,30	
38,10	57,15	76,20	95,25	114,30	44,09	44,60	7,40	11,50	15,90	20,10	24,30	

1,0 x Ø	1,5 x Ø	2,0 x Ø	2,5 x Ø	3,0 x Ø	mín.	máx.	1,0 x Ø	1,5 x Ø	2,0 x Ø	2,5 x Ø	3,0 x Ø
2,800	4,267	5,700	7,100	8,400	3,734	4,115	3,400	5,60	7,900	10,300	27,700
3,500	5,258	7,000	8,800	10,500	4,394	4,902	3,600	6,00	8,400	10,800	13,200
4,200	6,248	8,300	10,500	12,600	5,182	5,690	4,000	6,60	9,100	11,700	14,300
4,800	7,239	9,600	12,100	14,400	5,994	6,502	4,100	6,80	9,500	12,100	14,700
6,400	9,525	12,700	15,900	19,200	7,772	8,280	5,000	8,10	11,300	14,400	17,500
7,900	11,913	15,900	19,800	23,700	9,652	10,160	5,500	8,90	12,200	15,600	19,000
9,500	14,275	19,100	23,800	28,500	11,379	11,887	6,900	10,90	14,900	19,000	23,100
11,100	16,662	22,200	27,800	33,300	13,310	13,945	6,600	10,60	14,500	18,400	22,300
12,700	19,050	25,400	31,800	38,100	15,037	15,672	7,800	12,30	16,800	21,300	25,800
14,300	21,438	28,600	35,700	42,900	16,916	17,551	7,900	12,50	17,100	21,600	26,200
15,900	23,800	31,800	39,700	47,700	18,618	19,253	8,900	14,10	19,100	24,300	29,500
19,100	28,575	38,100	47,700	57,300	22,250	22,885	9,700	15,10	20,600	26,000	31,400
22,200	33,325	44,500	55,600	66,600	24,765	25,019	9,900	16,20	21,000	26,600	32,200
25,400	38,100	50,800	63,500	76,200	28,194	28,575	9,700	15,70	20,600	26,100	31,400
28,600	42,850	57,200	71,500	85,800	31,750	32,106	10,100	17,50	24,400	31,500	38,600
31,800	47,625	63,500	79,500	95,400	35,001	35,408	12,400	19,60	26,100	33,000	39,900
34,900	52,375	69,900	87,250	104,700	38,202	38,608	13,800	21,60	28,900	36,400	43,900
38,100	57,150	76,200	95,250	114,300	41,402	41,808	15,200	23,75	31,600	39,800	48,000



CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

INFORMACIÓN TÉCNICA PARA INSTALACIÓN DE INSERTOS DIN 8140

TECHNICAL DATA SHEET FOR THE INSTALLATION OF WIRE THREAD INSERTS DIN8140
 INFORMATION TECHNIQUE POUR L'INSTALLATION DES FILETS RAPPORTÉS DIN 8140

D Ø x P (")	TALARADO / DRILLING / PREÇAGE						ROSCADO / THREADING / FILETAGE		
	C	LONGITUD (S) / LENGTH (S) / LONGEUR (S)					B	A	
BSW	mm	1,0 x Ø	1,5 x Ø	2,0 x Ø	2,5 x Ø	3,0 x Ø	mm	mín.	máx.
1/8 x 40	3,40	6,600	8,204	9,800	11,100	13,000	3,93	3,277	3,429
3/16 x 24	5,10	9,900	12,192	14,700	17,000	19,500	6,01	4,978	5,105
1/4 x 20	6,70	12,600	15,240	18,900	26,100	25,400	7,80	6,629	6,782
5/16 x 18	8,30	15,200	18,237	23,200	27,100	31,000	9,60	8,331	8,484
3/8 x 16	9,90	16,800	21,438	26,400	31,100	35,800	11,40	9,906	10,109
7/16 x 14	11,60	19,400	24,816	30,500	36,100	41,600	13,20	11,506	11,760
1/2 x 12	13,00	22,000	28,575	34,700	41,100	47,400	15,20	13,081	13,335
9/16 x 12	14,80	23,600	30,963	37,900	45,000	52,200	16,80	14,681	14,935
5/8 x 11	16,70	27,100	34,214	43,000	50,900	58,900	18,60	16,586	16,840
3/4 x 10	20,00	30,300	40,005	49,300	58,800	68,500	22,00	19,837	20,091
7/8 x 9	23,00	35,300	46,025	57,600	68,700	79,700	25,50	23,012	23,266
1 x 8	26,50	38,500	52,375	63,900	76,600	89,300	29,10	26,187	26,518

BSF	mm	1,0 x Ø	1,5 x Ø	2,0 x Ø	2,5 x Ø	3,0 x Ø	mm	mín.	máx.
3/16 x 32	5,00	8,331	11,303	13,081	15,469	17,856	5,71	4,877	5,029
1/4 x 26	6,60	10,744	13,919	17,094	20,269	23,444	7,50	6,528	6,706
5/16 x 22	8,30	13,132	17,094	21,057	25,044	29,007	9,30	8,204	8,382
3/8 x 20	9,90	15,240	19,990	24,765	29,515	34,290	11,00	9,779	9,957
7/16 x 18	11,60	17,450	23,012	28,550	34,112	39,675	12,80	11,430	11,633
1/2 x 16	13,00	19,837	26,187	32,537	38,887	45,237	14,60	13,030	13,259
9/16 x 16	14,80	21,438	28,575	35,712	42,850	50,013	16,20	14,656	14,884
5/8 x 14	16,40	24,028	31,979	39,903	47,854	55,778	18,00	16,256	16,485
3/4 x 12	19,50	28,575	38,100	47,625	57,150	66,675	21,50	19,431	19,685
7/8 x 11	22,70	32,614	43,739	54,839	65,938	77,064	24,90	22,606	22,860
1 x 10	26,50	36,830	49,530	62,230	74,930	87,630	28,40	26,187	26,518

BSP	mm	1,0 x Ø	1,5 x Ø	2,0 x Ø	2,5 x Ø	3,0 x Ø	mm	mín.	máx.
1/8 x 28	10,00	7,264	8,640	10,439	11,100	13,614	10,82	9,900	10,160
1/4 x 19	13,60	12,370	15,540	18,720	21,895	25,070	14,74	13,460	13,720
3/8 x 19	17,10	15,545	20,290	25,070	29,820	34,595	18,25	17,000	17,270
1/2 x 14	21,50	20,853	27,200	33,553	39,903	46,253	23,09	21,330	21,600
5/8 x 14	23,40	24,028	31,950	39,903	47,828	55,778	25,05	23,240	23,550
3/4 x 14	27,00	27,203	36,720	46,253	55,778	65,303	28,59	26,750	27,070
7/8 x 14	30,60	30,378	41,500	52,603	63,729	74,828	32,35	30,480	30,810
1 x 11	33,70	35,789	49,490	61,189	73,889	86,589	35,96	33,530	33,900

- C** Diámetro de broca previa / Recommended drill diameter / Perçage avant trou
- S** Longitud de taladrado / Drilling Length / Longueur perçage
- B** Ø mayor de rosca / Maximum diameter of thread / Diametre maximum du filet
- A** Ø menor de rosca / Minimum diameter of thread / Diametre minimum du filet
- Q** Longitud nominal / Nominal Length / Longueur nominale
- d1** exterior del casquillo / External Ø of wire insert / Diametre extérieur di filet rapportés
- W** N° de hilos / N° of coils / Nombre de spires

RESISTENCIA DE LOS INSERTOS ROSCADOS

RESISTENCES OF WIRE TRHEAD INSERTS • RÉSISTENCES DES FILETS RAPPORTÉS

MATERIAL MATERIAL / MATÉRIEL	TEMP. MÁXIMA MAX. TEMPERATURE / TEMPERATURE MAX.	RESISTENCIA MÍNIMA A LA TRACCIÓN MIN. TENSILE STRENGTH / RÉSISTENCE MIN. À LA TRACTION
X10 Cr Ni 18-8	425° C (peak) / 315° C (cont.)	1400 N/mm ²

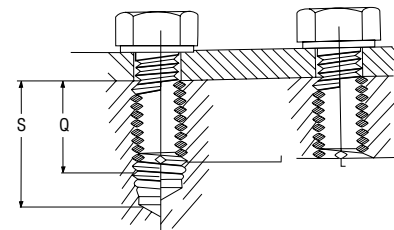
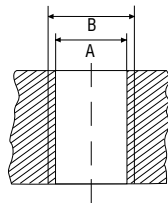
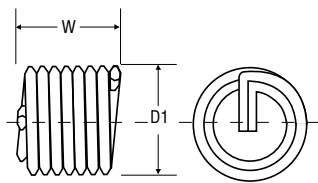
INFORMACIÓN TÉCNICA INSERTOS DE ROSCADO

WIRE THREAD INSERTS TECHNICAL INFORMATION • INFORMATION TECHNIQUE FILETS RAPPORTÉS

ROSCADO / THREADING / FILETAGE					INSERTO / INSERTS / FILETS RAPPORTÉS						
LONGITUD ÚTIL (Q) / LENGTH (Q) / LONGEUR (Q)					D1		Nº DE HILOS (W) / Nº OF COILS (W) / LONGEUR (W)				
1,0 x Ø	1,5 x Ø	2,0 x Ø	2,5 x Ø	3,0 x Ø	mín.	máx.	1,0 x Ø	1,5 x Ø	2,0 x Ø	2,5 x Ø	3,0 x Ø
3,200	4,801	6,400	7,900	9,600	3,988	4,394	3,400	7,90	7,900	10,300	12,500
4,800	7,112	9,600	11,900	14,400	6,096	6,502	2,900	5,10	7,200	9,300	11,500
6,400	9,525	12,700	15,900	19,200	7,899	8,407	3,400	5,90	8,100	10,500	12,900
7,900	11,913	15,900	19,800	23,700	9,703	10,185	4,100	6,70	9,400	12,000	14,600
9,500	14,275	19,100	23,800	28,500	11,506	11,989	4,500	7,30	10,200	13,000	15,800
11,100	16,662	22,200	27,800	33,300	13,487	13,995	4,600	7,50	10,400	13,300	16,200
12,700	19,050	25,400	31,800	38,100	15,392	16,002	4,400	7,30	10,100	13,000	15,900
14,300	21,438	28,600	35,700	42,900	16,993	17,628	5,200	8,40	11,600	14,800	18,000
15,900	23,800	31,800	39,700	47,700	18,898	19,482	5,400	8,70	11,900	15,300	18,700
19,100	28,575	38,100	47,600	57,300	22,403	22,987	6,000	9,70	13,200	16,800	20,400
22,200	33,325	44,500	55,600	66,600	26,010	26,695	6,400	10,10	13,900	17,700	21,400
25,400	38,100	50,800	63,500	76,200	27,686	30,404	6,500	10,30	14,100	17,900	21,700

1,0 x Ø	1,5 x Ø	2,0 x Ø	2,5 x Ø	3,0 x Ø	mín.	máx.	1,0 x Ø	1,5 x Ø	2,0 x Ø	2,5 x Ø	3,0 x Ø
4,750	7,112	9,525	11,913	14,275	5,994	6,401	4,100	6,80	9,400	12,100	-
6,350	9,525	12,700	15,875	19,050	7,899	8,407	4,600	7,60	10,400	13,400	-
7,925	11,913	15,875	19,837	23,800	9,804	10,312	5,000	8,10	11,200	14,300	-
9,525	14,275	19,050	23,800	28,575	11,608	12,090	5,600	9,00	12,400	15,800	-
11,100	16,662	22,225	27,788	33,325	13,589	14,097	5,900	9,50	13,100	16,600	-
12,700	19,050	25,400	31,750	38,100	15,494	16,002	6,100	9,70	13,300	16,900	-
14,275	21,438	28,575	35,712	42,850	17,196	17,780	7,000	11,10	15,100	19,300	-
15,875	23,800	31,750	39,675	47,625	19,101	19,685	6,800	10,80	14,800	18,700	-
19,050	28,575	38,100	47,625	57,150	22,911	23,495	7,000	11,10	15,200	19,300	-
22,225	33,325	44,450	55,550	66,675	26,492	27,305	7,600	11,90	16,400	20,800	-
25,400	38,100	50,800	63,500	76,200	30,201	30,988	7,900	12,50	17,100	21,600	-

1,0 x Ø	1,5 x Ø	2,0 x Ø	2,5 x Ø	3,0 x Ø	mín.	máx.	1,0 x Ø	1,5 x Ø	2,0 x Ø	2,5 x Ø	3,0 x Ø
3,175	4,760	6,350	7,925	9,525	11,100	11,400	1,90	3,80	5,10	6,70	-
6,350	9,500	12,700	15,875	19,050	15,050	15,350	3,10	5,50	7,40	9,60	-
9,525	14,300	19,050	23,800	28,575	18,550	18,850	5,30	8,75	11,80	15,00	-
12,700	19,100	25,400	31,750	38,100	23,400	23,700	5,20	8,60	11,60	14,80	-
15,875	23,800	31,750	39,675	47,625	25,350	25,650	6,80	11,00	14,80	18,80	-
19,050	28,600	38,100	47,625	57,150	28,900	29,200	8,40	13,50	18,10	22,90	-
22,225	33,300	44,450	55,550	66,675	32,750	33,150	10,00	15,80	21,30	-	-
25,400	38,100	50,800	63,500	76,200	36,400	36,800	8,90	14,10	19,00	-	-



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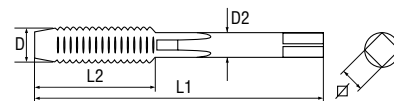
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M MACHOS STI (INTERMEDIO)
STI TAPS (SECOND LEAD)
TARAUDS STI



HSS-G **FORM D** **TOL ISO1 4H**



D Ø x P (mm)	D (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
M 2,00 x 0,40	2,5	44,5	9,5	2,8	2,24	1C03001	16,18
M 2,50 x 0,45	3,1	48,0	11,0	3,15	2,50	1C03003	16,18
M 3,00 x 0,50	3,6	53,0	13,0	4,0	3,15	1C03005	13,91
M 3,50 x 0,60	4,3	53,0	13,0	4,5	3,55	1C03006	14,11
M 4,00 x 0,70	4,9	58,0	16,0	5,0	4,00	1C03007	13,91
M 5,00 x 0,80	6,0	66,0	19,0	6,3	5,00	1C03008	13,91
M 6,00 x 1,00	7,3	72,0	22,0	8,0	6,30	1C03009	13,91
M 7,00 x 1,00	8,3	72,0	22,0	9,0	7,10	1C03010	17,59
M 8,00 x 1,25	9,6	80,0	24,0	10,0	8,00	1C03011	17,34
M 8,00 x 1,00	9,3	80,0	24,0	10,0	8,00	1C03012	17,59
M 9,00 x 1,25	10,6	85,0	25,0	8,0	6,30	1C03013	21,56
M 10,00 x 1,50	11,9	89,0	29,0	9,0	7,10	1C03015	21,24
M 10,00 x 1,25	11,6	85,0	25,0	8,0	6,30	1C03016	21,56
M 10,00 x 1,00	11,3	85,0	25,0	8,0	6,30	1C03017	21,56
M 11,00 x 1,50	12,9	89,0	29,0	9,0	7,10	1C03018	24,39
M 12,00 x 1,75	14,3	95,0	30,0	11,2	9,00	1C03020	24,05
M 12,00 x 1,50	14,0	95,0	30,0	11,2	9,00	1C03021	29,79
M 12,00 x 1,25	13,6	95,0	30,0	11,2	9,00	1C03022	29,79
M 12,00 x 1,00	13,3	95,0	30,0	11,2	9,00	1C03023	29,79
M 14,00 x 2,00	16,6	102,0	32,0	12,5	10,00	1C03027	33,39
M 14,00 x 1,50	16,0	102,0	32,0	12,5	10,00	1C03028	33,39
M 14,00 x 1,25	15,6	102,0	32,0	12,5	10,00	1C03029	33,39
M 14,00 x 1,00	15,3	102,0	32,0	12,5	10,00	1C03030	33,39
M 16,00 x 2,00	18,6	112,0	37,0	14,0	11,20	1C03033	39,97
M 16,00 x 1,50	18,0	104,0	29,0	14,0	11,20	1C03034	40,55
M 18,00 x 2,50	21,3	118,0	38,0	16,0	12,50	1C03035	51,35
M 18,00 x 2,00	20,6	104,0	29,0	14,0	11,20	1C03036	51,35
M 18,00 x 1,50	20,0	104,0	29,0	14,0	11,20	1C03037	51,35
M 20,00 x 2,50	23,3	118,0	38,0	16,0	12,50	1C03038	56,47
M 20,00 x 2,00	22,6	113,0	33,0	16,0	12,50	1C03039	56,47
M 20,00 x 1,50	22,0	113,0	33,0	16,0	12,50	1C03040	56,47
M 22,00 x 2,50	25,3	130,0	45,0	18,0	14,00	1C03041	64,95
M 22,00 x 2,00	24,6	120,0	35,0	18,0	14,00	1C03042	64,95
M 22,00 x 1,50	24,0	120,0	35,0	18,0	14,00	1C03043	64,95
M 24,00 x 3,00	27,9	138,0	48,0	20,0	16,00	1C03044	82,14
M 24,00 x 2,00	26,6	127,0	37,0	20,0	16,00	1C03045	82,14
M 24,00 x 1,50	26,0	120,0	35,0	18,0	14,00	1C03046	82,14

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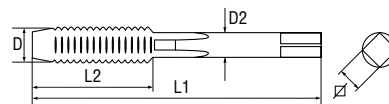
DISPLAYS
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MACHOS PARA INSERTOS REPARADORES

TAPS FOR WIRE THREAD INSERTS • TARAUDS POUR FILETS RAPPORTÉS

M MACHOS STI, JUEGO 2 PIEZAS

STI-TAPS, SET OF 2 PCS
TARAUDS STI - JEU 2 PIÈCES



HSS-G

FORM
D

TOL ISO1
4H

D Ø x P (mm)	D (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
M 26,00 x 1,50	28,0	127,0	37,0	20,0	16,00	1C03049	240,58
M 27,00 x 3,00	30,9	151,0	51,0	22,4	18,00	1C03050	240,58
M 27,00 x 2,00	29,6	127,0	37,0	20,0	16,00	1C03051	240,58
M 27,00 x 1,50	29,0	127,0	37,0	20,0	16,00	1C03052	240,58
M 28,00 x 1,50	30,0	127,0	37,0	20,0	16,00	1C03053	240,58
M 30,00 x 3,50	34,6	162,0	57,0	25,0	20,00	1C03054	319,99
M 30,00 x 2,00	32,6	137,0	37,0	22,4	18,00	1C03055	319,99
M 30,00 x 1,50	32,0	137,0	37,0	22,4	18,00	1C03056	319,99
M 33,00 x 3,50	37,6	162,0	57,0	25,0	20,00	1C03057	319,99
M 33,00 x 2,00	35,6	144,0	37,0	25,0	20,00	1C03058	319,99
M 36,00 x 4,00	41,2	170,0	60,0	28,0	22,40	1C03060	355,03
M 36,00 x 3,00	39,9	170,0	60,0	28,0	22,40	1C03061	355,03
M 36,00 x 2,00	38,6	150,0	39,0	28,0	22,40	1C03062	355,03
M 36,00 x 1,50	38,0	150,0	39,0	28,0	22,40	1C03063	355,03

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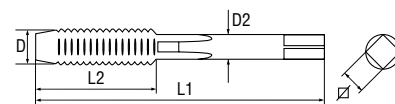
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UNC MACHOS STI (INTERMEDIO)

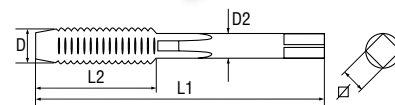
STI-TAPS (SECOND LEAD)
TARAUDS STI



	D Ø x P (")	D (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
UNC/NC								
Nr.	2 x 56	2,8	48,0	10,0	3,15	2,50	1C03100	22,42
Nr.	4 x 40	3,7	53,0	13,0	4,00	3,15	1C03101	22,42
Nr.	5 x 40	4,0	53,0	13,0	4,00	3,15	1C03102	22,42
Nr.	6 x 32	4,5	58,0	16,0	5,00	4,00	1C03103	22,42
Nr.	8 x 32	5,2	62,0	17,0	5,60	4,50	1C03104	22,42
Nr.	10 x 24	6,2	66,0	19,0	6,30	5,00	1C03105	22,42
Nr.	12 x 24	6,9	66,0	19,0	7,10	5,60	1C03106	22,42
	1/4 x 20	8,0	72,0	22,0	8,00	6,30	1C03107	14,68
	5/16 x 18	9,8	80,0	24,0	10,00	8,00	1C03108	16,16
	3/8 x 16	11,6	85,0	25,0	8,00	6,30	1C03109	16,83
	7/16 x 14	13,5	95,0	30,0	11,20	9,00	1C03110	22,42
	1/2 x 13	15,2	102,0	32,0	12,50	10,00	1C03111	25,37
	9/16 x 12	17,0	112,0	37,0	14,00	11,20	1C03112	42,17
	5/8 x 11	18,9	112,0	37,0	14,00	11,20	1C03113	52,07
	3/4 x 10	22,4	118,0	38,0	16,00	12,50	1C03114	63,27
	7/8 x 9	25,9	130,0	45,0	18,00	14,00	1C03115	73,83
	1 x 8	29,5	138,0	48,0	20,00	16,00	1C03116	73,83

UNC MACHOS STI, JUEGO 2 PIEZAS

STI-TAPS, SET OF 2 PCS
TARAUDS STI - JEU 2 PIÉCES



	D Ø x P (")	D (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
UNC/NC								
	1.1/8 x 7	33,3	151,0	51,0	22,4	18,00	1C03117	223,59
	1.1/4 x 7	36,5	162,0	57,0	25,0	20,00	1C03118	268,27
	1.3/8 x 6	40,4	170,0	60,0	28,0	22,40	1C03119	335,36
	1.1/2 x 6	43,6	187,0	67,0	31,5	25,00	1C03120	434,66

MACHOS PARA INSERTOS REPARADORES

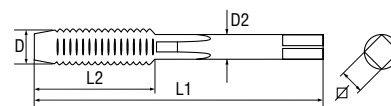
TAPS FOR WIRE THREAD INSERTS • TARAUDS POUR FILETS RAPPORTÉS

UNF MACHOS STI (INTERMEDIO)

STI-TAPS (SECOND LEAD)
TARAUDS STI



HSS-G FORM D TOL 3B



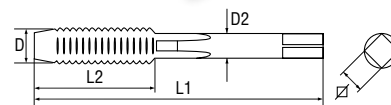
D Ø x P (")	D (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
UNF/NF							
Nr. 4 x 48	3,5	53,0	13,0	4,0	3,15	1C03151	22,42
Nr. 6 x 40	4,3	53,0	13,0	4,5	3,55	1C03152	22,42
Nr. 8 x 36	5,1	62,0	17,0	5,6	4,50	1C03153	22,42
Nr. 10 x 32	5,9	66,0	19,0	6,3	5,00	1C03154	22,42
1/4 x 28	7,5	69,0	19,0	8,0	6,30	1C03155	14,68
5/16 x 24	9,3	76,0	20,0	10,0	8,00	1C03156	16,16
3/8 x 24	10,9	82,0	22,0	8,0	6,30	1C03157	16,83
7/16 x 20	12,8	84,0	24,0	9,0	7,10	1C03158	22,42
1/2 x 20	14,4	90,0	25,0	11,2	9,00	1C03159	23,04
9/16 x 18	16,1	104,0	29,0	12,5	10,00	1C03160	42,17
5/8 x 18	17,7	104,0	29,0	14,0	11,20	1C03161	52,07
3/4 x 16	21,1	104,0	29,0	14,0	11,20	1C03162	63,27
7/8 x 14	24,6	120,0	35,0	18,0	14,00	1C03163	73,43
1 x 12	28,2	127,0	37,0	20,0	16,00	1C03164	73,43
1 x 14	27,8	127,0	37,0	20,0	16,00	1C03165	73,43

UNF MACHOS STI, JUEGO 2 PIEZAS

STI-TAPS, SET OF 2 PCS
TARAUDS STI - JEU 2 PIÈCES



HSS-G FORM D TOL 3B



D Ø x P (")	D (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
UNF/NF							
1.1/8 x 12	31,3	137,0	37,0	22,4	18,00	1C03166	223,59
1.1/4 x 12	34,5	144,0	39,0	25,0	20,00	1C03167	268,27
1.3/8 x 12	37,7	150,0	39,0	28,0	22,40	1C03168	335,36
1.1/2 x 12	40,9	150,0	39,0	28,0	22,40	1C03169	434,66

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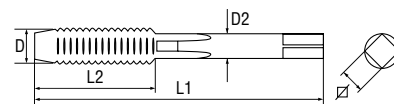
DISPLAYS
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G(BSP) MACHOS STI (INTERMEDIO)

STI-TAPS (SECOND LEAD)
TARAUDS STI



HSS-G **FORM D** **TOL ISO1 4H**



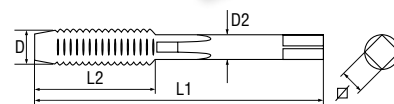
D Ø x P (")	D (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
1/8 x 28	10,8	59,0	15,0	8,00	6,30	1C03301	19,77
1/4 x 19	14,7	67,0	19,0	11,20	9,00	1C03302	22,42
3/8 x 19	18,3	75,0	21,0	14,00	11,20	1C03303	29,49
1/2 x 14	23,1	87,0	26,0	16,00	12,50	1C03304	47,79
5/8 x 14	25,0	91,0	26,0	18,00	14,00	1C03305	70,23
3/4 x 14	28,6	96,0	28,0	20,00	16,00	1C03306	70,23
1 x 11	36,0	109,0	33,0	25,00	20,00	1C03307	109,74

G(BSP) MACHOS STI, JUEGO 2 PIEZAS

STI-TAPS, SET OF 2 PCS
TARAUDS STI - JEU 2 PIÉCES



HSS-G **FORM D** **TOL ISO1 4H**



D Ø x P (")	D (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
1/8 x 28	10,0	59,0	15,0	8,0	6,30	1C03311	34,91
1/4 x 19	14,7	67,0	19,0	11,2	9,00	1C03312	39,63
3/8 x 19	18,3	75,0	21,0	14,0	11,20	1C03313	52,12
1/2 x 14	23,1	87,0	26,0	16,0	12,50	1C03314	84,43
5/8 x 14	25,1	91,0	26,0	18,0	14,00	1C03315	124,05
3/4 x 14	28,6	96,0	28,0	20,0	16,00	1C03316	124,05
7/8 x 14	32,4	102,0	29,0	22,4	18,00	1C03318	193,85
1 x 11	36,0	109,0	33,0	25,0	20,00	1C03317	193,85

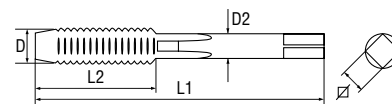
MACHOS PARA INSERTOS REPARADORES

TAPS FOR WIRE THREAD INSERTS • TARAUDS POUR FILETS RAPPORTÉS

BSW

MACHOS STI (INTERMEDIO)

STI-TAPS (SECOND LEAD)
TARAUDS STI



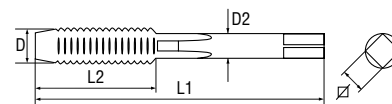
HSS-G FORM D TOL ISO1 4H

D Ø x P (")	D (mm)	L1 (mm)	L2 (mm)	D2 (mm)	Ø (mm)	Cod.	€/Unid.
1/8 x 40	3,9	53,0	13,0	4,0	3,15	1C03201	14,68
3/16 x 24	6,0	56,0	19,0	6,3	5,00	1C03202	14,68
1/4 x 20	7,8	72,0	22,0	8,0	6,30	1C03203	14,68
5/16 x 18	9,6	80,0	24,0	10,0	8,00	1C03204	16,16
3/8 x 16	11,4	85,0	25,0	8,0	6,30	1C03205	16,83
7/16 x 14	13,2	95,0	30,0	11,2	9,00	1C03206	22,42
1/2 x 12	15,2	102,0	32,0	12,5	10,00	1C03207	25,37
9/16 x 12	16,8	102,0	32,0	12,5	10,00	1C03208	42,17
5/8 x 11	18,6	112,0	37,0	14,0	11,20	1C03209	52,07
11/16 x 11	20,2	112,0	37,0	14,0	11,20	1C03210	63,27
3/4 x 10	22,0	118,0	38,0	16,0	12,50	1C03211	63,27
7/8 x 9	25,5	130,0	45,0	18,0	14,00	1C03212	73,43
1 x 8	29,1	138,0	48,0	20,0	16,00	1C03213	73,43

BSF

MACHOS STI (INTERMEDIO)

STI-TAPS (SECOND LEAD)
TARAUDS STI



HSS-G FORM D TOL ISO1 4H

D Ø x P (")	D (mm)	L1 (mm)	L2 (mm)	D2 (mm)	Ø (mm)	Cod.	€/Unid.
3/16 x 32	5,7	66,0	19,0	6,3	5,00	1C03251	14,68
1/4 x 26	7,5	72,0	22,0	8,0	6,30	1C03253	14,68
5/16 x 22	9,3	80,0	24,0	10,0	8,00	1C03255	16,16
3/8 x 20	11,0	85,0	25,0	8,0	6,30	1C03256	16,83
7/16 x 18	12,8	89,0	29,0	9,0	7,10	1C03257	22,42
1/2 x 16	14,6	95,0	30,0	11,2	9,00	1C03258	25,37
9/16 x 16	16,2	102,0	32,0	12,5	10,00	1C03259	42,17
5/8 x 14	18,0	112,0	37,0	14,0	11,20	1C03260	52,07
11/16 x 14	19,6	112,0	37,0	14,0	11,20	1C03261	63,27
3/4 x 12	21,5	118,0	38,0	16,0	12,50	1C03262	63,27
7/8 x 11	24,9	130,0	45,0	18,0	14,00	1C03264	73,43
1 x 10	28,4	138,0	48,0	20,0	16,00	1C03265	73,43

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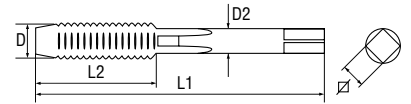
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BA MACHOS STI (INTERMEDIO)

STI-TAPS (SECOND LEAD)
TARAUDS STI



HSS-G **FORM D** **TOL ISO1 4H**



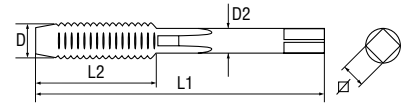
D Ø x P (mm)	D (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
BA 0	7,1	66,0	19,0	7,10	5,60	1C03321	14,68
BA 2	5,6	66,0	19,0	6,30	5,00	1C03323	14,68
BA 4	4,4	53,0	13,0	4,50	3,55	1C03325	14,68
BA 6	3,4	50,0	13,0	3,55	2,80	1C03327	14,68

BS. Brass MACHOS STI (INTERMEDIO)

STI-TAPS (SECOND LEAD)
TARAUDS STI



HSS-G **FORM D** **TOL ISO1 4H**



D Ø x P (")	D (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
1/4 x 26	7,5	69,0	19,0	8,00	6,30	1C03341	14,68
5/16 x 26	9,1	76,0	20,0	10,00	8,00	1C03342	16,16
3/8 x 26	10,7	82,0	22,0	8,00	6,30	1C03343	16,83
7/16 x 26	12,3	84,0	24,0	9,00	7,10	1C03344	22,42
1/2 x 26	13,9	90,0	25,0	11,20	9,00	1C03345	25,37

Consultar precio y plazo para kit / Request price and availability for kit / Consulter de prix et le disponibilité pour kit

MACHOS PARA INSERTOS REPARADORES

TAPS FOR WIRE THREAD INSERTS • TARAUDS POUR FILETS RAPPORTÉS

M MACHOS MÁQUINA STI (PASANTE)

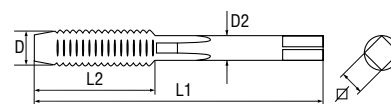
STI MACHINE TAPS (SPIRAL POINT)
TARAUDS MACHINE STI ENTRÉE GUN



HSS-CO 5%

FORM
B

TOL ISO1
4H



D Ø x P (mm)	D (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
M 3,00 x 0,50	3,6	53,0	13,0	4,0	3,15	1C03505	16,59
M 3,50 x 0,60	4,3	53,0	13,0	4,5	3,55	1C03506	16,59
M 4,00 x 0,70	4,9	58,0	16,0	5,0	4,00	1C03507	16,59
M 5,00 x 0,80	6,0	66,0	19,0	5,0	5,00	1C03508	16,59
M 6,00 x 1,00	7,3	72,0	22,0	8,0	6,40	1C03509	16,59
M 7,00 x 1,00	8,3	72,0	22,0	9,0	7,10	1C03510	20,78
M 8,00 x 1,25	9,5	80,0	24,0	10,0	8,00	1C03511	20,78
M 8,00 x 1,00	9,3	80,0	24,0	10,0	8,00	1C03512	20,78
M 10,00 x 1,50	11,9	89,0	29,0	9,0	7,10	1C03515	25,01
M 10,00 x 1,00	11,3	85,0	25,0	8,0	6,30	1C03517	25,01
M 12,00 x 1,75	14,3	95,0	30,0	11,2	9,00	1C03520	33,15
M 12,00 x 1,50	14,0	95,0	30,0	11,2	9,00	1C03521	34,24
M 12,00 x 1,25	13,6	95,0	30,0	11,2	9,00	1C03522	34,24
M 14,00 x 2,00	16,6	102,0	32,0	12,5	10,00	1C03527	45,80
M 14,00 x 1,50	16,0	102,0	32,0	12,5	10,00	1C03528	45,80
M 14,00 x 1,25	15,6	102,0	32,0	12,5	10,00	1C03529	45,80
M 16,00 x 2,00	18,6	112,0	37,0	14,0	11,20	1C03533	48,41

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

M MACHOS MÁQUINA STI (CIEGO)

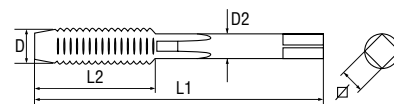
STI MACHINE TAPS (SPIRAL FLUTE)
TARAUDS MACHINE STI HÉLICOIDAL



HSS-CO 5%

FORM C/35°

TOL ISO1 4H



D Ø x P (mm)	D (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
M 3,00 x 0,50	3,6	53,0	13,0	4,0	3,15	1C03705	16,59
M 3,50 x 0,60	4,3	53,0	13,0	4,5	3,55	1C03706	16,59
M 4,00 x 0,70	4,9	58,0	16,0	5,0	4,00	1C03707	16,59
M 5,00 x 0,80	6,0	66,0	19,0	6,3	5,00	1C03708	16,59
M 6,00 x 1,00	7,3	72,0	22,0	8,0	6,40	1C03709	16,59
M 7,00 x 1,00	8,3	72,0	22,0	9,0	7,10	1C03710	20,78
M 8,00 x 1,25	9,5	80,0	24,0	10,0	8,00	1C03711	20,78
M 8,00 x 1,00	9,3	80,0	24,0	10,0	8,00	1C03712	20,78
M 10,00 x 1,50	11,9	89,0	29,0	9,0	7,10	1C03715	25,01
M 10,00 x 1,00	11,3	85,0	25,0	8,0	6,30	1C03717	25,01
M 12,00 x 1,75	14,3	95,0	30,0	11,2	9,00	1C03720	33,15
M 12,00 x 1,50	14,0	95,0	30,0	11,2	9,00	1C03721	34,24
M 12,00 x 1,25	13,6	95,0	30,0	11,2	9,00	1C03722	34,24
M 14,00 x 2,00	16,6	102,0	32,0	12,5	10,00	1C03727	45,80
M 14,00 x 1,50	16,0	102,0	32,0	12,5	10,00	1C03728	45,80
M 14,00 x 1,25	15,6	102,0	32,0	12,5	10,00	1C03729	45,80
M 16,00 x 2,00	18,6	112,0	37,0	14,0	11,20	1C03733	48,41

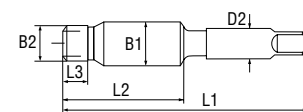
M MACHOS STI "SPARK PLUG" CON PUNTA PILOTO

STI-SPARK PLUG TAPS WITH PILOT NOSE
TARAUDS STI ÉTAGÉS



HSS-G

TOL ISO1 4H



D Ø x P (mm)	B1 (mm)	B2 (mm)	L3 (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
M 6,00 x 1,00	7,3	6	7	28	70	8	6,3	1C03630	26,95
M 8,00 x 1,25	9,6	8	9	32	75	8	6,3	1C03631	26,95
M 10,00 x 1,50	11,9	10	9	37	80	9	7,1	1C03632	33,87
M 10,00 x 1,00	11,3	10	8	30	74	8	6,3	1C03633	33,87
M 12,00 x 1,25	13,6	12	9	32	75	9	7,1	1C03634	48,77
M 14,00 x 1,25	15,6	14	10	45	90	12	9,2	1C03635	54,56
M 18,00 x 1,50	20,0	18	10	47	116	16	12,5	1C03636	81,14

MACHOS PARA INSERTOS REPARADORES

TAPS FOR WIRE THREAD INSERTS • TARAUDS POUR FILETS RAPPORTÉS

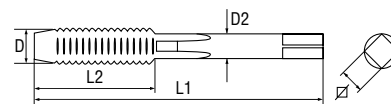
M MACHOS STI POR LAMINACIÓN

STI-FLUTELESS TAPS
TARAUDS STI À REFOULER



HSS-CO 5%

TOL ISO1
4H



D Ø x P (mm)	D (mm)	L1 (mm)	L2 (mm)	D2 (mm)	∅ (mm)	Cod.	€/Unid.
M 3,00 x 0,50	3,6	53,0	13,0	4,0	3,15	1C03605	25,37
M 4,00 x 0,70	4,9	58,0	16,0	5,0	4,00	1C03607	27,51
M 5,00 x 0,80	6,0	66,0	19,0	6,3	5,00	1C03608	27,51
M 6,00 x 1,00	7,3	72,0	22,0	8,0	6,40	1C03609	31,51
M 8,00 x 1,25	9,5	80,0	24,0	10,0	8,00	1C03611	37,90
M 10,00 x 1,50	11,9	89,0	29,0	9,0	7,10	1C03615	44,86
M 12,00 x 1,75	14,3	95,0	30,0	11,2	9,00	1C03620	63,27

DIÁMETRO BROCA PREVIA / RECOMMENDED TAPPING DRILL SIZES / DIAMÈTRES PRÉALABLES AU FILETAGE

Ø M3	Ø M4	Ø M5	Ø M6	Ø M8	Ø M10	Ø M12
3,40	4,60	5,60	6,80	9,00	11,20	13,40

CONSTRUCCIÓN
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METAL • MÉTAL

FRESADO
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HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

M y Mf

INSERTOS ROSCADOS DE ACERO INOXIDABLE
STAINLESS STEEL WIRE THREAD INSERTS
FILETS RAPPORTÉS INOX

DIN 8140

TOL ISO2
6H



D Ø x P (mm)	Uds. / Pcs.	1,0 x DØ		1,5 x DØ		2,0 x DØ		2,5 x DØ		3,0 x DØ	
		Cod.	€/Unid.	Cod.	€/Unid.	Cod.	€/Unid.	Cod.	€/Unid.	Cod.	€/Unid.
M 2,0 x 0,40	100	2C07202	0,99	2C07302	1,22	2C07402	1,49	2C07502	1,68	2C07602	2,10
M 2,2 x 0,45	100	2C07203	0,99	2C07303	1,22	2C07403	1,49	2C07503	1,68	2C07603	2,10
M 2,5 x 0,45	100	2C07204	0,30	2C07304	0,29	2C07404	0,34	2C07504	0,40	2C07604	0,48
M 3,0 x 0,50	100	2C07205	0,30	2C07305	0,29	2C07405	0,34	2C07505	0,40	2C07605	0,48
M 3,5 x 0,60	100	2C07206	0,34	2C07306	0,34	2C07406	0,39	2C07506	0,44	2C07606	0,53
M 4,0 x 0,70	100	2C07207	0,30	2C07307	0,29	2C07407	0,34	2C07507	0,40	2C07607	0,44
M 5,0 x 0,80	100	2C07208	0,34	2C07308	0,26	2C07408	0,39	2C07508	0,47	2C07608	0,56
M 6,0 x 1,00	100	2C07209	0,36	2C07309	0,28	2C07409	0,44	2C07509	0,53	2C07609	0,65
M 7,0 x 1,00	100	2C07210	0,40	2C07310	0,45	2C07410	0,53	2C07510	0,64	2C07610	0,76
M 8,0 x 1,25	100	2C07211	0,39	2C07311	0,37	2C07411	0,53	2C07511	0,64	2C07611	0,76
M 8,0 x 1,00	100	2C07212	0,44	2C07312	0,42	2C07412	0,57	2C07512	0,67	2C07612	0,82
M 9,0 x 1,25	100	2C07213	0,53	2C07313	0,68	2C07413	0,72	2C07513	0,78	2C07613	0,92
M 10,0 x 1,50	100	2C07215	0,48	2C07315	0,50	2C07415	0,61	2C07515	0,74	2C07615	0,89
M 10,0 x 1,25	100	2C07216	0,48	2C07316	0,50	2C07416	0,61	2C07516	0,74	2C07616	0,89
M 10,0 x 1,00	100	2C07217	0,48	2C07317	0,50	2C07417	0,61	2C07517	0,74	2C07617	0,89
M 11,0 x 1,50	100	2C07219	0,81	2C07319	0,85	2C07419	0,90	2C07519	1,18	2C07619	1,32
M 12,0 x 1,75	100	2C07221	0,72	2C07321	0,78	2C07421	0,92	2C07521	1,09	2C07621	1,32
M 12,0 x 1,50	100	2C07222	0,72	2C07322	0,78	2C07422	0,92	2C07522	1,09	2C07622	1,32
M 12,0 x 1,25	100	2C07223	0,72	2C07323	0,78	2C07423	0,92	2C07523	1,09	2C07623	1,32
M 12,0 x 1,00	100	2C07224	0,72	2C07324	0,78	2C07424	0,92	2C07524	1,09	2C07624	1,32
M 14,0 x 2,00	50	2C07225	1,01	2C07325	1,09	2C07425	1,20	2C07525	1,45	2C07625	1,76
M 14,0 x 1,50	50	2C07226	1,01	2C07326	1,09	2C07426	1,20	2C07526	1,45	2C07626	1,76
M 14,0 x 1,25	50	2C07227	1,01	2C07327	1,09	2C07427	1,20	2C07527	1,45	2C07627	1,76
M 14,0 x 1,00	50	2C07231	1,23	2C07331	1,09	2C07431	1,45	2C07531	1,76	2C07631	2,10
M 16,0 x 2,00	50	2C07234	1,37	2C07334	1,35	2C07434	1,76	2C07534	1,93	2C07634	2,10
M 16,0 x 1,50	50	2C07235	1,37	2C07335	1,35	2C07435	1,76	2C07535	1,93	2C07635	2,10
M 18,0 x 2,50	25	2C07236	2,00	2C07336	2,19	2C07436	3,16	2C07536	3,58	2C07636	4,20
M 18,0 x 2,00	25	2C07237	2,00	2C07337	2,19	2C07437	3,16	2C07537	3,58	2C07637	4,20
M 18,0 x 1,50	25	2C07238	2,00	2C07338	2,19	2C07438	3,16	2C07538	3,58	2C07638	4,20
M 20,0 x 2,50	25	2C07239	2,32	2C07339	2,78	2C07439	3,78	2C07539	4,20	2C07639	4,84
M 20,0 x 2,00	25	2C07240	2,32	2C07340	2,78	2C07440	3,78	2C07540	4,20	2C07640	4,84
M 20,0 x 1,50	25	2C07241	2,32	2C07341	2,78	2C07441	3,78	2C07541	4,20	2C07641	4,84
M 22,0 x 2,50	10	2C07242	2,52	2C07342	2,98	2C07442	4,00	2C07542	4,62	2C07642	5,26
M 22,0 x 2,00	10	2C07243	2,52	2C07343	2,98	2C07443	4,00	2C07543	4,62	2C07643	5,26
M 22,0 x 1,50	10	2C07244	2,52	2C07344	2,98	2C07444	4,00	2C07544	4,62	2C07644	5,26
M 24,0 x 3,00	10	2C07245	3,16	2C07345	3,18	2C07445	4,20	2C07545	5,04	2C07645	5,89
M 24,0 x 2,00	10	2C07246	3,16	2C07346	3,18	2C07446	4,20	2C07546	5,04	2C07646	5,89
M 24,0 x 1,50	10	2C07247	3,16	2C07347	3,18	2C07447	4,20	2C07547	5,04	2C07647	5,89
M 26,0 x 1,50	5	-	-	2C07349	5,17	-	-	-	-	-	-
M 27,0 x 3,00	5	-	-	2C07350	5,17	-	-	-	-	-	-
M 27,0 x 2,00	5	-	-	2C07351	5,17	-	-	-	-	-	-
M 27,0 x 1,50	5	-	-	2C07352	5,17	-	-	-	-	-	-
M 28,0 x 1,50	5	-	-	2C07353	5,17	-	-	-	-	-	-
M 30,0 x 3,50	5	-	-	2C07354	5,96	-	-	-	-	-	-
M 30,0 x 2,00	5	-	-	2C07355	5,96	-	-	-	-	-	-
M 30,0 x 1,50	5	-	-	2C07356	5,96	-	-	-	-	-	-
M 33,0 x 3,50	5	-	-	2C07357	7,55	-	-	-	-	-	-
M 33,0 x 2,00	5	-	-	2C07358	7,55	-	-	-	-	-	-
M 36,0 x 4,00	5	-	-	2C07360	7,55	-	-	-	-	-	-
M 36,0 x 3,00	5	-	-	2C07361	7,55	-	-	-	-	-	-
M 36,0 x 2,00	5	-	-	2C07362	7,55	-	-	-	-	-	-
M 36,0 x 1,50	5	-	-	2C07363	7,55	-	-	-	-	-	-

INSERTOS REPARADORES DE ROSCA

WIRE THREAD INSERTS • FILETS RAPPORTÉS

Mf INSERTOS ROSCADOS PARA LAS ROSCAS DE LAS BUJÍAS

STAINLESS STEEL WIRE THREAD INSERTS FOR SPARK PLUG
FILETS RAPPORTÉS INOX POUR BOUGIES

DIN 8140 TOL ISO2 6H



D Ø x P (mm)	Uds. / Pcs.	8,40		12,40		16,40	
		Cod.	€/Unid.	Cod.	€/Unid.	Cod.	€/Unid.
M 14 x 1,25	50	2C07128	1,09	2C07228	1,09	2C07328	1,09

M INSERTOS ROSCADOS AUTOFRENANTES DE ACERO INOXIDABLE

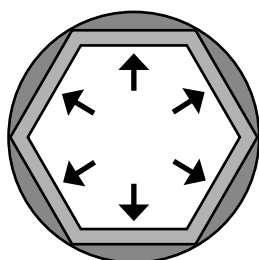
SCREW LOCKING STAINLESS STEEL WIRE THREAD INSERTS
FILETS RAPPORTÉS INOX INDESSERRABLES

DIN 8140 TOL ISO2 6H



D Ø x P (mm)	Uds. / Pcs.	1,0 x DØ		1,5 x DØ		2,0 x DØ	
		Cod.	€/Unid.	Cod.	€/Unid.	Cod.	€/Unid.
M 3 x 0,50	100	2C05205	0,36	2C05305	0,37	2C05405	0,40
M 4 x 0,70	100	2C05207	0,36	2C05307	0,37	2C05407	0,40
M 5 x 0,80	100	2C05208	0,40	2C05308	0,40	2C05408	0,47
M 6 x 1,00	100	2C05209	0,44	2C05309	0,45	2C05409	0,53
M 8 x 1,25	100	2C05211	0,47	2C05311	0,50	2C05411	0,64
M 10 x 1,50	100	2C05215	0,59	2C05315	0,60	2C05415	0,74
M 12 x 1,75	100	2C05221	0,86	2C05321	0,93	2C05421	1,11
M 14 x 2,00	50	2C05225	1,23	2C05325	1,31	2C05425	1,45
M 16 x 2,00	50	2C05234	1,65	2C05334	1,64	2C05434	2,12

Consultar precio y plazo para largos de 2,5xD y 3,0xD
Request prices and availability for length of 2,5xD and 3,0xD
Consulter de prix et le disponibilité pour longueur 2,5xD et 3,0xD



- Insertos con sistema de frenado interno
Wire thread inserts with a locking internal system
Filets rapportés avec système interne autofreinage.
- Indicados en mecanismos con altas vibraciones o impactos
Suited to high impact and vibrations systems
Indiqués pour mécanismes avec grandes vibrations et impacts
- Se recomienda su utilización con tornillería lubricada o con recubrimientos
Recommended for using with oil lubricated bolts
Utilisation recommandé avec boulons lubrifiés

UNC

INSERTOS ROSCADOS DE ACERO INOXIDABLE
 STAINLESS STEEL WIRE THREAD INSERTS
 FILETS RAPPORTÉS INOX

DIN 8140 TOL 2B



			1,0 x DØ		1,5 x DØ		2,0 x DØ		2,5 x DØ		3,0 x DØ	
D Ø x P (")	Uds. / Pcs.		Cod.	€/Unid.	Cod.	€/Unid.	Cod.	€/Unid.	Cod.	€/Unid.	Cod.	€/Unid.
Nr. 2 x 56	100		2C08200	0,99	2C08300	1,09	2C08400	1,49	2C08500	1,68	2C08600	2,10
Nr. 4 x 40	100		2C08201	0,39	2C08301	0,34	2C08401	0,39	2C08501	0,44	2C08601	0,53
Nr. 5 x 40	100		2C08202	0,40	2C08302	0,40	2C08402	0,44	2C08502	0,53	2C08602	0,64
Nr. 6 x 32	100		2C08203	0,30	2C08303	0,32	2C08403	0,36	2C08503	0,40	2C08603	0,47
Nr. 8 x 32	100		2C08204	0,30	2C08304	0,32	2C08404	0,36	2C08504	0,40	2C08604	0,47
Nr. 10 x 24	100		2C08205	0,39	2C08305	0,37	2C08405	0,42	2C08505	0,50	2C08605	0,61
Nr. 12 x 24	100		2C08206	0,40	2C08306	0,42	2C08406	0,48	2C08506	0,59	2C08606	0,72
1/4 x 20	100		2C08207	0,40	2C08307	0,42	2C08407	0,48	2C08507	0,59	2C08607	0,72
5/16 x 18	100		2C08208	0,53	2C08308	0,60	2C08408	0,67	2C08508	0,81	2C08608	0,98
3/8 x 16	100		2C08209	0,82	2C08309	0,78	2C08409	1,07	2C08509	1,23	2C08609	1,45
7/16 x 14	100		2C08210	0,90	2C08310	1,03	2C08410	1,24	2C08510	1,48	2C08610	1,82
1/2 x 13	100		2C08211	0,98	2C08311	1,03	2C08411	1,24	2C08511	1,48	2C08611	1,82
9/16 x 12	50		2C08212	3,16	2C08312	3,98	2C08412	5,41	2C08512	6,18	2C08612	7,46
5/8 x 11	50		2C08214	2,86	2C08314	3,62	2C08414	4,76	2C08514	5,69	2C08614	6,78
3/4 x 10	25		2C08216	3,33	2C08316	4,27	2C08416	5,64	2C08516	6,69	2C08616	8,01
7/8 x 9	10		2C08218	4,42	2C08318	6,26	2C08418	8,41	2C08518	9,94	2C08618	12,08
1 x 8	10		2C08219	4,42	2C08319	6,26	2C08419	8,41	2C08519	9,94	2C08619	12,08
1.1/8 x 7	5		-	-	2C08320	10,14	-	-	-	-	-	-
1.1/4 x 7	5		-	-	2C08321	11,13	-	-	-	-	-	-
1.3/8 x 6	5		-	-	2C08322	12,33	-	-	-	-	-	-
1.1/2 x 6	5		-	-	2C08323	14,31	-	-	-	-	-	-

INSERTOS REPARADORES DE ROSCA

WIRE THREAD INSERTS • FILETS RAPPORTÉS

UNF INSERTOS ROSCADOS DE ACERO INOXIDABLE

STAINLESS STEEL WIRE THREAD INSERTS
FILETS RAPPORTÉS INOX

DIN 8140 TOL 2B



D Ø x P (")	Uds. / Pcs.	1,0 x DØ		1,5 x DØ		2,0 x DØ		2,5 x DØ		3,0 x DØ	
		Cod.	€/Unid.	Cod.	€/Unid.	Cod.	€/Unid.	Cod.	€/Unid.	Cod.	€/Unid.
Nr. 4 x 48	100	2C08290	0,89	2C08390	0,96	2C08490	1,34	2C08590	1,49	2C08690	1,90
Nr. 6 x 40	100	2C08291	0,89	2C08391	0,96	2C08491	1,34	2C08591	1,49	2C08691	1,90
Nr. 8 x 36	100	2C08292	0,89	2C08392	0,96	2C08492	1,34	2C08592	1,49	2C08692	1,90
Nr. 10 x 32	100	2C08293	0,39	2C08393	0,38	2C08493	0,48	2C08593	0,59	2C08693	0,72
1/4 x 28	100	2C08225	0,39	2C08325	0,38	2C08425	0,48	2C08525	0,59	2C08625	0,72
5/16 x 24	100	2C08226	0,53	2C08326	0,54	2C08426	0,67	2C08526	0,81	2C08626	0,98
3/8 x 24	100	2C08227	0,78	2C08327	0,78	2C08427	0,99	2C08527	1,20	2C08627	1,45
7/16 x 20	100	2C08228	0,98	2C08328	1,03	2C08428	1,24	2C08528	1,48	2C08628	1,82
1/2 x 20	100	2C08229	0,98	2C08329	1,03	2C08429	1,24	2C08529	1,48	2C08629	1,82
9/16 x 18	50	2C08230	2,30	2C08330	2,17	2C08430	2,75	2C08530	3,36	2C08630	3,86
5/8 x 18	50	2C08231	2,30	2C08331	2,17	2C08431	2,75	2C08531	3,16	2C08631	3,86
3/4 x 16	25	2C08233	3,78	2C08333	4,98	2C08433	6,35	2C08533	7,70	2C08633	9,23
7/8 x 14	10	2C08235	5,12	2C08335	7,15	2C08435	9,63	2C08535	11,07	2C08635	13,26
1 x 12	10	2C08237	5,12	2C08337	7,15	2C08437	9,63	2C08537	11,07	2C08637	13,26
1.1/8 x 12	5	-	-	2C08396	10,14	-	-	-	-	-	-
1.1/4 x 12	5	-	-	2C08397	11,13	-	-	-	-	-	-
1.3/8 x 12	5	-	-	2C08398	12,33	-	-	-	-	-	-
1.1/2 x 12	5	-	-	2C08399	14,31	-	-	-	-	-	-

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

BSW

INSERTOS ROSCADOS DE ACERO INOXIDABLE
 STAINLESS STEEL WIRE THREAD INSERTS
 FILETS RAPPORTÉS INOX

DIN 8140 TOL ISO2 6H



D Ø x P (")	Uds. / Pcs.	1,0 x DØ		1,5 x DØ		2,0 x DØ		2,5 x DØ		3,0 x DØ	
		Cod.	€/Unid.	Cod.	€/Unid.	Cod.	€/Unid.	Cod.	€/Unid.	Cod.	€/Unid.
1/8 x 40	100	2C08241	1,16	2C08341	1,27	2C08441	2,10	2C08541	2,38	2C08641	2,55
3/16 x 24	100	2C08242	1,16	2C08342	1,27	2C08442	2,10	2C08542	2,38	2C08642	2,55
1/4 x 20	100	2C08243	0,50	2C08343	0,53	2C08443	0,64	2C08543	0,84	2C08643	0,90
5/16 x 18	100	2C08244	0,59	2C08344	0,64	2C08444	0,74	2C08544	0,89	2C08644	1,07
3/8 x 16	100	2C08245	1,03	2C08345	1,06	2C08445	1,31	2C08545	1,53	2C08645	1,85
7/16 x 14	100	2C08246	1,26	2C08346	1,31	2C08446	1,60	2C08546	1,90	2C08646	2,32
1/2 x 12	100	2C08247	1,26	2C08347	1,31	2C08447	1,60	2C08547	1,90	2C08647	2,32
9/16 x 12	50	2C08248	3,16	2C08348	4,18	2C08448	5,19	2C08548	6,18	2C08648	7,57
5/8 x 11	50	2C08249	3,16	2C08349	4,18	2C08449	5,19	2C08549	6,18	2C08649	7,57
3/4 x 10	25	2C08251	4,08	2C08351	4,98	2C08451	6,42	2C08551	7,70	2C08651	9,23
7/8 x 9	10	2C08253	5,26	2C08353	6,96	2C08453	9,19	2C08553	11,07	2C08653	13,26
1 x 8	10	2C08255	5,68	2C08355	7,95	2C08455	9,19	2C08555	11,07	2C08655	13,26

CONSTRUCCIÓN
 CONSTRUCTION • CONSTRUCTION

MADERA
 WOOD • BOIS

METAL
 METAL • METAL

FRESADO
 MILLING • FRAISAGE

ROSCADO
 THREADING • FILETAGE

ACCESORIOS
 ACCESSORIES • ACCESSOIRES

HEXAGONAL
 HEXAGONAL • HEXAGONAL

METROLOGÍA
 METROLOGY • MÉTROLOGIE

DISPLAYS
 DISPLAYS • DISPLAYS

G(BSP) INSERTOS ROSCADOS DE ACERO INOXIDABLE

WIRE THREAD INSERTS "FREE RUNNING" STAINLESS STEEL
FILETS RAPPORTÉS INOX

DIN 8140

TOL ISO2
6H



D Ø x P (")	Uds. / Pcs.	1,0 x DØ		1,5 x DØ		2,0 x DØ		2,5 x DØ		3,0 x DØ	
		Cod.	€/Unid.	Cod.	€/Unid.	Cod.	€/Unid.	Cod.	€/Unid.	Cod.	€/Unid.
1/8 x 28	50	-	-	2C08380	0,80	-	-	-	-	-	-
1/4 x 19	50	-	-	2C08381	1,20	-	-	-	-	-	-
3/8 x 19	50	-	-	2C08382	1,40	-	-	-	-	-	-
1/2 x 14	50	-	-	2C08383	1,80	-	-	-	-	-	-
5/8 x 14	5	-	-	2C08384	4,47	-	-	-	-	-	-
3/4 x 14	5	-	-	2C08385	4,47	-	-	-	-	-	-
7/8 x 14	5	-	-	2C08386	13,72	-	-	-	-	-	-
1 x 11	5	-	-	2C08387	13,72	-	-	-	-	-	-

BSF INSERTOS ROSCADOS "FACIL INSERCIÓN", INOXIDABLE

WIRE THREAD INSERTS "FREE RUNNING" STAINLESS STEEL
FILETS RAPPORTÉS INOX

DIN 8140

TOL ISO2
6H



D Ø x P (")	Uds. / Pcs.	1,0 x DØ		1,5 x DØ		2,0 x DØ		2,5 x DØ		3,0 x DØ	
		Cod.	€/Unid.	Cod.	€/Unid.	Cod.	€/Unid.	Cod.	€/Unid.	Cod.	€/Unid.
3/16 x 32	100	2C08262	1,16	2C08362	1,27	2C08462	2,10	2C08562	2,38	2C08662	2,55
1/4 x 26	100	2C08263	0,50	2C08363	0,53	2C08463	0,64	2C08563	0,76	2C08663	0,90
5/16 x 22	100	2C08265	0,56	2C08365	0,64	2C08465	0,74	2C08565	0,89	2C08665	1,07
3/8 x 20	100	2C08266	1,03	2C08366	1,06	2C08466	1,31	2C08566	1,53	2C08666	1,85
7/16 x 18	100	2C08267	1,26	2C08367	1,31	2C08467	1,60	2C08567	1,90	2C08667	2,32
1/2 x 16	100	2C08268	1,26	2C08368	1,31	2C08468	1,60	2C08568	1,90	2C08668	2,32
9/16 x 16	50	2C08269	3,16	2C08369	3,98	2C08469	5,19	2C08569	6,18	2C08669	7,57
5/8 x 14	50	2C08270	3,16	2C08370	3,98	2C08470	5,19	2C08570	6,18	2C08670	7,57
3/4 x 12	25	2C08272	4,08	2C08372	4,98	2C08472	6,42	2C08572	7,70	2C08672	9,23
7/8 x 11	10	2C08274	5,26	2C08374	6,96	2C08474	9,19	2C08574	11,07	2C08674	13,26
1 x 10	10	2C08276	5,26	2C08376	6,96	2C08476	8,49	2C08576	11,07	2C08676	13,26

HERRAMIENTA PARA INSERTAR CON TOPE AJUSTABLE
 INSERTING TOOL WITH LOCKING RING
 APPAREIL DE POSE MANUEL


Nº	M - Mf	UNC / UNF / BSW / BSF	Uds. / Pcs.	Cod.	€/Unid.
2	M 2,00 x 0,40	UNC Nr. 2	1	3C08002	14,33
	M 2,20 x 0,45				
3	M 2,50 x 0,45	-	1	3C08003	14,33
4	M 3,00 x 0,50	UNC/UNF Nr. 4	1	3C08004	14,33
5	M 3,50 x 0,60	UNC/UNF Nr. 6	1	3C08005	14,33
6	M 4,00 x 0,70	UNC/UNF Nr. 8	1	3C08006	14,33
7	-	BSW 3/16	1	3C08007	14,33
		UNC Nr.10			
8	M 5,00 x 0,80	UNC/UNF Nr.10	1	3C08008	14,33
		UNC Nr. 12			
9	M 6,00 x 1,00	UNC/UNF 1/4	1	3C08009	14,33
		BSW/BSF 1/4			
10	M 7,00 x 1,00	UNC/BSW 5/16	1	3C08010	16,43
11	M 8,00 x 1,25	UNC/BSF 5/16	1	3C08011	16,43
	M 8,00 x 1,00				
12	M 9,00 x 1,25	UNC 3/8	1	3C08012	17,74
	M 9,00 x 1,00	BSW/BSF 3/8			
13	M 10,00 x 1,50	UNF 3/8	1	3C08013	17,74
	M 10,00 x 1,00				
	M 10,00 x 1,25				
14	M 11,00 x 1,50	UNC/UNF 7/16	1	3C08014	20,58
	M 11,00 x 1,25	BSW/BSF 7/16			
15	M 12,00 x 1,75	UNC/UNF 1/2	1	3C08015	24,77
	M 12,00 x 1,50				
	M 12,00 x 1,25				
	M 12,00 x 1,00				
16	M 14,00 x 2,00	UNC/UNF 9/16	1	3C08016	24,77
	M 14,00 x 1,50	BSW/BSF 9/16			
17	M 14,00 x 1,25	-	1	3C08017	24,77
	M 14,00 x 1,00				
18	M 16,00 x 2,00	UNC/UNF 5/8	1	3C08018	27,36
	M 16,00 x 1,50	BSW/BSF 5/8			
20	M 18,00 x 2,50	UNC 3/4	1	3C08020	27,36
	M 18,00 x 2,00				
	M 18,00 x 1,50				
21	M 20,00 x 2,50	UNF 3/4	1	3C08021	27,36
	M 20,00 x 2,00				
	M 20,00 x 1,50				
22	M 22,00 x 2,50	UNC/UNF 7/8	1	3C08022	34,39
	M 22,00 x 2,00				
	M 22,00 x 1,50	BSW/BSF 7/8			
23	M 24,00 x 3,00	UNC/UNF 1"	1	3C08023	34,39
	M 24,00 x 2,00				
	M 24,00 x 1,50	BSW/BSF 1"			

ACCESORIOS

ACCESORIES • ACCESSOIRES

M HERRAMIENTA PARA INSERTAR A MÁQUINA

MACHINE INSERTING TOOL
APPAREIL DE POSE À MACHINE



D Ø x P (mm)	L1 (mm)		Hexagon (")	Uds. / Pcs.	Cod.	€/Unid.
M 3,00 x 0,50	46	6	1/4	1	3C08070	21,14
M 4,00 x 0,70	56	7	1/4	1	3C08071	21,14
M 5,00 x 0,80	62	8	1/4	1	3C08072	21,14
M 6,00 x 1,00	76	10	1/4	1	3C08073	21,14
M 8,00 x 1,25	85	12	1/4	1	3C08074	25,75
M 10,00 x 1,50	96	14	1/4	1	3C08075	28,45
M 12,00 x 1,75	107	16	1/4	1	3C08076	31,45

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE


DISPLAYS
DISPLAYS • DISPLAYS

M

HERRAMIENTA PARA INSERTAR

INSERTING TOOL
 APPAREIL DE POSE À MACHINE



Ø Nominal Ø x Paso / Ø Nominal Ø x Paso	Uds. / Pcs.		Cod.	€/Unid.
M - Mf				
M 26,00 x 1,50	1	1/2"	3C08024	35,54
M 27,00 x 3,00	1	1/2"	3C08025	35,53
M 27,00 x 2,00	1	1/2"	3C08026	35,54
M 27,00 x 1,50	1	1/2"	3C08027	35,54
M 28,00 x 1,50	1	1/2"	3C08028	35,54
M 30,00 x 3,50	1	1/2"	3C08029	42,64
M 30,00 x 2,00	1	1/2"	3C08030	42,64
M 30,00 x 1,50	1	1/2"	3C08031	42,65
M 33,00 x 3,50	1	1/2"	3C08032	49,75
M 33,00 x 2,00	1	1/2"	3C08033	49,75
M 36,00 x 4,00	1	1/2"	3C08034	49,75
M 36,00 x 3,00	1	1/2"	3C08035	49,75
M 36,00 x 2,00	1	1/2"	3C08036	49,75
M 36,00 x 1,50	1	1/2"	3C08037	49,75
UNC				
1.1/8 x 7	1	1/2"	3C08050	42,64
1.1/4 x 7	1	1/2"	3C08051	42,64
1.3/8 x 6	1	1/2"	3C08052	49,75
1.1/2 x 6	1	1/2"	3C08053	49,75
UNF				
1.1/8 x 7	1	1/2"	3C08060	42,64
1.1/4 x 7	1	1/2"	3C08061	42,64
1.3/8 x 6	1	1/2"	3C08062	49,75
1.1/2 x 6	1	1/2"	3C08063	49,75
G (BSP)				
1/8 x 28	1	1/4"	3C08080	21,33
1/4 x 19	1	1/4"	3C08081	21,33
3/8 x 19	1	1/4"	3C08082	24,88
1/2 x 14	1	1/4"	3C08083	28,43
5/8 x 14	1	1/2"	3C08084	35,54
3/4 x 14	1	1/2"	3C08085	35,54
7/8 x 14	1	1/2"	3C08086	49,75
1" x 11	1	1/2"	3C08087	49,75

HERRAMIENTA ROMPE ARRASTRE

TANG BREAK TOOL
RUPTEUR



Nº	M - Mf	UNC / UNF / BSW / BSF	Uds. / Pcs.	Cod.	€/Unid.
2	M 2,00 x 0,40	UNC Nº 2	1	3C07002	6,11
	M 2,20 x 0,45				
3	M 2,50 x 0,45	-	1	3C07003	6,20
4	M 3,00 x 0,50	UNC/UNF Nº 4	1	3C07004	6,20
5	M 3,50 x 0,60	UNC/UNF Nº 6	1	3C07005	6,20
6	M 4,00 x 0,70	UNC/UNF Nº 8	1	3C07006	6,20
8	M 5,00 x 0,80	UNC/UNF Nº10	1	3C07008	6,20
		UNC Nº12			
9	M 6,00 x 1,00	UNC/UNF 1/4	1	3C07009	6,20
		BSW/BSF 1/4			
11	M 7,00 x 1,00	UNC/UNF 5/16 BSW/BSF 5/16	1	3C07011	6,88
	M 8,00 x 1,00				
	M 8,00 x 1,25				
12	M 9,00 x 1,25	UNC 3/8	1	3C07012	6,88
	M 9,00 x 1,00	BSW/BSF 3/8			
13	M 10,00 x 1,50	UNF 3/8	1	3C07013	8,33
	M 10,00 x 1,00				
	M 10,00 x 1,25				
14	M 11,00 x 1,50	UNC/UNF 7/16	1	3C07014	8,33
	M 11,00 x 1,25	BSW/BSF 7/16			
15	M 12,00 x 1,75	UNC/UNF 1/2 BSW/BSF 1/2	1	3C07015	8,33
	M 12,00 x 1,50				
	M 12,00 x 1,25				
	M 12,00 x 1,00				

HERRAMIENTA EXTRACTORA

EXTRACTING TOOL
EXTRACTEUR



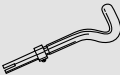




Nº	Métrica / Métrica	Pulgadas / Inches	Uds. / Pcs.	Cod.	€/Unid.
2	M 3 - M 10	3/16 - 3/8	1	3C07052	30,97
3	M 11 - M 24	3/8 - 1	1	3C07053	37,54

M y Mf

KITS REPARADORES DE ROSCA
 THREAD REPAIR KIT
 KITS DE RÉPARATION DE FILETAGE



					 x 1,5D	Uds. / Pcs.	Cod.	€/Unid.
M	2,00 x 0,40	2,1 mm	Nº 2	Nº 2	20	1	4C04001	54,37
M	2,50 x 0,45	2,6 mm	Nº 3	Nº 3	20	1	4C04003	54,37
M	3,00 x 0,50	3,2 mm	Nº 4	Nº 4	20	1	4C04005	52,78
M	3,50 x 0,60	3,7 mm	Nº 5	Nº 5	20	1	4C04006	54,37
M	4,00 x 0,70	4,2 mm	Nº 6	Nº 6	20	1	4C04007	49,29
M	5,00 x 0,80	5,2 mm	Nº 8	Nº 8	20	1	4C04009	51,25
M	6,00 x 1,00	6,3 mm	Nº 9	Nº 9	20	1	4C04010	55,21
M	7,00 x 1,00	7,3 mm	Nº 10	Nº 11	20	1	4C04011	74,26
M	8,00 x 1,25	8,3 mm	Nº 11	Nº 11	20	1	4C04012	70,23
M	8,00 x 1,00	8,3 mm	Nº 11	Nº 11	20	1	4C04013	74,26
M	9,00 x 1,25	9,3 mm	Nº 12	Nº 12	15	1	4C04014	84,82
M	10,00 x 1,50	10,4 mm	Nº 13	Nº 13	15	1	4C04016	75,17
M	10,00 x 1,25	10,3 mm	Nº 13	Nº 13	15	1	4C04017	79,47
M	10,00 x 1,00	10,3 mm	Nº 13	Nº 13	15	1	4C04018	79,47
M	11,00 x 1,50	11,4 mm	Nº 14	Nº 14	10	1	4C04019	91,78
M	12,00 x 1,75	12,4 mm	Nº 15	Nº 15	10	1	4C04021	84,27
M	12,00 x 1,50	12,4 mm	Nº 15	Nº 15	10	1	4C04022	89,10
M	12,00 x 1,25	12,3 mm	Nº 15	Nº 15	10	1	4C04023	89,10
M	12,00 x 1,00	12,3 mm	Nº 15	Nº 15	10	1	4C04024	91,78
M	14,00 x 2,00		Nº 16		10	1	4C04028	95,04
M	14,00 x 1,50		Nº 16		10	1	4C04029	100,49
M	14,00 x 1,25		Nº 17		10	1	4C04030	100,49
M	14,00 x 1,00		Nº 17		10	1	4C04031	103,50
M	16,00 x 2,00		Nº 18		10	1	4C04032	115,20
M	16,00 x 1,50		Nº 18		10	1	4C04033	121,80
M	18,00 x 2,50		Nº 20		5	1	4C04034	149,02
M	18,00 x 2,00		Nº 20		5	1	4C04035	149,02
M	18,00 x 1,50		Nº 20		5	1	4C04036	149,02
M	20,00 x 2,50		Nº 21		5	1	4C04037	161,20
M	20,00 x 2,00		Nº 21		5	1	4C04038	161,20
M	20,00 x 1,50		Nº 21		5	1	4C04039	161,20
M	22,00 x 2,50		Nº 22		5	1	4C04040	185,60
M	22,00 x 2,00		Nº 22		5	1	4C04041	185,60
M	22,00 x 1,50		Nº 22		5	1	4C04042	185,60
M	24,00 x 3,00		Nº 23		5	1	4C04043	214,05
M	24,00 x 2,00		Nº 23		5	1	4C04044	214,05
M	24,00 x 1,50		Nº 23		5	1	4C04045	214,05

KITS REPARADORES DE ROSCA

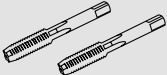


THREAD REPAIR KIT • KITS DE RÉPARATION DE FILETAGE

M y Mf

KITS REPARADORES DE ROSCA

THREAD REPAIR KIT
KITS DE RÉPARATION DE FILETAGE




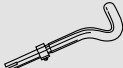



						
		x 1,5D	Uds. / Pcs.	Cod.	€/Unid.	
M 26,00 x 1,50	3C08024	10	1	4C04049	454,80	
M 27,00 x 3,00	3C08025	10	1	4C04050	454,80	
M 27,00 x 2,00	3C08026	10	1	4C04051	454,80	
M 27,00 x 1,50	3C08027	10	1	4C04052	454,80	
M 28,00 x 1,50	3C08028	10	1	4C04053	518,23	
M 30,00 x 3,50	3C08029	10	1	4C04054	542,21	
M 30,00 x 2,00	3C08030	10	1	4C04055	542,21	
M 30,00 x 1,50	3C08031	10	1	4C04056	542,21	
M 33,00 x 3,50	3C08032	10	1	4C04057	566,19	
M 33,00 x 2,00	3C08033	10	1	4C04058	566,19	
M 36,00 x 4,00	3C08034	10	1	4C04060	615,98	
M 36,00 x 3,00	3C08035	10	1	4C04061	615,98	
M 36,00 x 2,00	3C08036	10	1	4C04062	615,98	
M 36,00 x 1,50	3C08037	10	1	4C04063	615,98	
M 39,00 x 4,00	3C08038	10	1	4C04231	879,42	
M 39,00 x 3,00	3C08039	10	1	4C04232	767,15	NEW
M 40,00 x 3,00	3C08040	10	1	4C04233	879,42	NEW
M 42,00 x 4,50	3C08041	10	1	4C04234	1.178,79	NEW
M 42,00 x 3,00	3C08042	10	1	4C04235	879,42	NEW
M 45,00 x 4,50	3C08043	10	1	4C04236	1.216,22	NEW
M 45,00 x 3,00	3C08044	10	1	4C04237	1.103,95	NEW
M 48,00 x 5,00	3C08045	10	1	4C04238	1.487,32	NEW
M 48,00 x 3,00	3C08046	10	1	4C04239	1.103,95	NEW
M 50,00 x 3,00	3C08047	10	1	4C04240	1.178,79	NEW
M 52,00 x 5,00	3C08048	10	1	4C04241	1.852,39	NEW
M 52,00 x 3,00	3C08049	10	1	4C04242	1.590,44	NEW

*Consultar disponibilidad / Request availability / Consulter la disponibilité

KIT PARA LAS ROSCAS DE LAS BUJÍAS

INSERTING TOOL
KITS DE RÉPARATION DE FILETAGE POUR BOUGIES D'ALLUMAGE



							
M 14 x 1,25	Nº 17	8,40 mm	12,40 mm	16,40 mm	Uds. / Pcs.	Cod.	€/Unid.
		5	5	5	1	4C04096	125,47

MACHOS SPARK-PLUG / STI-SPARK PLUG TAPS / TARAUDS STI ÉTAGÉS

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL


METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

UNC

KITS REPARADORES DE ROSCA
 THREAD REPAIR KIT
 KITS DE RÉPARATION DE FILETAGE




				 x 1,5D	Uds. / Pcs.	Cod.	€/Unid.
Nr. 2 x 56	2,4 mm	Nº 2	Nº 2	20	1	4C04100	75,54
Nr. 4 x 40	3,1 mm	Nº 4	Nº 4	20	1	4C04101	68,53
Nr. 5 x 40	3,4 mm	Nº 4	Nº 4	20	1	4C04106	68,53
Nr. 6 x 32	3,8 mm	Nº 5	Nº 5	20	1	4C04102	68,53
Nr. 8 x 32	4,4 mm	Nº 6	Nº 6	20	1	4C04103	68,53
Nr. 10 x 24	5,2 mm	Nº 7	Nº 6	20	1	4C04104	68,53
Nr. 12 x 24	5,8 mm	Nº 8	Nº 8	20	1	4C04105	68,53
1/4 x 20	6,7 mm	Nº 9	Nº 9	20	1	4C04107	61,74
5/16 x 18	8,3 mm	Nº 10	Nº 10	20	1	4C04108	72,94
3/8 x 16	9,9 mm	Nº 12	Nº 12	15	1	4C04109	77,99
7/16 x 14	11,6 mm	Nº 14	Nº 14	10	1	4C04110	87,54
1/2 x 13	13,0 mm	Nº 15	Nº 15	10	1	4C04111	96,09
9/16 x 12		Nº 16		10	1	4C04112	128,29
5/8 x 11		Nº 18		10	1	4C04113	128,29
3/4 x 10		Nº 20		5	1	4C04114	163,51
7/8 x 9		Nº 22		5	1	4C04115	198,72
1 x 8		Nº 23		4	1	4C04116	189,42

UNC

KITS REPARADORES DE ROSCA
 THREAD REPAIR KIT
 KITS DE RÉPARATION DE FILETAGE



			 x 1,5D	Uds. / Pcs.	Cod.	€/Unid.
1.1/8 x 7	3C08050		10	1	4C04117	483,22
1.1/4 x 7	3C08051		10	1	4C04118	537,59
1.3/8 x 6	3C08052		10	1	4C04119	646,32
1.1/2 x 6	3C08053		10	1	4C04135	753,03

KITS REPARADORES DE ROSCA



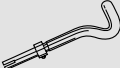


THREAD REPAIR KIT • KITS DE RÉPARATION DE FILETAGE

UNF

KITS REPARADORES DE ROSCA

THREAD REPAIR KIT
KITS DE RÉPARATION DE FILETAGE



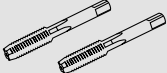


								
					x 1,5D	Uds. / Pcs.	Cod.	€/Unid.
Nr. 4 x 48	3,0 mm	Nº 4	Nº 4		20	1	4C04120	69,20
Nr. 6 x 40	3,8 mm	Nº 5	Nº 5		20	1	4C04121	69,20
Nr. 8 x 36	4,4 mm	Nº 6	Nº 6		20	1	4C04122	69,20
Nr. 10 x 32	5,1 mm	Nº 8	Nº 8		20	1	4C04123	69,20
1/4 x 28	6,7 mm	Nº 9	Nº 9		20	1	4C04125	62,35
5/16 x 24	8,3 mm	Nº 11	Nº 11		20	1	4C04126	76,29
3/8 x 24	9,8 mm	Nº 13	Nº 13		15	1	4C04127	81,57
7/16 x 20	11,5 mm	Nº 14	Nº 14		10	1	4C04128	91,56
1/2 x 20	13,0 mm	Nº 15	Nº 15		10	1	4C04129	100,50
9/16 x 18		Nº 16			10	1	4C04130	134,18
5/8 x 18		Nº 18			10	1	4C04131	134,18
3/4 x 16		Nº 21			5	1	4C04132	171,02
7/8 x 14		Nº 22			5	1	4C04133	207,85
1 x 12		Nº 23			4	1	4C04134	198,11

UNF

KITS REPARADORES DE ROSCA

THREAD REPAIR KIT
KITS DE RÉPARATION DE FILETAGE








							
			x 1,5D	Uds. / Pcs.	Cod.	€/Unid.	
1.1/8 x 12		3C08060	10	1	4C04136	483,22	
1.1/4 x 12		3C08061	10	1	4C04137	537,59	
1.3/8 x 12		3C08062	10	1	4C04138	646,32	
1.1/2 x 12		3C08063	10	1	4C04139	753,03	

BSW

KITS REPARADORES DE ROSCA
 THREAD REPAIR KIT
 KITS DE RÉPARATION DE FILETAGE




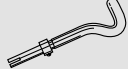



							
				x 1,5D	Uds. / Pcs.	Cod.	€/Unid.
1/8 x 40	3,4 mm	Nº 4	Nº 4	20	1	4C04141	68,53
3/16 x 24	5,0 mm	Nº 8	Nº 8	20	1	4C04142	68,53
1/4 x 20	6,7 mm	Nº 9	Nº 9	20	1	4C04143	61,74
5/16 x 18	8,3 mm	Nº 10	Nº 11	20	1	4C04144	75,54
3/8 x 16	9,9 mm	Nº 12	Nº 12	15	1	4C04145	80,77
7/16 x 14	11,5 mm	Nº 14	Nº 14	10	1	4C04146	90,66
1/2 x 12	13,0 mm	Nº 15	Nº 15	10	1	4C04147	99,52
9/16 x 12		Nº 16		10	1	4C04148	132,87
5/8 x 11		Nº 18		10	1	4C04149	132,87
3/4 x 10		Nº 20		5	1	4C04150	169,35
7/8 x 9		Nº 22		5	1	4C04151	205,81
1 x 8		Nº 23		4	1	4C04152	196,17

BSF

KITS REPARADORES DE ROSCA
 THREAD REPAIR KIT
 KITS DE RÉPARATION DE FILETAGE



							
				x 1,5D	Uds. / Pcs.	Cod.	€/Unid.
3/16 x 32	5,0 mm	Nº 8	Nº 6	20	1	4C04162	68,53
1/4 x 26	6,6 mm	Nº 9	Nº 9	20	1	4C04163	61,74
5/16 x 22	8,3 mm	Nº 11	Nº 11	20	1	4C04165	75,54
3/8 x 20	9,9 mm	Nº 12	Nº 13	15	1	4C04166	80,77
7/16 x 18	11,5 mm	Nº 14	Nº 14	10	1	4C04167	90,66
1/2 x 16	13,0 mm	Nº 15	Nº 15	10	1	4C04168	99,52
9/16 x 16		Nº 16		10	1	4C04169	132,87
5/8 x 14		Nº 18		10	1	4C04170	132,87
3/4 x 12		Nº 20		5	1	4C04172	169,35
7/8 x 11		Nº 22		5	1	4C04174	205,81
1 x 10		Nº 23		4	1	4C04176	196,30

KITS REPARADORES DE ROSCA

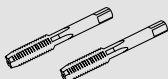


THREAD REPAIR KIT • KITS DE RÉPARATION DE FILETAGE

G(BSP)

KITS REPARADORES DE ROSCA

THREAD REPAIR KIT
KITS DE RÉPARATION DE FILETAGE




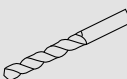
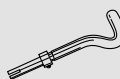


						
		x 1,5D		Uds. / Pcs.	Cod.	€/Unid.
1/8 x 28	3C08080	10		1	4C04190	121,89
1/4 x 19	3C08081	10		1	4C04191	128,26
3/8 x 19	3C08082	10		1	4C04192	142,30
1/2 x 14	3C08083	10		1	4C04193	172,66
5/8 x 14	3C08084	10		1	4C04194	406,02
3/4 x 14	3C08085	10		1	4C04195	406,02
7/8 x 14	3C08086	10		1	4C04196	557,80
1 x 11	3C08087	10		1	4C04197	557,80

M

REPARADOR DE ROSCA CON ANCLAJE DE 1/4"

1/4" SHANK REPAIR KIT
KIT DE RÉPARATION DE FILETAGE AVEC QUEU 1/4"



							
				x 1,5D	Uds. / Pcs.	Cod.	€/Unid.
M 4,00 x 0,70	4,2 mm	Nº 6	Nº 6	20	1	4C04307	49,36
M 5,00 x 0,80	5,2 mm	Nº 8	Nº 8	20	1	4C04309	51,33
M 6,00 x 1,00	6,3 mm	Nº 9	Nº 9	20	1	4C04310	55,29
M 8,00 x 1,25	8,3 mm	Nº 11	Nº 11	20	1	4C04312	70,33

Hasta fin de existencias / Until end of stock / Jusqu'à épuisement des stocks

KIT REPARADOR DE ROSCADO PARA TALLER

THREAD REPAIR WORKSHOP KITS
KITS DE RÉPARATION DE FILETAGE POUR ATÉLIERS



						Uds. / Pcs.	Cod.	€/Unid.
					x 1,5D			
M5-M 12						1	4C04081	378,94
M 5.00 x 0.80	5,2 mm	Nº 8	Nº 8	25				
M 6.00 x 1.00	6,3 mm	Nº 9	Nº 9	25				
M 8.00 x 1.25	8,3 mm	Nº 11	Nº 11	25				
M 10.00 x 1.50	10,4 mm	Nº 13	Nº 13	25				
M 12.00 x 1.75	12,4 mm	Nº 15	Nº 15	10				
M6-M 14 x 1.25 / NP						1	4C04082	420,94
M 6.00 x 1.00	6,3 mm	Nº 9	Nº 9	25				
M 8.00 x 1.25	8,3 mm	Nº 11	Nº 11	25				
M 10.00 x 1.50	10,4 mm	Nº 13	Nº 13	25				
M 12.00 x 1.75	12,4 mm	Nº 15	Nº 15	10				
M 14.00 x 1.25		Nº 17		10				
M 6 - M 14 x 1.25 / PT (*Machos Plug - Punta Piloto / *Plug Taps - Pilot Nose)						1	4C04083	434,11
M 6.00 x 1.00	6,3 mm	Nº 9	Nº 9	25				
M 8.00 x 1.25	8,3 mm	Nº 11	Nº 11	25				
M 10.00 x 1.50	10,4 mm	Nº 13	Nº 13	25				
M 12.00 x 1.75	12,4 mm	Nº 15	Nº 15	10				
M 14.00 x 1.25*		Nº 17		10				
UNC 1/4 - 1/2"						1	4C04184	473,56
UNC 1/4 x 20	6,7 mm	Nº 9	Nº 9	25				
UNC 5/16 x 18	8,3 mm	Nº 10	Nº 11	25				
UNC 3/8 x 16	9,9 mm	Nº 12	Nº 12	25				
UNC 7/16 x 14	11,6 mm	Nº 14	Nº 14	10				
UNC 1/2 x 13	13,0 mm	Nº 15	Nº 15	10				
UNF 1/4 - 1/2"						1	4C04185	473,56
UNF 1/4 x 28	6,7 mm	Nº 9	Nº 9	25				
UNF 5/16 x 24	8,3 mm	Nº 11	Nº 11	25				
UNF 3/8 x 24	9,8 mm	Nº 13	Nº 13	25				
UNF 7/16 x 20	11,5 mm	Nº 14	Nº 14	10				
UNF 1/2 x 20	13,0 mm	Nº 15	Nº 15	10				
BSW 1/4 - 1/2"						1	4C04186	473,56
BSW 1/4 x 20	6,7 mm	Nº 9	Nº 9	25				
BSW 5/16 x 18	8,3 mm	Nº 10	Nº 11	25				
BSW 3/8 x 16	9,9 mm	Nº 12	Nº 12	25				
BSW 7/16 x 14	11,5 mm	Nº 14	Nº 14	10				
BSW 1/2 x 12	13,0 mm	Nº 15	Nº 15	10				
BSF 1/4 - 1/2"						1	4C04187*	473,56
BSF 1/4 x 26	6,6 mm	Nº 9	Nº 9	25				
BSF 5/16 x 22	8,3 mm	Nº 11	Nº 11	25				
BSF 3/8 x 20	9,9 mm	Nº 12	Nº 12	25				
BSF 7/16 x 18	11,5 mm	Nº 14	Nº 14	10				
BSF 1/2 x 16		Nº 15		10				

*Hasta fin de existencias / Until end of stock / Jusqu'à épuisement des stocks


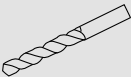



KITS REPARADORES DE ROSCA A MÁQUINA

WITH MACHINE INSERTING TOOL • COFFRET RÉPARATION AVEC DES OUTILS À MACHINE

M KIT CON HERRAMIENTAS PARA INSERTAR A MÁQUINA

WITH MACHINE INSERTING TOOL
COFFRET RÉPARATION AVEC DES OUTILS À MACHINE


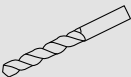





								
					x 1,5D	Uds. / Pcs.	Cod.	€/Unid.
M 3,00 x 0,50		3,2 mm	M 3	Nº 4	20	1	4C04070	62,52
M 4,00 x 0,70		4,2 mm	M 4	Nº 6	20	1	4C04071	62,52
M 5,00 x 0,80		5,2 mm	M 5	Nº 8	20	1	4C04072	64,69
M 6,00 x 1,00		6,3 mm	M 6	Nº 9	20	1	4C04073	68,72
M 8,00 x 1,25		8,3 mm	M 7	Nº 11	20	1	4C04074	88,13
M 10,00 x 1,50		10,4 mm	M 8	Nº 13	15	1	4C04075	95,14
M 12,00 x 1,75		12,4 mm	M 9	Nº 15	10	1	4C04076	106,44

M KIT CON HERRAMIENTAS PARA INSERTAR A MÁQUINA

WITH MACHINE INSERTING TOOL
COFFRET RÉPARATION AVEC DES OUTILS À MACHINE



								
					x 1,5D	Uds. / Pcs.	Cod.	€/Unid.
M5 - M12						1	4C04087	471,53
M 5,00 x 0,80		5,2 mm	M 5	Nº 8	25			
M 6,00 x 1,00		6,3 mm	M 6	Nº 9	25			
M 8,00 x 1,25		8,3 mm	M 8	Nº 11	25			
M 10,00 x 1,50		10,4 mm	M 10	Nº 13	25			
M 12,00 x 1,75		12,4 mm	M 12	Nº 15	10			



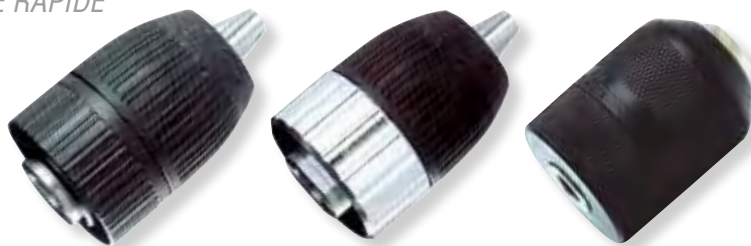
ACCESSORIES-ACCESSOIRES





ACCESORIOS

PORTABROCAS PERCUSIÓN CIERRE RÁPIDO
PERCUSSIVE DRILL AND FAST LOCK DRILL CHUCK
PERCEUSES À PERCUSSION EN FERMETURE RAPIDE



V021220

V021221

V023824

LONGITUD / LENGHT

Capacidad Range (mm)	Acople / Mount	Ø ext. (mm)	Abierto / Opened (mm)	Cerrado / Closed (mm)	Peso Weight (kg)	Uds. Pcs.	Cod.	€/Unid.
2 - 13	1/2 - 20 UNF	43	62	75	0,250	1	V021220	20,18
2 - 13	1/2 - 20 UNF	43	62	75	0,280	1	V021221	22,70
1,50 - 13	3/8 - 24 UNF	43	62	72	0,290	1	V023824	31,94

PORTABROCAS DE LLAVE
KEY TYPE CHUCK • MANDRIN FERMETURE AVEC CLÉ



LONGITUD / LENGHT

Capacidad Range (mm)	Acople / Mount	Ø ext. (mm)	Abierto / Opened (mm)	Cerrado / Closed (mm)	Peso Weight (kg)	Uds. Pcs.	Cod.	€/Unid.
1,50 - 13	1/2 - 20 UNF	42	57	70	0,34	1	V021520	41,72

LLAVE SINGLE KEY • CLÉ DE RECHANGE

Uds. / Pcs.	Cod.	€/Unid.
1	V031520	7,07



PORTABROCAS

DRILL CHUCKS • MANDRINS

PORTABROCAS ROTACIÓN CON CIERRE RÁPIDO

FAST LOCK DRILL CHUCK

MANDRIN FÉRMÉTURE RAPIDE ET AUTOAJUTABLE



Capacidad Range (mm)	Acople / Mount	Ø ext. (mm)	LONGITUD / LENGHT		Peso Weight (kg)	Uds. Pcs.	Precisión Precision (mm)	Cod.	€/Unid.
			Abierto / Opened (mm)	Cerrado / Closed (mm)					
1 - 13	1/2 - 20 UNF	44	85	95	0,73	1	0,20	V0131220	65,29
1 - 16	B - 16	51	102	115	1,09	1	0,07	V016116	72,17
1 - 16	B - 18	51	102	115	1,08	1	0,07	V018116	72,17
5 - 20	B - 22	57	105	129	1,53	1	0,18	V022520	116,32

PORTAFRESAS CONO MORSE

BUR HOLDER MORSE TAPER • QUEUE CONIQUE



Ø (mm)	Uds. / Pcs.	Cod.	€/Unid.
C.M. 2 + accesorios / C.M. 2 + accessories	1	18003	343,24
C.M. 3 + accesorios / C.M. 2 + accessories	1	18025	343,24

Portafresas con entrada para refrigerante para máquinas con base electromagnética SIN AMARRES WELDON. Permite el uso de estas fresas en tornos, fresadoras y taladros. Tool holders with internal cooling system for electromagnetic drilling machines without WELDON SHANK. It allows the use of WELDON SHANK milling cutters on lathes, milling machines and drill machines. / Porte-fraises à réfrigération interne pour machines à base électromagnétique SANS ANCRAGE WELDON. Pour l'utilisation de fraises à ancrage Weldon sur des tours, fraiseuses ou perceuses.

CONSTRUCTION • CONSTRUCTION
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WOOD • BOIS
METAL
METAL • MÉTAL
FRESADO
ROSCADO
THREADING • FILETAGE
ACCESORIOS
HEXAGONAL
HEXAGONAL • HEXAGONAL
METROLOGÍA
DISPLAYS
DISPLAYS • DISPLAYS

ESPIGAS TEMPLADAS Y RECTIFICADAS

HARDENED AND GROUNDED TAPER SHANK ARBORS
ARBRES DE MONTAGE TREMPÉS ET RECTIFIÉS



DIN 228
CONO MORSE

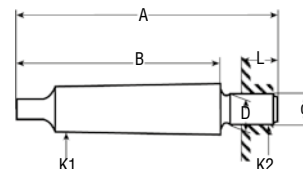
DIN 238
ESPIGA

Cono Morse / Morse Cone	Espiga / Arbor	L (mm)	Peso / Weight (Kg)	Uds. / Pcs.	Cod.	€/Unid.
1	B - 10	86	0,050	1	V2001B10	8,81
1	B - 12	88	0,060	1	V2001B12	8,81
1	B - 16	99	0,090	1	V2001B16	8,81
1	B - 18	107	0,110	1	V2001B18	8,81
2	B - 10	105	0,130	1	V2002B10	9,57
2	B - 12	106	0,140	1	V2002B12	9,40
2	B - 16	112	0,160	1	V2002B16	9,40
2	B - 18	119	0,185	1	V2002B18	9,40
3	B - 12	125	0,280	1	V2003B12	12,25
3	B - 16	130	0,300	1	V2003B16	12,25
3	B - 18	138	0,330	1	V2003B18	12,25
3	B - 22	147	0,390	1	V2003B22	12,25
4	B - 16	156	0,615	1	V2004B16	19,06
4	B - 18	164	0,635	1	V2004B18	19,06
4	B - 22	173	0,700	1	V2004B22	19,06
5	B - 18	200	1,570	1	V2005B18	31,65

Para medidas no tarifadas consultar precio y disponibilidad / Check prices and availability for no tarified articles / Demandez pour des produits non tarifiqués

DIMENSIONES APROXIMADAS ESPIGAS DE ASIENTO

SLEEVES MEASURES
DIMENSIONS DES DOUILLES DE RÉDUCTION



Cono Morse Morse Cone DIN 228 (K-1)	Cono interior del portabrocas Drill Chuck Internal Cone DIN 228 K-2)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)
1	B - 10	86	65,5	10,094	9,4	14,5
1	B - 12	88	65,5	12,065	11,1	18,5
1	B - 16	99	65,5	15,733	14,5	24,0
1	B - 18	107	65,5	17,780	16,2	32,0
2	B - 10	105	80	10,094	9,4	14,5
2	B - 12	106	80	12,065	11,1	18,5
2	B - 16	112	80	15,733	14,5	24,0
2	B - 18	119	80	17,780	16,2	32,0
3	B - 12	125	99	12,065	11,1	18,5
3	B - 16	130	99	15,733	14,5	24,0
3	B - 18	138	99	17,780	16,2	32,0
4	B - 16	156	124	15,733	14,5	24,0
4	B - 18	164	124	17,780	16,2	32,0
5	B - 16	198	156	15,733	14,5	24,0
5	B - 18	198	156	17,780	16,2	32,0

ESPIGAS Y CASQUILLOS

TAPER DRILL CHUCKS AND SLEEVES • DOUILLES ET ARBRES DE MONTAGE

CASQUILLOS REDUCTORES TEMPLADOS Y RECTIFICADOS

HARDENED AND GROUND SLEEVES

DOUILLES DE RÉDUCTION TREMPÉS ET RECTIFIÉS

DIN 2185



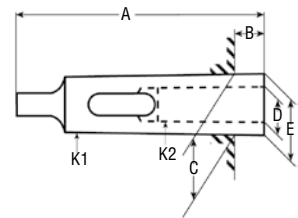
Exterior / External	Interior / Internal	L (mm)	Peso / Weight (Kg)	Uds. / Pcs.	Cod.	€/Unid.
2	1	92	0,090	1	V1000021	18,20
3	1	99	0,205	1	V1000031	19,51
3	2	112	0,180	1	V1000032	19,51
3*	2	195	0,470	1	V1000L32	39,00
4	1	124	0,500	1	V1000041	22,75
4	2	124	0,430	1	V1000042	22,75
4	3	140	0,385	1	V1000043	22,75
5	1	155	1,400	1	V1000051	55,28
5	2	157	1,340	1	V1000052	55,28
5	3	157	1,150	1	V1000053	63,94
5	4	170	1,010	1	V1000054	69,17
5*	4	300	2,071	1	V1000L54	138,34
6	3	218	3,790	1	V1000063	109,01
6	4	218	3,450	1	V1000064	121,06
6	5	218	3,450	1	V1000065	125,89

* Casquillos serie larga / Long series / Série longue

DIMENSIONES APROXIMADAS CASQUILLOS REDUCTORES

TAPER SHANK ARBOR MEASURES

DIMENSIONS DES ARBRES DE MONTAGE



CONO MORSE / MORSE CONE		A (mm)	B (mm)	C (mm)	D (mm)	E (mm)
Exterior / External (K-1)	Interior / Internal (K-2)					
2	1	92	17,0	17,780	12,065	18,6
3	1	99	5,0	23,825	12,065	24,1
3	2	112	18,0	23,825	17,780	24,7
4	1	124	6,5	31,267	12,065	31,6
4	2	124	6,5	31,267	17,780	31,6
4	3	140	22,5	31,267	23,825	32,4
5	1	156	6,5	44,399	12,065	44,7
5	2	156	6,5	44,399	17,780	44,7
5	3	156	6,5	44,399	23,825	44,7
5	4	170	21,5	44,399	31,267	45,5
6	2	218	8,0	63,348	17,780	63,8
6	3	218	8,0	63,348	23,825	63,8
6	4	218	8,0	63,348	31,267	63,8
6	5	218	8,0	63,348	44,399	63,8

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HEXAGONAL
HEXAGONAL • HEXAGONAL
METROLOGÍA
DISPLAYS • DISPLAYS

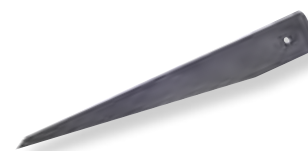
CASQUILLOS AUMENTADORES TEMPLADOS Y RECTIFICADOS

 HARDENED AND GROUNDED EXTENSION SLEEVES
 DOUILLES RALLONGÉS TREMPÉS ET RECTIFIÉS


Exterior / External	Interior / Internal	L (mm)	Peso / Weight (Kg)	Uds. / Pcs.	Cod.	€/Unid.
2	3	195	0,69	1	V1L00032	46,81
3	4	239	1,54	1	V1L00043	53,49

CUÑAS PARA CASQUILLOS

EXTRACTION WEDGE • ÉCROUS D'EXTRACTION



DIN 317

Utilidad / Utility	Uds. / Pcs.	Cod.	€/Unid.
Para Conos Morse Nº 1 y Nº 2 / For Morse taper Nº 1 y Nº 2	1	VC31712	7,90
Para Conos Morse Nº 3 / For Morse taper Nº 3	1	VC31703	12,97
Para Conos Morse Nº 4 y Nº 5 / For Morse taper Nº 4 y Nº 5	1	VC31704	16,71

TOPES DE PROFUNDIDAD PARA BROCAS

DEPTH ADJUSTING COLLAR • BUTÉES DE PERÇAGE

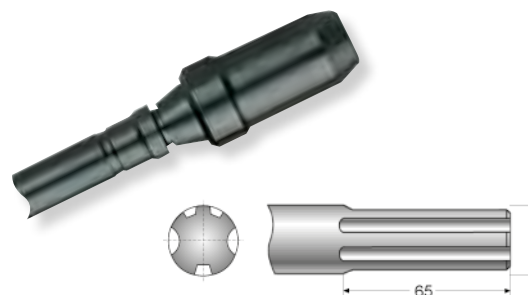


Ø (mm)	Gama de medidas / Range (mm)	Uds. / Pcs.	Cod.	€/Unid.
3,5	De 2,0 a 3,5	1	Y10035	3,73
5,0	De 4,0 a 5,0	1	Y10050	4,27
6,5	De 5,5 a 6,5	1	Y10065	5,07
8,0	De 7,0 a 8,0	1	Y10080	5,07
10,0	De 8,5 a 10,0	1	Y10100	5,07
12,0	De 10,5 a 12,0	1	Y10120	5,07

CONVERSOR DE ANCLAJE SDS-MAX A SDS-PLUS

 CONVERTOR FROM SDS-MAX SHANK TO SDS-PLUS
 CONVERTEUR DE SDS-MAX A SDS-PLUS


L1 (mm)	Uds. / Pcs.	Cod.	€/Unid.
225	1	1C02250	131,97


 Para taladros con sistema SDS-MAX, HILTI Y-Groove y Licencia Bosch.
 Drills with SDS-MAX, HILTI Y-Groove and Bosch License system
 Perceuse avec système SDS-MAX, HILTI Y-Groove et Bosch Licence.

ELEMENTOS DE UNIÓN Y ÚTILES DE SUJECCIÓN

ADAPTERS • ADAPTATEURS

ELEMENTOS DE UNIÓN Y ÚTILES DE SUJECCIÓN

ADAPTERS • ADAPTATEURS



V945212
V945024

264 000 001

V945138

V930001

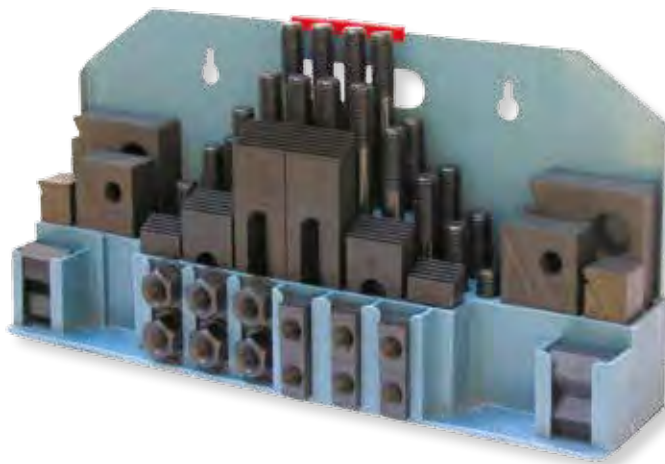
V931021


V931121
V935816

Conversión / System	Uds. / Pcs.	Cod.	€/Unid.
SDS-PLUS a 1/2" - 20 H (M6 Izq.) / From SDS-PLUS to Thread 1/2" - 20 tpi (M6 LH)	1	V945212	13,37
SDS-PLUS a 3/8" - 24 H (M4 Izq.) / From SDS-PLUS to Thread 3/8" - 24 tpi (M4 LH)	1	V945024	13,37
TORNILLO REPUESTO M6 Izq. / Replacement Screw M6 LH	1	V945406	1,59
TORNILLO REPUESTO M4 Izq. / Replacement Screw M4 LH	1	V945404	1,59
SDS-plus a hexag. 1/4" / From SDS-PLUS to 1/4"	1	264 000 001	26,21
HEXAGONAL 1/4" a 3/8" - 24 H / From HEXAGONAL 1/4" to thread 3/8" - 24tpi	1	V945138	5,35
Rosca 3/8" - 24 H / Thread 3/8" 24 tpi	1	V930001	2,00
Rosca 3/8" - 24 H a 1/2" - 20 H / From Thread 3/8" 24 tpi to Thread 1/2" 20 tpi	1	V931021	4,45
Rosca 1/2" - 20 H a 3/8" - 24 H / From Thread 1/2 - 20 tpi to 3/8 - 24 tpi	1	V931121	7,64
Rosca 5/8" - 16 H a 1/2" - 20 H / Thread 5/8" - 16tpi to 1/2" - 20 tpi	1	V935816	4,45

ÚTILES DE SUJECCIÓN CONJUNTO DE 52 PIEZAS

CLAMPING TOOLS - 52 PCS. KIT • OUTILS DE FIXATION - 52 PCS.



Ref.	Rosca / Thread		Uds. / Pcs.	Cod.	€/Unid.
RH. M - 10	M 10	12,00 mm	1	V40RHM10	180,53
RH. M - 12	M 12	14,00 mm	1	V40RHM12	187,22
RH. M - 14	M 14	16,00 mm	1	V40RHM14	199,25
RH. M - 16	M 16	18,00 mm	1	V40RHM16	227,33

Hasta fin de existencias / Until end of stock / Jusqu'à épuisement des stocks

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MARCADOR INDUSTRIAL INDELEBLE TEXPEN
STEEL TIP PAINT MARQUER • MARQUEUR MÉTAL PERMANENT

Contenido / Content	Uds. / Pcs.	Cod.	Color	€/Unid.
26 ml	12	K38011		9,31
26 ml	12	K38021		9,31
26 ml	12	K38031		9,31
26 ml	12	K38041		9,31
26 ml	12	K38051		9,31

DYKEM



Marcador industrial indeleble / Industrial permanent marker / Marqueur permanent industriel
 Válido para superficies rugosas y grasientas / Useful for rough surfaces / Utilisable sur surfaces rugueuses ou grasses
 Tubo rígido de fácil manejo / Rigid tube for a easy use / Tube rigide pour une manipulation aisée
 Resistente a caídas y golpes / Strong to falls / Robuste, anti-chocs



CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

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METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES







HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • METROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

MARCADORES
MARQUERS • MARQUEURS

MARCADOR CELULOSA INDELEBLE BRITE-MARK
VALVE ACTION PAINT MARQUER • MARQUEUR PERMANENT

Contenido / Content	Uds. / Pcs.	Cod.	Color	€/Unid.
26 ml	12	K37011		8,25
26 ml	12	K37021		8,25
26 ml	12	K37031		8,25
26 ml	12	K37041		8,25
26 ml	12	K37051		8,25
26 ml	12	K37061		8,25

DYKEM



ACEITE DE CORTE Y ROSCADO
CUTTING AND TAPPING FLUID
FLUIDE POUR FILETAGE ET DE COUP

Contenido / Content	Uds.	Cod	€/Unid.
400 ml	1	1AC4000	18,19

Metales duros y blandos. Alto poder refrigerante y anticorrosivo.
Suitable for hard and soft metals. High refrigerating and anti-corrosion capacity.
Métaux doux et durs. Haut pouvoir anticorrosion.



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METROLOGÍA
DISPLAYS
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NOVEDADES 

- ESTUCHES brocas pala

NEW FEATURES 

- *Flat drill bit SETS*

NOUVEAUTÉS 

- *FCOFFRETS méche plate*



HEXAGONAL-HEXAGONAL



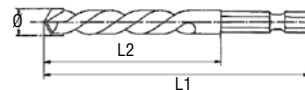


HEXAGONAL



JX PORCELANATO

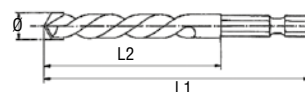
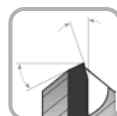
JX PORCELAIN • JX GRÈS CÉRAMIQUE



Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
4	95	50	1	1102010495	7,41
5	95	50	1	1102010595	8,42
6	100	55	1	1102016100	9,44

MULTIUSOS

MULTIPURPOSE • MULTI USAGE



Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
4	85	35	1	1HX0040	5,97
5	90	40	1	1HX0050	6,30
6	100	50	1	1HX0060	6,82

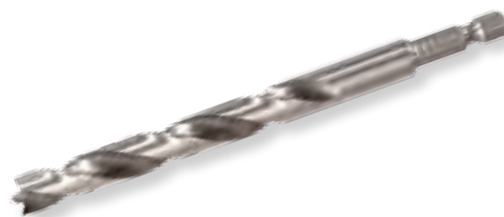
Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
8	120	65	1	1HX0080	7,82
10	120	65	1	1HX0100	11,15
12	140	85	1	1HX0120	14,97

BROCAS ANCLAJE HEXAGONAL

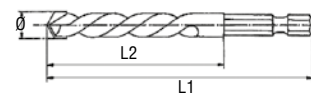
HEXAGONAL SHANK DRILL BITS • FORETS QUEUE HEXAGONALE

BROCA 3 PUNTAS PARA MADERA HSS-G

HSS-G 3 POINT WOOD DRILL BIT
FORET A BOIS 3 POINTES HSS-G



HSS-G

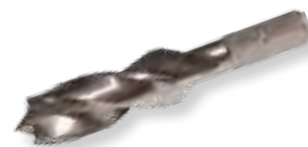


Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
3	61	34	1	120106003	3,84
4	75	50	1	120106004	3,96
5	86	60	1	120106005	4,02

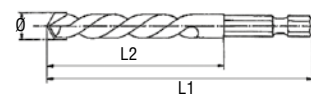
Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
6	93	68	1	120106006	4,02
8	115	90	1	120106008	4,21
10	132	107	1	120106010	4,64

BROCA 3 PUNTAS PARA MADERA HSS-G SERIE CORTA

HSS-G 3 POINT WOOD DRILL BIT SHORT SERIES
FORET A BOIS 3 POINTE HSS-G SERIE COURTE



HSS-G



Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
3	39	22	1	3R67630	6,44
4	43	26	1	3R67640	6,44
5	48	31	1	3R67650	6,44

Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
6	49	33	1	3R67660	7,22
8	50	37	1	3R67680	8,09
10	53	40	1	3R67698	9,78

CONSTRUCCIÓN
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METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

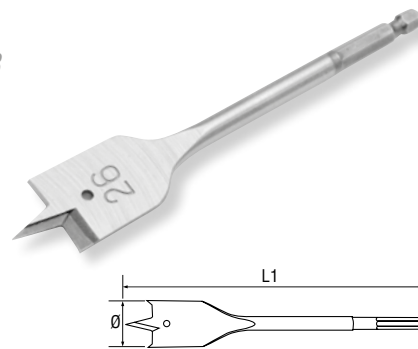
ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
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BROCA PALA TIPO B *FLAT DRILL BIT TYPE B • MÉCHE PLATE TIPE B*



Ø (mm)	L1 (mm)	Mango / Shank Ø (mm)	Uds. Pcs.	Cod.	€/Unid.
6,00	157	6,5	1	103006	1,79
8,00	157	6,5	1	103008	1,79
10,00	157	6,5	1	103010	1,89
12,00	157	6,5	1	103012	2,28
14,00	157	6,5	1	103014	2,53
15,00	157	6,5	1	103015	2,53
16,00	157	6,5	1	103016	2,56
17,00	157	6,5	1	103017	2,68
18,00	157	6,5	1	103018	2,71
19,00	157	6,5	1	103019	2,79
20,00	157	6,5	1	103020	2,95
22,00	157	6,5	1	103022	3,45

Ø (mm)	L1 (mm)	Mango / Shank Ø (mm)	Uds. Pcs.	Cod.	€/Unid.
24,00	157	6,5	1	103024	3,78
25,00	157	6,5	1	103025	3,94
26,00	157	6,5	1	103026	4,18
28,00	157	6,5	1	103028	4,52
30,00	157	6,5	1	103030	4,71
32,00	157	6,5	1	103032	4,83
33,00	157	6,5	1	103033	5,25
34,00	157	6,5	1	103034	5,44
35,00	157	6,5	1	103035	6,15
36,00	157	6,5	1	103036	6,23
38,00	157	6,5	1	103038	6,56
40,00	157	6,5	1	103040	6,89

ESTUCHE BROCAS PALA TIPO B

FLAT DRILL BIT SET TYPE B • COFFRET MÉCHE PLATE TIPE B

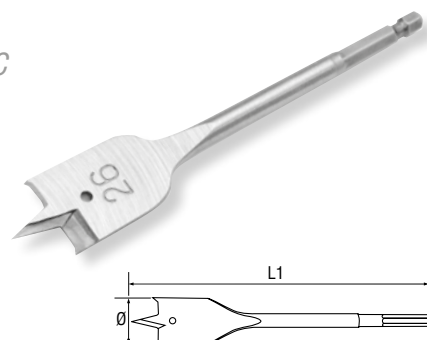
Ref.	Medidas / Sizes	Tipo / Type	€/Unid.
PB13	6-8-10-12-13-14-16-18-19-20-22-24-25	B	34,70



BROCAS PARA MADERA

WOOD DRILL BITS • FORETS À BOIS

BROCA PALA TIPO C *FLAT DRILL BIT TYPE C • MÉCHE PLATE TYPE C*



Ø (mm)	L1 (mm)	Mango / Shank Ø (mm)	Uds. Pcs.	Cod.	€/Unid.
6,00	152	6,5	1	103C06	2,05
8,00	152	6,5	1	103C08	2,05
9,00	152	6,5	1	103C09	2,12
10,00	152	6,5	1	103C10	2,28
11,00	152	6,5	1	103C11	2,46
12,00	152	6,5	1	103C12	2,59
13,00	152	6,5	1	103C13	2,64
14,00	152	6,5	1	103C14	2,77
15,00	152	6,5	1	103C15	2,97
16,00	152	6,5	1	103C16	3,01
18,00	152	6,5	1	103C18	3,09
19,00	152	6,5	1	103C19	3,19
20,00	152	6,5	1	103C20	3,30
22,00	152	6,5	1	103C22	3,54

Ø (mm)	L1 (mm)	Mango / Shank Ø (mm)	Uds. Pcs.	Cod.	€/Unid.
23,00	152	6,5	1	103C23	3,82
24,00	152	6,5	1	103C24	3,98
25,00	152	6,5	1	103C25	4,39
26,00	152	6,5	1	103C26	4,54
28,00	152	6,5	1	103C28	5,02
30,00	152	6,5	1	103C30	5,31
32,00	152	6,5	1	103C32	5,54
33,00	152	6,5	1	103C33	5,76
34,00	152	6,5	1	103C34	5,97
35,00	152	6,5	1	103C35	6,26
36,00	152	6,5	1	103C36	6,61
38,00	152	6,5	1	103C38	6,96
40,00	152	6,5	1	103C40	7,23

ESTUCHE BROCAS PALA TIPO C

FLAT DRILL BIT SET TYPE C • COFFRET MÉCHE PLATE TYPE C

Ref.	Medidas / Sizes	Tipo / Type	€/Unid.
PC13	6-8-10-12-13-14-16-18-19-20-22-24-25	C	38,89



CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

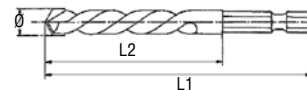
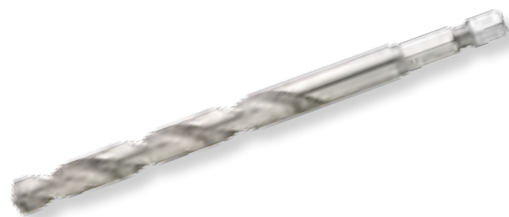
HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

BROCA METAL HSS-G

HSS-G METAL DRILL BIT • FORETS METAL HSS-G

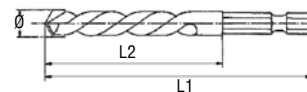


Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
3	62	35	1	130132003	4,52
4	75	50	1	130132004	4,98
5	85	60	1	130132005	5,18

Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
6	94	68	1	130132006	5,58
8	117	90	1	130132008	6,08

BROCA METAL HSS-G SERIE CORTA

HSS-G METAL DRILL BIT SHORT SERIES
FORETS METAL HSS-G SÉRIE COURTE



Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
1,0	32	7	1	3R67110	6,80
1,5	32	10	1	3R67115	6,80
2,0	34	12	1	3R67120	6,80
2,5	36	14	1	3R67125	6,80
3,0	38	16	1	3R67130	6,80
3,3	40	18	1	3R67133	6,80
3,5	40	18	1	3R67135	6,80
4,0	44	20	1	3R67140	6,80
4,2	45	20	1	3R67142	6,80
4,5	46	24	1	3R67145	6,80
5,0	50	26	1	3R67150	6,80
5,5	50	26	1	3R67155	7,43

Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
6,0	50	26	1	3R67160	7,43
6,5	50	30	1	3R67165	7,43
6,8	50	30	1	3R67168	7,43
7,0	50	30	1	3R67170	7,43
7,5	51	32	1	3R67175	8,67
8,0	51	32	1	3R67180	8,67
8,5	53	33	1	3R67185	8,67
9,0	53	33	1	3R67190	10,41
9,5	54	38	1	3R67195	10,41
10,0	54	38	1	3R67198	10,41
10,2	54	38	1	3R67199	10,41

ESTUCHE DE BROCAS

DRILL BITS SET
COFFRET FORETS



Medidas / Sizes

De 1,0 a 10,0 x 0,5 mm

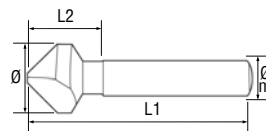
Uds. / Pcs.	Cod.	€/Unid.
19	3R67100	104,60

AVELLANADORES

COUNTERSINKS • CHANFRENEUR

AVELLANADORES 90°

COUNTERSINK HSS 90° • CHANFRENEUR HSS 90°



HSS-G



90°

Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
6,3	31	2,0 a 5,7	1	3R67306	17,53
8,3	31	2,5 a 7,6	1	3R67308	17,53
10,4	34	3,0 a 9,7	1	3R67310	18,88

Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs.	Cod.	€/Unid.
12,4	35	3,2 a 12,0	1	3R67312	19,87
16,5	40	3,6 a 16,0	1	3R67316	22,30
20,5	41	4,0 a 20,0	1	3R67320	25,26

CJTO. AVELLANADORES
C/ADAPTADOR Y MANGO
COUNTERSINK SET
COFFRET CHANFRENEURS



Medidas / Sizes

6,3, 8,3, 10,4, 12,4,
16,5, 20,5 mm

Uds. / Pcs.	Cod.	€/Unid.
8	3R67423	82,58

CONSTRUCCIÓN
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HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

M MACHO CON ANCLAJE DE 1/4"

1/4" SHANK TAPS
TARAUDS MÉCHE 1/4"



HSS-G

DIN 13



Ø (mm)	L1	L2	Uds. / Pcs.	Cod.	€/Unid.
M 3,00 x 0,50	33,0	11	1	3R67026	6,67
M 3,50 x 0,60	33,5	10	1	3R67028	10,20
M 4,00 x 0,70	35,0	12	1	3R67030	6,67
M 4,50 x 0,75	35,0	12	1	3R67032	10,20
M 5,00 x 0,80	36,0	15	1	3R67034	8,63
M 5,50 x 0,90	35,0	15	1	3R67036	11,48
M 6,00 x 1,00	39,0	18	1	3R67038	8,63
M 7,00 x 1,00	37,5	16	1	3R67040	11,48
M 8,00 x 1,25	40,0	19	1	3R67042	12,76
M 9,00 x 1,25	40,5	18	1	3R67044	19,14
M 10,00 x 1,50	41,0	21	1	3R67046	14,81

ESTUCHE MACHOS MANGO HEXAGONAL HSS-G

HSS-G HEXAGON SHANK TAPS SET
COFFRET DE TARAUDS HEXAGONALES HSS-G



Medidas / Sizes

M 3, 4, 5, 6, 8, 10 mm

Uds. / Pcs.	Cod.	€/Unid.
7	3R67010	59,52

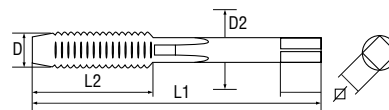
Métrica Dimensions	M 3	M 4	M 5	M 6	M 8	M 10
Ø Broca previa Core hole dia	2,5 mm	3,3 mm	4,2 mm	5,0 mm	6,8 mm	8,5 mm
Nº de revoluciones RPM	Regulación más baja (0 – 450 revoluciones/min.) Lowest setting (0 - 450 RPM)					
Par de giro Torque	Regulación máxima Maximum setting					

MACHOS ANCLAJE HEXAGONAL

TAPS HEXAGON SHANK • TARAUDS HEXAGONALES

M MACHOS COMBINADOS HSS-G

HSS-G COMBINED TAPS
TARAUDS COMBINÉS HSS-G



Macho / Tap Ø (mm)	Broca / Drill Bit Ø (mm)	L1 (mm)	L2 (mm)	Uds. / Pcs,	Cod,	€/Unid.
M 3,00 x 0,50	2,5	36	18	1	3R67226	16,50
M 4,00 x 0,70	3,3	39	23	1	3R67230	16,50
M 5,00 x 0,80	4,2	41	25	1	3R67234	16,50
M 6,00 x 1,00	5,0	44	27	1	3R67238	16,50
M 8,00 x 1,25	6,8	50	35	1	3R67242	23,59
M 10,00 x 1,50	8,5	59	42	1	3R67246	28,29

ESTUCHE MACHOS COMBINADOS HSS-G

HSS-G COMBINED TAPS SET
COFFRET TARAUDS COMBINÉS HSS-G



Medidas / Sizes

M 3, 4, 5, 6, 8, 10 (mm).

Uds. / Pcs.	Cod.	€/Unid.
7	3R67200	122,74

CONSTRUCCIÓN
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ACCESSORIES • ACCESSOIRES

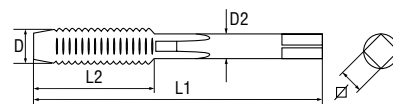
HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

M MÉTRICA ISO-ROSCA DIN 13

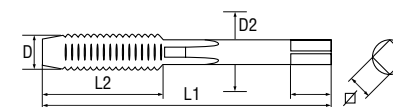
METRIC ISO-THREAD DIN 13
MÉTRIQUE DIN-13



D Ø x P (mm)	D 1 (mm)	L1 (mm)	Cod.	€/Unid.
M 3 x 0,50	2,5	36	3R67210	33,76
M 4 x 0,70	3,3	39	3R67211	33,76
M 5 x 0,80	4,2	41	3R67212	33,76
M 6 x 1,00	5,0	44	3R67213	33,76
M 8 x 1,25	6,8	50	3R67214	45,32
M 10 x 1,50	8,5	59	3R67215	62,51

UNC ROSCA GRUESA UNIFICADA ANSI B 1.1

UNIFIED COARSE THREAD ANSI B 1.1
FILETAGE UNIFIÉ PAS GROS ANSI B 1.1



D Ø x P (")	D 1 (mm)	L1 (mm)	Cod.	€/Unid.
Nr. 4 x 40	2.30	36	3R67280	23,44
Nr. 5 x 40	2.60	36	3R67281	23,44
Nr. 6 x 32	2.85	39	3R67282	23,44
Nr. 8 x 32	3.50	39	3R67283	23,44
Nr. 10 x 24	3.90	41	3R67284	23,44
Nr. 12 x 24	4.50	41	3R67285	23,44
1/4 x 20	5.20	44	3R67286	23,44
5/16 x 18	6.60	50	3R67287	32,81
3/8 x 16	8.00	59	3R67288	39,38

MACHOS ANCLAJE HEXAGONAL

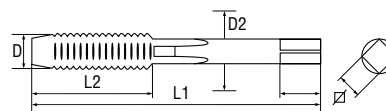
TAPS HEXAGON SHANK • TARAUDS HEXAGONALES

UNF ROSCA FINA UNIFICADA ANSI B 1.1

UNIFIED FINE THREAD ANSI B 1.1
FILETAGE UNIFIÉ PAS GROS ANSI B 1.1



HSS-G



D Ø x P (")	D 1 (mm)	L1 (mm)	Cod.	€/Unid.
Nr. 4 x 48	2.4	36	3R67290	23,44
Nr. 5 x 44	2.7	36	3R67291	23,44
Nr. 6 x 40	3.0	39	3R67292	23,44
Nr. 8 x 36	3.5	39	3R67293	23,44
Nr. 10 x 32	4.1	41	3R67294	23,44
Nr. 12 x 28	4.7	41	3R67295	23,44
1/4 x 28	5.5	44	3R67296	23,44
5/16 x 24	6.9	50	3R67297	32,81
3/8 x 24	8.5	59	3R67298	39,38

M REPARADOR DE ROSCA CON ANCLAJE DE 1/4"

1/4" SHANK REPAIR KIT
KIT DE RÉPARATION DE FILETAGE AVEC QUEU 1/4"



					x 1,5D	Uds. / Pcs.	Cod.	€/Unid.
M 4,00 x 0,70	4,2 mm	Nº 6	Nº 6		20	1	4C04307	49,36
M 5,00 x 0,80	5,2 mm	Nº 8	Nº 8		20	1	4C04309	51,33
M 6,00 x 1,00	6,3 mm	Nº 9	Nº 9		20	1	4C04310	55,29
M 8,00 x 1,25	8,3 mm	Nº 11	Nº 11		20	1	4C04312	70,33

Hasta fin de existencias / Until end of stock / Jusqu'à épuisement des stocks

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

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METAL
METAL • METAL

FRESADO
MILLING • FRAISAGE

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THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

PH **EXTRA**



Forma / Form	Calidad / Quality	Uds. / Pcs.	Cod.	€/Envase
PH - 1 x 25	EXTRA	100	NMOPH1	83,90
PH - 2 x 25	EXTRA	100	NMOPH2	83,90
PH - 3 x 25	EXTRA	100	NMOPH3	83,90
PH - 4 x 32	EXTRA	50	NMOPH4	148,57

Forma / Form	Calidad / Quality	Uds. / Pcs.	Cod.	€/Envase
PH - 1 x 50	EXTRA	50	NNOPH1	89,14
PH - 2 x 50	EXTRA	50	NNOPH2	89,14
PH - 3 x 50	EXTRA	50	NNOPH3	89,14

PH **EXTRA**



Forma / Form	Calidad / Quality	Uds. / Pcs.	Cod.	€/Envase
PH - 1 x 25	EXTRA	10	NMCPH1	10,56
PH - 2 x 25	EXTRA	10	NMCPH2	10,56
PH - 3 x 25	EXTRA	10	NMCPH3	10,56
PH - 4 x 32	EXTRA	10	NMCPH4	31,74

Forma / Form	Calidad / Quality	Uds. / Pcs.	Cod.	€/Envase
PH - 1 x 50	EXTRA	5	NNCPH1	11,03
PH - 2 x 50	EXTRA	5	NNCPH2	11,03
PH - 3 x 50	EXTRA	5	NNCPH3	11,03

PH **TIN**



Forma / Form	Calidad / Quality	Uds. / Pcs.	Cod.	€/Envase
PH - 1 x 25	TIN - CVD	100	NM1PH1	260,42
PH - 2 x 25	TIN - CVD	100	NM1PH2	260,42
PH - 3 x 25	TIN - CVD	100	NM1PH3	260,42

Forma / Form	Calidad / Quality	Uds. / Pcs.	Cod.	€/Envase
PH - 1 x 50	TIN - CVD	50	NN1PH1	213,24
PH - 2 x 50	TIN - CVD	50	NN1PH2	213,24
PH - 3 x 50	TIN - CVD	50	NN1PH3	213,24

PH **TIN**



Forma / Form	Calidad / Quality	Uds. / Pcs.	Cod.	€/Envase
PH - 1 x 25	TIN - CVD	10	NMTPH1	28,21
PH - 2 x 25	TIN - CVD	10	NMTPH2	28,21
PH - 3 x 25	TIN - CVD	10	NMTPH3	28,21

Forma / Form	Calidad / Quality	Uds. / Pcs.	Cod.	€/Envase
PH - 1 x 50	TIN - CVD	5	NNTPH1	23,02
PH - 2 x 50	TIN - CVD	5	NNTPH2	23,02
PH - 3 x 50	TIN - CVD	5	NNTPH3	23,02

HEX **EXTRA**



Forma / Form	Calidad / Quality	Uds. / Pcs.	Cod.	€/Envase
HEX 2,0 x 25	EXTRA	50	NSOH20	63,53
HEX 2,5 x 25	EXTRA	50	NSOH25	63,53
HEX 3,0 x 25	EXTRA	100	NSOH30	127,05
HEX 4,0 x 25	EXTRA	100	NSOH40	127,05
HEX 5,0 x 25	EXTRA	100	NSOH50	127,05
HEX 6,0 x 25	EXTRA	100	NSOH60	127,05

Forma / Form	Calidad / Quality	Uds. / Pcs.	Cod.	€/Envase
HEX 2,0 x 50	EXTRA	25	NTOH20	65,34
HEX 2,5 x 50	EXTRA	25	NTOH25	65,34
HEX 3,0 x 50	EXTRA	50	NTOH30	130,68
HEX 4,0 x 50	EXTRA	50	NTOH40	130,68
HEX 5,0 x 50	EXTRA	50	NTOH50	130,68
HEX 6,0 x 50	EXTRA	50	NTOH60	130,68

HEX **EXTRA**



Forma / Form	Calidad / Quality	Uds. / Pcs.	Cod.	€/Envase
HEX 2,0 x 25	EXTRA	10	NSCH20	14,90
HEX 2,5 x 25	EXTRA	10	NSCH25	14,90
HEX 3,0 x 25	EXTRA	10	NSCH30	14,90
HEX 4,0 x 25	EXTRA	10	NSCH40	14,90
HEX 5,0 x 25	EXTRA	10	NSCH50	14,90
HEX 6,0 x 25	EXTRA	10	NSCH60	14,90

Forma / Form	Calidad / Quality	Uds. / Pcs.	Cod.	€/Envase
HEX 2,0 x 50	EXTRA	5	NTCH20	15,24
HEX 2,5 x 50	EXTRA	5	NTCH25	15,24
HEX 3,0 x 50	EXTRA	5	NTCH30	15,24
HEX 4,0 x 50	EXTRA	5	NTCH40	15,24
HEX 5,0 x 50	EXTRA	5	NTCH50	15,24
HEX 6,0 x 50	EXTRA	5	NTCH60	15,24

PUNTAS DE ATORNILLAR 1/4"

1/4" SCREWDRIVER BITS • ÉMBOUTS 1/4"

PZ **EXTRA**



Forma / Form	Calidad / Quality	Uds. / Pcs.	Cod.	€/Envase
PZ - 1 x 25	EXTRA	100	NPOPZ1	83,90
PZ - 2 x 25	EXTRA	100	NPOPZ2	83,90
PZ - 3 x 25	EXTRA	100	NPOPZ3	83,90
PZ - 4 x 32	EXTRA	50	NPOPZ4	145,19

Forma / Form	Calidad / Quality	Uds. / Pcs.	Cod.	€/Envase
PZ - 1 x 50	EXTRA	50	NQOPZ1	89,14
PZ - 2 x 50	EXTRA	50	NQOPZ2	89,14
PZ - 3 x 50	EXTRA	50	NQOPZ3	89,14

PZ **EXTRA**



Forma / Form	Calidad / Quality	Uds. / Pcs.	Cod.	€/Envase
PZ - 1 x 25	EXTRA	10	NPCPZ1	10,56
PZ - 2 x 25	EXTRA	10	NPCPZ2	10,56
PZ - 3 x 25	EXTRA	10	NPCPZ3	10,56
PZ - 4 x 32	EXTRA	10	NPCPZ4	32,23

Forma / Form	Calidad / Quality	Uds. / Pcs.	Cod.	€/Envase
PZ - 1 x 50	EXTRA	5	NQCPZ1	11,03
PZ - 2 x 50	EXTRA	5	NQCPZ2	11,03
PZ - 3 x 50	EXTRA	5	NQCPZ3	11,03

PZ **TIN**



Forma / Form	Calidad / Quality	Uds. / Pcs.	Cod.	€/Envase
PZ - 1 x 25	TIN - CVD	100	NP1PZ1	260,42
PZ - 2 x 25	TIN - CVD	100	NP1PZ2	260,42
PZ - 3 x 25	TIN - CVD	100	NP1PZ3	260,42

Forma / Form	Calidad / Quality	Uds. / Pcs.	Cod.	€/Envase
PZ - 1 x 50	TIN - CVD	50	NQT1Z1	213,24
PZ - 2 x 50	TIN - CVD	50	NQT1Z2	213,24
PZ - 3 x 50	TIN - CVD	50	NQT1Z3	213,24

PZ **TIN**



Forma / Form	Calidad / Quality	Uds. / Pcs.	Cod.	€/Envase
PZ - 1 x 25	TIN - CVD	10	NPTPZ1	28,21
PZ - 2 x 25	TIN - CVD	10	NPTPZ2	28,21
PZ - 3 x 25	TIN - CVD	10	NPTPZ3	28,21

Forma / Form	Calidad / Quality	Uds. / Pcs.	Cod.	€/Envase
PZ - 1 x 50	TIN - CVD	5	NQTPZ1	23,46
PZ - 2 x 50	TIN - CVD	5	NQTPZ2	23,46
PZ - 3 x 50	TIN - CVD	5	NQTPZ3	23,46

R-CUADRADA **EXTRA**
R-SQUARE
R-CARRÉ



Forma / Form	Calidad / Quality	Uds. / Pcs.	Cod.	€/Envase
R - 1 x 25	EXTRA	50	NU00R1	69,89
R - 2 x 25	EXTRA	50	NU00R2	69,89
R - 3 x 25	EXTRA	50	NU00R3	69,89

Forma / Form	Calidad / Quality	Uds. / Pcs.	Cod.	€/Envase
R - 1 x 50	EXTRA	25	NV00R1	92,11
R - 2 x 50	EXTRA	25	NV00R2	92,11
R - 3 x 50	EXTRA	25	NV00R3	92,11

R-CUADRADA **EXTRA**
R-SQUARE
R-CARRÉ



Forma / Form	Calidad / Quality	Uds. / Pcs.	Cod.	€/Envase
R - 1 x 25	EXTRA	10	NUOCR1	9,06
R - 2 x 25	EXTRA	10	NUOCR2	9,06
R - 3 x 25	EXTRA	10	NUOCR3	9,06

Forma / Form	Calidad / Quality	Uds. / Pcs.	Cod.	€/Envase
R - 1 x 50	EXTRA	5	NVOCR1	20,58
R - 2 x 50	EXTRA	5	NVOCR2	20,58
R - 3 x 50	EXTRA	5	NVOCR3	20,58

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • METAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

TORX



Forma / Form	Calidad / Quality	Uds. / Pcs.	Cod.	€/Envase
T - 6 x 25	EXTRA	50	NJOT06	103,12
T - 7 x 25	EXTRA	50	NJOT07	103,12
T - 8 x 25	EXTRA	50	NJOT08	103,12
T - 9 x 25	EXTRA	50	NJOT09	103,12
T - 10 x 25	EXTRA	100	NJOT10	173,04
T - 15 x 25	EXTRA	100	NJOT15	173,04
T - 20 x 25	EXTRA	100	NJOT20	173,04
T - 25 x 25	EXTRA	100	NJOT25	173,04
T - 27 x 25	EXTRA	100	NJOT27	173,04
T - 30 x 25	EXTRA	100	NJOT30	173,04
T - 40 x 25	EXTRA	100	NJOT40	173,04
Forma / Form	Calidad / Quality	Uds. / Pcs.	Cod.	€/Envase
T - 10 x 50	EXTRA	50	NKOT10	243,22
T - 15 x 50	EXTRA	50	NKOT15	243,22
T - 20 x 50	EXTRA	50	NKOT20	243,22
T - 25 x 50	EXTRA	50	NKOT25	243,22
T - 27 x 50	EXTRA	50	NKOT27	243,22
T - 30 x 50	EXTRA	50	NKOT30	243,22
T - 40 x 50	EXTRA	50	NKOT40	243,22

TORX



Forma / Form	Calidad / Quality	Uds. / Pcs.	Cod.	€/Envase
T - 6 x 25	EXTRA	10	NJCT06	23,19
T - 7 x 25	EXTRA	10	NJCT07	23,19
T - 8 x 25	EXTRA	10	NJCT08	23,19
T - 9 x 25	EXTRA	10	NJCT09	23,19
T - 10 x 25	EXTRA	10	NJCT10	19,33
T - 15 x 25	EXTRA	10	NJCT15	19,33
T - 20 x 25	EXTRA	10	NJCT20	19,33
T - 25 x 25	EXTRA	10	NJCT25	19,33
T - 27 x 25	EXTRA	10	NJCT27	19,33
T - 30 x 25	EXTRA	10	NJCT30	19,33
T - 40 x 25	EXTRA	10	NJCT40	19,33
Forma / Form	Calidad / Quality	Uds. / Pcs.	Cod.	€/Envase
T - 10 x 50	EXTRA	5	NKCT10	26,51
T - 15 x 50	EXTRA	5	NKCT15	26,51
T - 20 x 50	EXTRA	5	NKCT20	26,51
T - 25 x 50	EXTRA	5	NKCT25	26,51
T - 27 x 50	EXTRA	5	NKCT27	26,51
T - 30 x 50	EXTRA	5	NKCT30	26,51
T - 40 x 50	EXTRA	5	NKCT40	26,51

TORX



Forma / Form	Calidad / Quality	Uds. / Pcs.	Cod.	€/Envase
T - 10 x 25	TIN - CVD	100	NJ1T10	325,09
T - 15 x 25	TIN - CVD	100	NJ1T15	325,09
T - 20 x 25	TIN - CVD	100	NJ1T20	325,09
T - 25 x 25	TIN - CVD	100	NJ1T25	325,09
T - 27 x 25	TIN - CVD	100	NJ1T27	325,09
T - 30 x 25	TIN - CVD	100	NJ1T30	325,09
T - 40 x 25	TIN - CVD	100	NJ1T40	325,09

TORX



Forma / Form	Calidad / Quality	Uds. / Pcs.	Cod.	€/Envase
T - 10 x 25	TIN - CVD	10	NJTT10	34,57
T - 15 x 25	TIN - CVD	10	NJTT15	34,57
T - 20 x 25	TIN - CVD	10	NJTT20	34,57
T - 25 x 25	TIN - CVD	10	NJTT25	34,57
T - 27 x 25	TIN - CVD	10	NJTT27	34,57
T - 30 x 25	TIN - CVD	10	NJTT30	34,57
T - 40 x 25	TIN - CVD	10	NJTT40	34,57

PUNTAS DE ATORNILLAR 1/4"

1/4" SCREWDRIVER BITS • ÉMBOUTS 1/4"

TORX INVIOLEABLE

TORX TAMPER
TORX PERCÉ BAGUÉ



EXTRA



25 mm

Forma / Form	Calidad / Quality	Uds. / Pcs.	Cod.	€/Envase
T x - 10 x 25	EXTRA	50	NLOT10	162,54
T x - 15 x 25	EXTRA	50	NLOT15	162,54
T x - 20 x 25	EXTRA	50	NLOT20	162,54
T x - 25 x 25	EXTRA	50	NLOT25	162,54
T x - 27 x 25	EXTRA	50	NLOT27	162,54
T x - 30 x 25	EXTRA	50	NLOT30	162,54
T x - 40 x 25	EXTRA	50	NLOT40	162,54

TORX INVIOLEABLE

TORX TAMPER
TORX PERCÉ BAGUÉ



EXTRA



25 mm

Forma / Form	Calidad / Quality	Uds. / Pcs.	Cod.	€/Envase
T x - 10 x 25	EXTRA	10	NLCT10	34,64
T x - 15 x 25	EXTRA	10	NLCT15	34,64
T x - 20 x 25	EXTRA	10	NLCT20	34,64
T x - 25 x 25	EXTRA	10	NLCT25	34,64
T x - 27 x 25	EXTRA	10	NLCT27	34,64
T x - 30 x 25	EXTRA	10	NLCT30	34,64
T x - 40 x 25	EXTRA	10	NLCT40	34,64

PLANA

SLOTTED
PLAT



EXTRA



25 mm



50 mm

Forma / Form	Calidad / Quality	Uds. / Pcs.	Cod.	€/Envase
PLANA 3,0 x 0,5 x 25	EXTRA	50	NH3005	63,53
PLANA 4,0 x 0,5 x 25	EXTRA	100	NH4005	127,05
PLANA 4,5 x 0,6 x 25	EXTRA	100	NH4506	127,05
PLANA 5,5 x 0,8 x 25	EXTRA	100	NH5508	127,05
PLANA 5,5 x 1,0 x 25	EXTRA	100	NH5510	127,05
PLANA 6,5 x 1,2 x 25	EXTRA	100	NH6512	127,05
PLANA 8,0 x 1,2 x 25	EXTRA	50	NH8012	247,76
PLANA 8,0 x 1,6 x 25	EXTRA	50	NH8016	247,76

Forma / Form	Calidad / Quality	Uds. / Pcs.	Cod.	€/Envase
PLANA 3,0 x 0,5 x 50	EXTRA	25	NI3005	74,41
PLANA 4,0 x 0,5 x 50	EXTRA	50	NI4005	148,84
PLANA 4,5 x 0,6 x 50	EXTRA	50	NI4506	148,84
PLANA 5,5 x 0,8 x 50	EXTRA	50	NI5508	148,84
PLANA 5,5 x 1,0 x 50	EXTRA	50	NI5510	148,84
PLANA 6,5 x 1,2 x 50	EXTRA	50	NI6512	148,84
PLANA 8,0 x 1,2 x 50	EXTRA	25	NI8012	128,87
PLANA 8,0 x 1,6 x 50	EXTRA	25	NI8016	128,87

PLANA

SLOTTED
PLAT



EXTRA



25 mm



50 mm

Forma / Form	Calidad / Quality	Uds. / Pcs.	Cod.	€/Envase
PLANA 3,0 x 0,5 x 25	EXTRA	10	NHC3005	14,90
PLANA 4,0 x 0,5 x 25	EXTRA	10	NHC4005	14,90
PLANA 4,5 x 0,6 x 25	EXTRA	10	NHC4506	14,92
PLANA 5,5 x 0,8 x 25	EXTRA	10	NHC5508	14,94
PLANA 5,5 x 1,0 x 25	EXTRA	10	NHC5510	14,96
PLANA 6,5 x 1,2 x 25	EXTRA	10	NHC6512	14,97
PLANA 8,0 x 1,2 x 25	EXTRA	10	NHC8012	51,78
PLANA 8,0 x 1,6 x 25	EXTRA	10	NHC8016	51,78

Forma / Form	Calidad / Quality	Uds. / Pcs.	Cod.	€/Envase
PLANA 3,0 x 0,5 x 50	EXTRA	5	NIC3005	17,07
PLANA 4,0 x 0,5 x 50	EXTRA	5	NIC4005	17,07
PLANA 4,5 x 0,6 x 50	EXTRA	5	NIC4506	17,07
PLANA 5,5 x 0,8 x 50	EXTRA	5	NIC5508	17,07
PLANA 5,5 x 1,0 x 50	EXTRA	5	NIC5510	17,07
PLANA 6,5 x 1,2 x 50	EXTRA	5	NIC6512	17,07
PLANA 8,0 x 1,2 x 50	EXTRA	5	NIC8012	27,99
PLANA 8,0 x 1,6 x 50	EXTRA	5	NIC8016	27,99

Otras puntas, CONSULTAR. / For measurements not listed, request. / Pour des mesures non cotées consulter.

EXPENDEDOR DE PUNTAS

SCREWDRIVER BITS BOX • CAISSE ÉMBOUTS



Descripción / Description	Uds. / Pcs.	Cod.	€/Unid.
Composición Puntas 25 mm / Bits 25 mm / Embouts 25 mm	325	NX0017	390,66
Composición Puntas 50 mm / Bits 50 mm / Embouts 50 mm	150	NX0018	412,08

Contenido / Contains / Contenu

EXPENDEDOR DE PUNTAS 25 mm / SCREWDRIVER BITS BOX 25 mm / CAISSE ÉMBOUTS 25 mm

Puntas / Bits		Uds. / Pcs.	Puntas / Bits		Uds. / Pcs.
	PLANA / SLOTTED / PLAT 4,5 x 0,6 x 25	20		HEX 3,0 x 25	10
	PLANA / SLOTTED / PLAT 5,5 x 0,8 x 25	50		HEX 4,0 x 25	10
	PLANA / SLOTTED / PLAT 6,5 x 1,2 x 25	20		HEX 5,0 x 25	10
	TORX-10 x 25	10		PZ-1 x 25	20
	TORX-15 x 25	10		PZ-2 x 25	50
	TORX-20 x 25	10		PZ-3 x 25	10
	TORX-25 x 25	10		ADAPTADOR MAGNETICO / MAGNETIC HOLDER	
	PH-1 x 25	20	ADAPTATEUR MAGNETIQUE 10 x 60		5
	PH-2 x 25	50			
	PH-3 x 25	10			

EXPENDEDOR DE PUNTAS 50 mm / SCREWDRIVER BITS BOX 50 mm / CAISSE ÉMBOUTS 50 mm

Puntas / Bits		Uds. / Pcs.	Puntas / Bits		Uds. / Pcs.
	PLANA / SLOTTED / PLAT 4,5 x 0,6 x 50	10		HEX 3,0 x 50	5
	PLANA / SLOTTED / PLAT 5,5 x 0,8 x 50	20		HEX 4,0 x 50	5
	PLANA / SLOTTED / PLAT 6,5 x 1,2 x 50	10		HEX 5,0 x 50	5
	TORX-10 x 50	5		PZ-1 x 50	10
	TORX-15 x 50	5		PZ-2 x 50	20
	TORX-20 x 50	5		PZ-3 x 50	10
	TORX-25 x 50	5		ADAPTADOR MAGNETICO / MAGNETIC HOLDER	
	PH-1 x 50	5	ADAPTATEUR MAGNETIQUE 10 x 60		5
	PH-2 x 50	20			
	PH-3 x 50	5			

PUNTAS DE ATORNILLAR 1/4"

1/4" SCREWDRIVER BITS • ÉMBOUTS 1/4"

JUEGOS DE PUNTAS

SCREWDRIVER BIT SETS • COFFRET ÉMBOUT

Basic



Descripción / Description	Uds. / Pcs.	Cod.	€/Unid.
Juego Puntas y Adaptador EXTRA Screwdriver Bit Sets & Adapter EXTRA / Coffret Émbout et Adaptateur EXTRA	32	NX0019	28,93

Contenido / Contains / Contenu

Puntas / Bits
PH-1, PH-2, PH-2, PH-3
PZ-1, PZ-2, PZ-2, PZ-3
PLANA / SLOTTED / PLAT 3-4-5-6
HEX-3, HEX-4, HEX-5, HEX-6

Puntas / Bits
TORX-10, TORX-15, TORX-20, TORX-25, TORX-27, TORX-30, TORX-40
TX.INV.-10, TX.INV.-15, TX.INV.-20, TX.INV.-25, TX.INV.-27, TX.INV.-30, TX.INV.-40
ADAPTADOR MAGNETICO MAGNETIC HOLDER / ADAPTATEUR MAGNETIQUE
ADAPTADOR PORTA VASOS NUT DRIVER SOCKETS / ADAPTATEUR Á BILLE

JUEGOS DE PUNTAS

SCREWDRIVER BIT SETS • COFFRET ÉMBOUT

advance
MAXIMO RENDIMIENTO

EXTRA



Descripción / Description	Uds. / Pcs.	Cod.	€/Unid.
Juego Puntas y Adaptador EXTRA Screwdriver Bit Sets & Adapter EXTRA / Coffret Émbout et Adaptateur EXTRA	32	NX0020	56,58

Contenido / Contains / Contenu

Puntas / Bits
PH-1, PH-2, PH-3 x 2
PZ-1, PZ-2, PZ-3 x 2
HEX-2, HEX-2,5, HEX-3, HEX-4, HEX-5, HEX-6

Puntas / Bits
PLANA® / SLOTTED / PLAT 3 - 4 - 4,5 - 5,5 - 6,5 - 8
TORX-10, TORX-15, TORX-20, TORX-25, TORX-27, TORX-30
ADAPTADOR MAGNETICO 10x60 MAGNETIC HOLDER 10x60 / ADAPTATEUR MAGNETIQUE 10x60

ESTUCHES PUNTAS CON MANGO SILICONA
BITS SET WITH HANDLE • COFFRET ÉMBOUS AVEC MANCHE



Descripción / Description	Uds. / Pcs.	Cod.	€/Unid.
Juego de Puntas PH - 1 x 25, Mango 1/4", Adaptador Rápido 1/4" PH - 1 x 25 Scerwdriver Set with Quick Holder Coffret Émbouts PH - 1 x 25 Avec Adaptateur Rapide	52	NPH150	89,39
Juego de Puntas PH - 2 x 25, Mango 1/4", Adaptador Rápido 1/4" PH - 2 x 25 Scerwdriver Set with Quick Holder Coffret Émbouts Ph - 2 x 25 Avec Adaptateur Rapide	52	NPH250	89,39
Juego de Puntas PZ - 1 x 5, Mango 1/4", Adaptador Rápido 1/4" PZ - 1 x 5 Scerwdriver Set with Quick Holder Coffret Émbouts PZ - 1 x 5 Avec Adaptateur Rapide	52	NPZ150	89,39
Juego de Puntas PZ - 2 x 25, Mango 1/4", Adaptador Rápido 1/4" PZ - 2 x 25 Scerwdriver Set with Quick Holder Coffret Émbouts PZ - 2 x 25 Avec Adaptateur Rapide	52	NPZ250	89,39

JUEGOS DE BROCAS 1/4"
1/4" DRILL BIT SET • COFFRET FORET 1/4"



Descripción / Description	Uds. / Pcs.	Cod.	€/Unid.
Construcción + Madera Extracorta + Adaptador Magnético Masonry + Wood Extrashort + Magnetic Holder Béton + Bois Extracourte + Adpatateur Magnétique	12	6JG001	83,03
Construcción + Metal Extracorta + Adaptador Magnético Masonry + Metal Extrashort + Magnetic Holder Béton + Metal Extracourte + Adpatateur Magnétique	12	6JG002	83,03
Madera + Madera Extracorta + Adaptador Magnético Wood + Wood Extrashort + Magnetic Holder Bois + Bois Extracourte + Adpatateur Magnétique	12	6JG003	83,03
Madera + Metal Extracorta + Adaptador Magnético Wood + Metal Extrashort + Magnetic Holder Bois + Metal Extracourte + Adpatateur Magnétique	12	6JG004	83,03
Metal + Metal Extracorta + Adaptador Magnético Metal + Metal Extrashort + Magnetic Holder Metal + Metal Extracourte + Adpatateur Magnétique	12	6JG005	83,03
Metal + Madera Extracorta + Adaptador Magnético Metal + Wood Extra Short + Magnetic Holder Metal + Bois Extracourte + Adpatateur Magnétique	12	6JG006	83,03

Hasta fin de existencias / Until end of stock / Jusqu'à épuisement des stocks

Diámetros / Diameters / Diametres	
SERIE NORMAL / NORMAL SERIES / SÉRIE NORMALE	4, 5, 6, 8, 10 mm
SERIE EXTRACORTA / EXTRASHORT SERIES / SÉRIE EXTRACOURTE	3, 4, 5, 6, 8, 10 mm

PUNTAS DE ATORNILLAR

SCREWDRIVER BITS • ÉMBOUS

ADAPTADOR

ADAPTER • ADAPTATEUR



ADAPTADOR MAGNETICO 1/4"
DE 10 x 60 mm
MAGNETIC HOLDER 10 x 60 mm
ADAPTATEUR MAGNETIQUE
10 x 60 mm

Uds. / Pcs.	Cod.	€/Unid.
1	NZAD10	5,54



ADAPTADOR MAGNETICO 1/4"
DE 10 x 100 mm
MAGNETIC HOLDER 10 x 100 mm
ADAPTATEUR MAGNETIQUE
10 x 100 mm

Uds. / Pcs.	Cod.	€/Unid.
1	NZAD100	12,68



ADAPTADOR 1/4" CAMBIO RÁPIDO
QUICK GRIP HOLDER
ADAPTATEUR RAPIDE

Uds. / Pcs.	Cod.	€/Unid.
1	NZAD14	17,53



MANGO SILICONA GRIP
HEXAGONAL 1/4"
SILICONE SHANK HOLDER
MANCHE DE SILICONE

Uds. / Pcs.	Cod.	€/Unid.
1	NZBD14	19,23

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

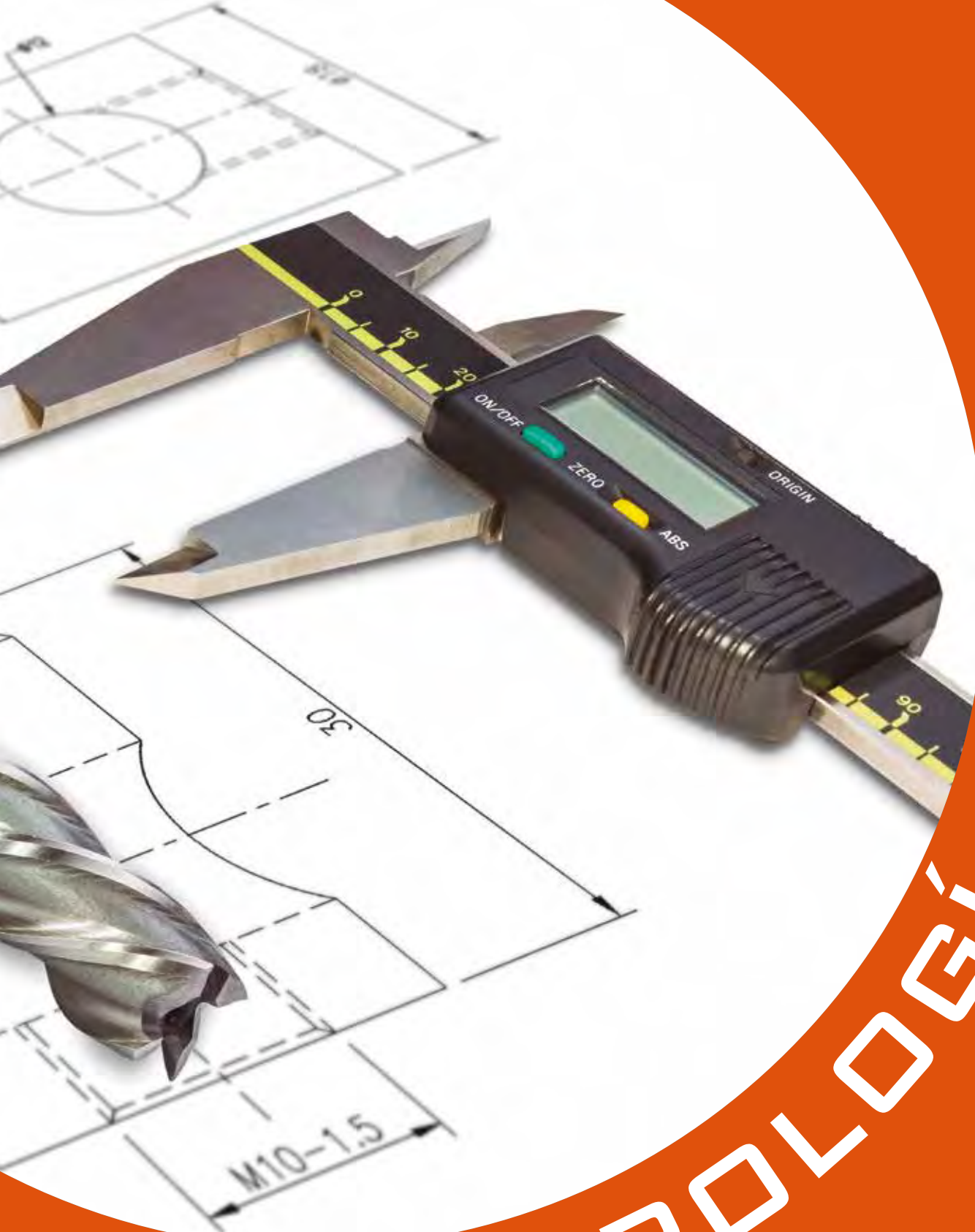
HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

METROLOGY-MÉTROLOGIE





METROLOGÍA

RELOJ COMPARADOR ANALÓGICO
 DIAL INDICATOR • COMPAREUR



Ref.	Modelo / Model	Esfera / Oval (Ø mm)	MEDICIÓN / MEASUREMENT		Uds. Pcs.	Cod.	€/Unid.
			Capacidad / Range	Resolución Resolution (mm)			
851	ANALÓGICO	55	0 - 10 mm / 0 - 0,5"	0,01	1	XD0511	48,36

RELOJ COMPARADOR DIGITAL
 ELECTRONIC DIAL INDICATOR
 COMPAREUR AFFICHAGE DIGITAL



Ref.	Modelo / Model	Esfera / Oval (Ø mm)	MEDICIÓN / MEASUREMENT		Uds. Pcs.	Cod.	€/Unid.
			Capacidad / Range	Resolución Resolution (mm)			
852	DIGITAL	55	0 - 10 mm / 0 - 0,5"	0,01	1	XD0512	101,40

BASE MAGNÉTICA
 MAGNETIC BASE • SUPPORT MAGNETIQUE



Ref.	Soporte / Base (mm)	Torre Vertical Height of Column (mm)	Torre Articulada Articulated Arm (mm)	Cod.	€/Unid.
801	50 x 55 x 66	180 x 12	150 x 10	XD0510	53,66

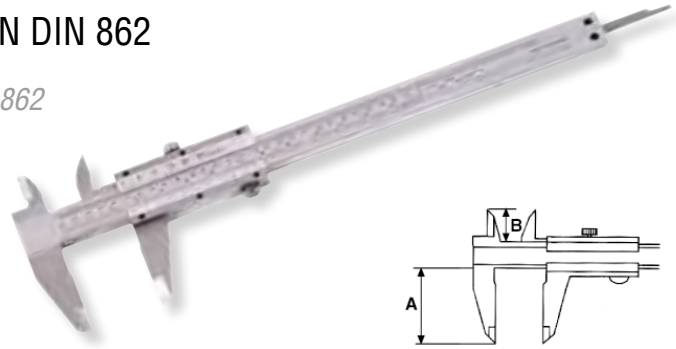
CALIBRES

CALIPERS • PIEDS À COULISSES

CALIBRE INOX CON TORNILLO DE FIJACIÓN DIN 862

INOX CALIPER WITH LOCKING SCREW DIN 862

PIED À COULISSE INOX AVEC VIS DE BLOCCAGE DIN 862



DIN 862

MEDICIÓN / MEASUREMENT

Ref.	A - B (mm)	Capacidad / Range (mm)	Resolución Resolution (mm)	Acabado Finishing	Estuche / Pack	Cod.	€/Unid.
103	40 - 20	0 - 150	0,05	MATE	ABS-PLASTIC	X10150	29,70
103-L	46 - 23	0 - 200	0,05	MATE	ABS-PLASTIC	X10150L	42,52
104	40 - 20	0 - 150	0,05	MATE	CUERO	X10415	33,38

CALIBRE INOX CON PULSADOR AUTOMÁTICO DIN 862

INOX CALIPER WITH LOCKING DEVICE DIN 862

PIED À COULISSE INOX AVEC VIS DE BLOCCAGE AUTOMATIQUE DIN 862



DIN 862

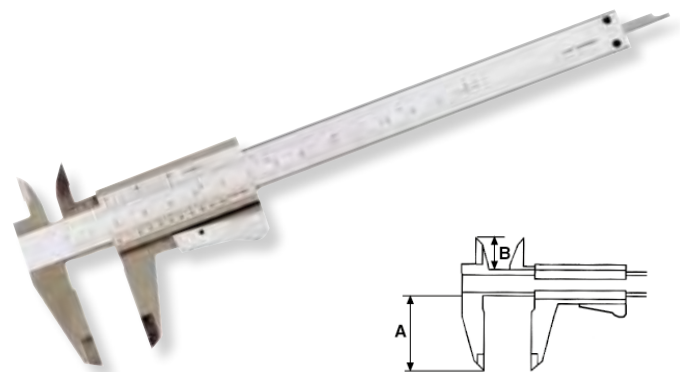
MEDICIÓN / MEASUREMENT

Ref.	A - B (mm)	Capacidad / Range (mm)	Resolución Resolution (mm)	Acabado Finishing	Estuche / Pack	Cod.	€/Unid.
105	40 - 20	0 - 150	0,05	MATE	ABS-PLASTIC	X20515	32,26
106	40 - 20	0 - 150	0,05	MATE	CUERO	X20150	32,26

CALIBRE INOX MONOBLOCK DIN 862

INOX MONOBLOCK CALIPER DIN 862

PIED À COULISSE INOX MONOBLOCK DIN 862



DIN 862

MEDICIÓN / MEASUREMENT

Ref.	A - B (mm)	Capacidad / Range (mm)	Resolución Resolution (mm)	Acabado Finishing	Estuche / Pack	Cod.	€/Unid.
107	40 - 20	0 - 150	0,05	MATE	CUERO	X30715	50,42
107-B	40 - 20	0 - 150	0,05	MATE	ABS-PLASTIC	X3071B	50,42

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

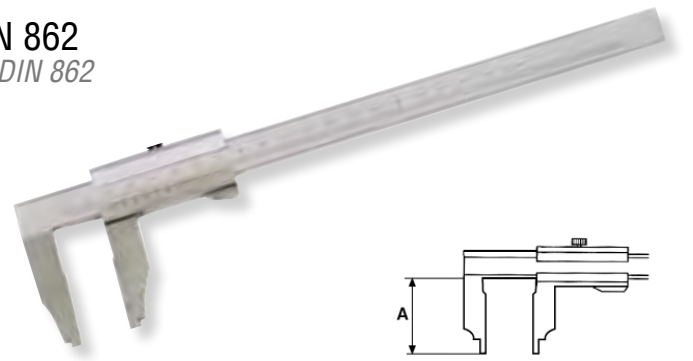
ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

CALIBRE TORNERO INOX MONOBLOCK DIN 862
INOX MONOBLOCK CALIPER WITH LOCKING SCREW DIN 862
PIED À COULISSE DE TOURNEUR INOX DIN 862

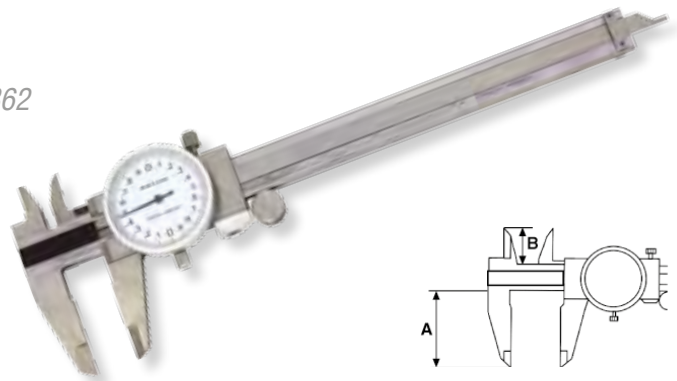


DIN 862

MEDICIÓN / MEASUREMENT

Ref.	A - B (mm)	Capacidad / Range (mm)	Resolución Resolution (mm)	Acabado Finishing	Estuche / Pack	Cod.	€/Unid.
110-B	59	0 - 200	0,02	MATE	ABS-PLASTIC	X5102B	105,57

CALIBRE INOX CON RELOJ DIN 862
DIAL INOX CALIPER DIN 862
PIED À COULISSE INOX AVEC COMPARETEUR DIN 862

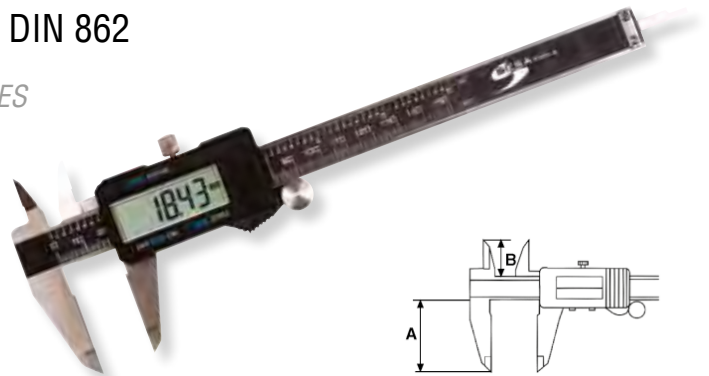


DIN 862

MEDICIÓN / MEASUREMENT

Ref.	A - B (mm)	Capacidad / Range (mm)	Resolución Resolution (mm)	Acabado Finishing	Estuche / Pack	Cod.	€/Unid.
111	40 - 20	0 - 150	0,02	MATE	ABS-PLASTIC	X61115	60,81
111-X	58 - 20	0 - 300	0,02	MATE	ABS-PLASTIC	X61115X	161,03

CALIBRE DIGITAL INOX - MM / PULGADAS DIN 862
DIGITAL INOX CALIPER DIN 862 MM / INCHES
PIED À COULISSE INOX DIGITAL DIN 862 MM / POUCE



DIN 862

MEDICIÓN / MEASUREMENT

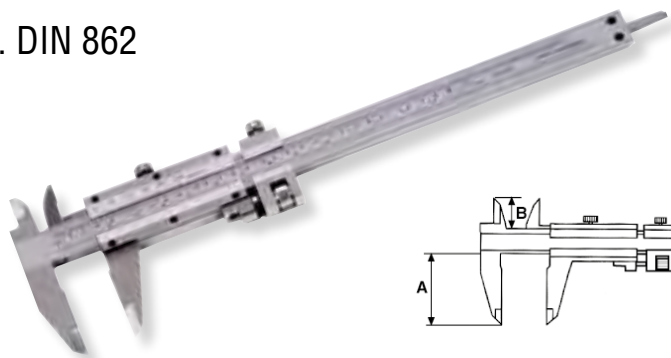
Ref.	A - B (mm)	Capacidad / Range (mm)	Resolución Resolution (mm)	Acabado Finishing	Estuche / Pack	Cod.	€/Unid.
112-G	40 - 20	0 - 150	0,01	MATE	ABS-PLASTIC	X71215G	82,19
112-L	46 - 23	0 - 200	0,01	MATE	ABS-PLASTIC	X71215L	86,48
112-X	46 - 23	0 - 300	0,01	MATE	ABS-PLASTIC	X71215X	160,26

CALIBRES

CALIPERS • PIEDS À COULISSES

CALIBRE INOX CON TORNILLO DE APROX. DIN 862

INOX CALIPER WITH FINE ADJUSTMENT DIN 862
 PIED À COULISSE INOX AVEC VIS DE BLOCKAGE



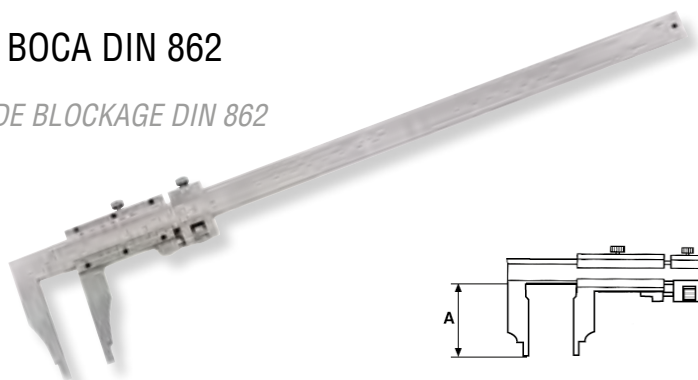
DIN 862

MEDICIÓN / MEASUREMENT

Ref.	A - B (mm)	Capacidad / Range (mm)	Resolución Resolution (mm)	Acabado Finishing	Estuche / Pack	Cod.	€/Unid.
109-C	40 - 20	0 - 150	0,02	MATE	ABS-PLASTIC	X40920C	38,54
109	46 - 26	0 - 200	0,02	MATE	ABS-PLASTIC	X40920	48,34
116	55 - 26,5	0 - 300	0,02	MATE	ABS-PLASTIC	X10300	87,84
116-A	130 - 45	0 - 1.000	0,02	MATE	MADERA	X01000A	724,03

CALIBRE CON TORNILLO DE APROX. - 1 BOCA DIN 862

INOX CALIPER WITH LOCKING SCREW DIN 862
 PIED À COULISSE DE TOURNEUR INOX AVEC VIS DE BLOCKAGE DIN 862



DIN 862

MEDICIÓN / MEASUREMENT

Ref.	A - B (mm)	Capacidad / Range (mm)	Resolución Resolution (mm)	Acabado Finishing	Estuche / Pack	Cod.	€/Unid.
116-T	62	0 - 300	0,02	MATE	MADERA	X10300T	96,03
117	85	0 - 500	0,02	MATE	MADERA	X00500	242,01
117-N	126	0 - 800	0,02	MATE	MADERA	X00800	522,88
118	150	0 - 1.000	0,02	MATE	MADERA	X01000	892,73

CALIBRE CALIBRE INOX PROFUNDIDAD DIN 862

INOX DEPTH GAUGE DIN 862
 JAUGES DE PROFONDEUR INOX DIN 862



DIN 862

MEDICIÓN / MEASUREMENT

Ref.	Capacidad / Range (mm)	Resolución Resolution (mm)	Acabado Finishing	Estuche / Pack	Cod.	€/Unid.
113	0 - 200	0,02	MATE	MADERA	X81320	46,08

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

MICRÓMETRO INOX PARA EXTERIORES DIN 863
INOX OUTSIDE MICROMETERS
MICROMÈTRES POUR EXTERIEURES



DIN 863

MEDICIÓN / MEASUREMENT

Ref.	Anillo / Ring (mm)	Contacto Contact	Capacidad / Range (mm)	Resolución Resolution (mm)	Acabado Finishing	Estuche / Pack	Cod.	€/Unid.
201	6,5	WIDIA	0 - 25	0,01	MATE	ABS-PLASTIC	X91025	42,02
202	6,5	WIDIA	25 - 50	0,01	MATE	ABS-PLASTIC	X92050	47,29
203	6,5	WIDIA	50 - 75	0,01	MATE	ABS-PLASTIC	X93075	58,07
204	6,5	WIDIA	75 - 100	0,01	MATE	ABS-PLASTIC	X94100	67,19
205	6,5	WIDIA	100 - 125	0,01	MATE	ABS-PLASTIC	X94125	111,00
206	6,5	WIDIA	125 - 150	0,01	MATE	ABS-PLASTIC	X94150	167,66

MICRÓMETRO INOX DIGITAL PARA EXTERIORES DIN 863
ELECTRONIC OUTSIDE MICROMETERS
MICROMÈTRES EXTERIEURES DIGITALES



DIN 863

MEDICIÓN / MEASUREMENT

Ref.	Anillo / Ring (mm)	Contacto Contact	Capacidad / Range (mm)	Resolución Resolution (mm)	Acabado Finishing	Estuche / Pack	Cod.	€/Unid.
301	6,5	WIDIA	0 - 25	0,001	MATE	ABS-PLASTIC	XA1025	219,88



MICRÓMETROS

MICROMETERS • MICROMÈTRES

MICRÓMETRO INOX PARA INTERIORES

INTERNAL INOX MICROMETERS
ALÉSOMETRES



Ref.	Anillo / Ring (mm)	Contacto Contact	MEDICIÓN / MEASUREMENT		Acabado Finishing	Estuche / Pack	Cod.	€/Unid.
			Capacidad / Range (mm)	Resolución Resolution (mm)				
401	17	WIDIA	5 - 30	0,01	MATE	MADERA	XB1530	113,12
402	17	WIDIA	25 - 50	0,01	MATE	MADERA	XB2255	121,58

MICRÓMETRO INOX DE PROFUNDIDAD

INOX DEPTH MICROMETERS
MICROMÈTRES DE PROFONDEUR



Ref.	Varillas Reading Rod	MEDICIÓN / MEASUREMENT		Acabado Finishing	Estuche / Pack	Cod.	€/Unid.
		Capacidad / Range (mm)	Resolución Resolution (mm)				
501	INTERCAMBIABLES	0 - 100	0,01	MATE	MADERA	XC1100	123,44

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

KIT RELOJ ANALÓGICO + BASE MAGNÉTICA
SET WITH MAGNETIC BASE AND DIAL INDICATOR
COFFRET AVEC COMPAREUR ET SUPPORT MAGNETIQUE



Ref.	Composición / Composition	Uds. Pcs.	Rango Medición Measurement Range	Resolución Resolution (mm)	Estuche Pack	Cod.	€/Unid.
212	Reloj comparador analógico / Dial Indicator	1	0 - 10 mm.	0,01/0,0005"	Plástico / Plastic	X97150	167,64
	Base magnética / Magnetic base	1	-	-			

CONJUNTO DE MEDICIÓN DIGITAL PARA TORNERO
TOURNER DIGITAL MEASURING SET
COFFRET MÉSURE DIGITAL POUR TOURNEUR



Ref.	Composición / Composition	Uds. Pcs.	Rango Medición Measurement Range	Resolución Resolution (mm)	Estuche Pack	Cod.	€/Unid.
213	Calibre digital electrónico / Inox Digital caliper	1	0 - 150 mm.	0,01/0,0005"	Plástico / Plastic	X98150	242,91
	Reloj comparador digital / Digital Dial Indicator	1	0 - 10 mm.	0,01/0,0005"			
	Base magnética / Magnetic base	1	-	-			

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • METAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

ESTUCHES MEDICIÓN

MEASURING SETS • COFFRETS MÉSURE

CONJUNTO DE MEDICION DIGITAL

DIGITAL MEASURING SET
COFFRET MESURE DIGITAL



Ref.	Composición / Composition	Uds. Pcs.	Rango Medición Measurement Range	Resolución Resolution (mm)	Estuche Pack	Cod.	€/Unid.
214	Calibre digital electrónico 112-G / <i>Inox Digital caliper</i>	1	0 - 150 mm.	0,01/0,0005"	Plástico / Plastic	X99100	199,51
	Micrómetro electrónico / <i>Outside Micrometer</i>	1	0 - 25 mm.	0,01/0,0005"			
	Pilas / <i>Batteries</i>	2					

CONJUNTO DE MICRÓMETROS INOX EXTERIORES

INOX OUTSIDE MICROMETERS SET
COFFRET MICROMÈTRES EXTERIEURES INOX



MEDICIÓN / MEASUREMENT

Ref.	Uds. / Pcs.	Rango Medición / Measurement Range	Resolución / Resolution (mm)	Estuche / Pack	Cod.	€/Unid.
210	4	0 - 100 mm.	0,01	Madera / Wood	X95100	182,41
211	6	0 - 150 mm.	0,01	Madera / Wood	X96150	326,45

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

GALGAS DE ROSCA COMBINADAS, MÉTRICA Y WHITHWORTH
METRIC AND WHITWORTH SCREW PITCH GAUGES
CALIBRES DE FILETAGE PUR MÉTRIQUE ET WHITWORTH



Ref.	Láminas / Blades	Uds. / Pcs.	Cod.	€/Unid.
1102	52	1	NB1102	17,16
1103	58	1	NB1103	22,18

GALGAS DE ROSCA COMBINADAS, CÓNCAVAS Y CONVEXAS
CONCAVE AND CONVEX RADIUS GAUGE SETS
JAUGES À RAYONS CONCAVES ET CONVEXES



Ref.	Láminas / Blades	Gama / Range	Uds. / Pcs.	Cod.	€/Unid.
1203	34	R 1,0 - 7,0	1	NB1203	38,69
1202	32	R 7,5 - 15,0	1	NB1202	36,42
1201	30	R 15,5 - 25,0	1	NB1201	32,07

GALGAS DE ESPESORES, LONGITUD 100mm
THICKNESS GAUGE SETS, LENGTH 100mm
JAUGES D'ÉPAISSEUR, LONGEUR 100mm



Ref.	Láminas / Blades	Gama / Range	Uds. / Pcs.	Cod.	€/Unid.
1001	13	0,05 - 1,00	1	NB1001	6,83
1002	20	0,05 - 1,00	1	NB1002	8,39

ESCUADRAS Y TRANSPORTADORES

SET SQUARES & PROTRACTORS • EQUERRES ET RAPORTEURS

ESCUADRAS DE ZINC

SQUARES OF ZINC
EQUERRES DU ZINC



Ref.	Dimensiones / Size (mm)	Tipo / Type	Sección / Section (mm)	Uds. / Pcs.	Cod.	€/Unid.
901	100 x 70	Lisa / Without base	15 x 5	1	NA0901	11,44
950	100 x 70	Tacón / With base	15 x 5	1	NA0950	18,71
902	150 x 100	Lisa / Without base	20 x 5	1	NA0902	12,14
951	150 x 100	Tacón / With base	20 x 5	1	NA0951	22,14
903	200 x 130	Lisa / Without base	20 x 5	1	NA0903	18,59
952	200 x 130	Tacón / With base	20 x 5	1	NA0952	27,19
904	300 x 175	Lisa / Without base	25 x 5	1	NA0904	19,81
953	300 x 175	Tacón / With base	25 x 5	1	NA0953	38,39
905	400 x 230	Lisa / Without base	30 x 5	1	NA0905	25,10
954	400 x 230	Tacón / With base	30 x 5	1	NA0954	45,80
906	500 x 280	Lisa / Without base	30 x 5	1	NA0906	28,96
955	500 x 280	Tacón / With base	30 x 5	1	NA0955	66,52

TRANSPORTADORES DE ÁNGULOS 0 - 180°

ANGLE PROTRACTORS
RAPORTEURS



Ref.	Ø mm.	L. Caña (mm)	Uds. / Pcs.	Cod.	€/Unid.
975	80	120	1	NA0975	40,98
976	120	150	1	NA0976	42,93
977	150	200	1	NA0977	51,54
978	200	300	1	NA0978	81,71

COMPASES CIRCULARES DE ACERO FORJADO

ROUGH STEEL DIVIDERS WITH QUADRANT
COMPAS ACIER FORGE AVEC ARC DE CERCLE



Ref.	L (mm)	Uds. / Pcs.	Patas / Legs	Cod.	€/Unid.
601	150	1	Cuadradas / Square	NC0601	23,73
602	200	1	Cuadradas / Square	NC0602	26,31
603	250	1	Cuadradas / Square	NC0603	35,68
604	300	1	Cuadradas / Square	NC0604	42,36

COMPASES INTERIORES DE ACERO FORJADO

ROUGH STEEL INSIDE CALIPERS
COMPAS D'INTERIEUR



Ref.	L (mm)	Uds. / Pcs.	Patas / Legs	Cod.	€/Unid.
701	150	1	Planas / Flat	NC0701	12,91
702	200	1	Planas / Flat	NC0702	17,07
703	250	1	Planas / Flat	NC0703	21,31
704	300	1	Planas / Flat	NC0704	25,67

COMPASES - ACERO FORJADO Y PUNTAS TRATADAS

SPRING CALIPERS - FORGED STEEL AND TRHEATED POINTS • COMPASSES - ACIER FORGÉ ET POINTES TRAITÉS

COMPASES EXTERIORES DE ACERO FORJADO

ROUGH STEELOUTSIDE CALIPERS
COMPAS D'ÉXTERIEUR



Ref.	L (mm)	Uds. / Pcs.	Patas / Legs	Cod.	€/Unid.
801	150	1	Planas / Flat	NC0801	13,21
802	200	1	Planas / Flat	NC0802	17,07
803	250	1	Planas / Flat	NC0803	21,59
804	300	1	Planas / Flat	NC0804	25,56

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

NOVEDADES

- DISPENSADOR de sobremesa CERRADO
- Expositores BLISTER RÍGIDO

EW FEATURES

- *CLOSED desktop DISPENSER*
- *RIGID BLISTER displays*

NOUVEAUTÉS

- *DISTRIBUTEUR de bureau FERMÉ*
- *Expositeurs BLISTER RIGIDE*



DISPLAYS-DISPLAYS





DISPLAYS

MINI EXPOSITOR
 MINI DISPLAY
 MINI ÉXPOSITEUR

Expositor MINI
 1.830 x 500 x 430
 mm



CONSTRUCCIÓN
 CONSTRUCTION • CONSTRUCTION

MADERA
 WOOD • BOIS

METAL
 METAL • MÉTAL

FRESADO
 MILLING • FRAISAGE

ROSCADO
 THREADING • FILETAGE

ACCESORIOS
 ACCESSORIES • ACCESSOIRES

HEXAGONAL
 HEXAGONAL • HEXAGONAL

METROLOGÍA
 METROLOGY • MÉTROLOGIE

DISPLAYS
 DISPLAYS • DISPLAYS

MUEBLES EXPOSITORES

PRODUCT DISPLAYS • PRÉSENTATION PRODUIT

MINI EXPOSITOR MINI DISPLAY • MINI ÉXPOSITEUR

COMBINADO COMBINED • COMBINÉ

Art.	Ø (mm)	Uds.	€/Unid.
 <p>BROCA DIN 338N HSS-G</p>	3,00	10	
	3,50	10	
	4,00	10	
	4,50	10	
	5,00	10	
	6,00	10	
	8,00	10	
	10,00	5	
	12,00	5	
 <p>BROCA GRANITO</p>	3 X 60	5	
	4 X 75	5	
	5 X 85	10	
	6 X 100	15	
	8 X 120	15	
	10X 120	10	
	12 X 150	10	
	SESABOX GRANITO	5	
 <p>BROCA JR PORCELANATO</p>	4X85	10	
	5X85	10	
	6X100	15	
	8X125	5	
	10X150	5	
	SESABOX JR 4-5-6-6-8	5	
 <p>BROCA ST-2 (SDS-PLUS)</p>	4X110	5	
	5X110	10	
	6X160	15	
	8X160	10	
	10X160	10	
	12X160	5	
	14x200	5	
	16x260	5	
	18x300	5	
  <p>CORONAS BIMETAL M42</p>	16	3	
	20	3	
	24	3	
	27	3	
	30	3	
	35	3	
	40	3	
	51	2	
	60	2	
	70	2	
	83	2	
	A1 14-30	3	
	A2T 32-152	3	

Cod. MIN001

2.131,30

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

MINI EXPOSITOR MINI DISPLAY • MINI ÉXPOSITEUR

METAL METAL • MÉTAL

Art.	Ø (mm)	Uds.	€/Unid.
 BROCA DIN 338N HSS-G	3,00	10	
	3,50	10	
	4,00	10	
	4,50	10	
	5,00	10	
	6,00	10	
	8,00	10	
	10,00	5	
	12,00	5	
 BROCA DIN 338N HSS-G MANGO REDUCIDO	14	2	
	16	2	
	18	2	
	20	2	
	22	2	
	24	2	
	25	2	
	26	2	
 ESTUCHES DE BROCAS	1915314	2	
	194314	2	
	1915333	2	
	194333	2	
	1915015T	2	
	194019T	2	
	1915025T	2	
	194025T	2	
 CORONAS BIMETAL M42	16	2	
	20	2	
	24	2	
	27	2	
	30	2	
	35	2	
	40	2	
	51	2	
	60	2	
	70	1	
83	1		
A1 14-30	2		
A2T 32-152	2		
Cod. MIN002			2.261,13

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE


DISPLAYS
DISPLAYS • DISPLAYS

MUEBLES EXPOSITORES

PRODUCT DISPLAYS • PRÉSENTATION PRODUIT

MINI EXPOSITOR MINI DISPLAY • MINI ÉXPOSITEUR

CONSTRUCCIÓN CONSTRUCTION • CONSTRUCTION

Art.	Ø (mm)	Uds.	€/Unid.
 <p>BROCA TORNADO PARED</p>	3X60	5	
	4X75	5	
	5X85	10	
	6X100	15	
	8X120	10	
	10X120	5	
	12X150	5	
	14X150	3	
 <p>BROCA JR PORCELANATO</p>	4X85	10	
	5X85	10	
	6X100	20	
	8X125	10	
	10X150	5	
	SESABOX JR 4-5-6-6-8	5	
 <p>BROCA ST-2 (SDS-PLUS)</p>	4X110	5	
	5X110	10	
	6X110	15	
	8X160	5	
	10X160	5	
	12X160	5	
	14x200	3	
	16x260	4	
	18x300	3	
 <p>PUNTEROS Y CINCELES</p>	PUNT 250	2	
	CINCEL 250/20	2	
	CINCEL 250/40	2	
	CINCEL 200/40 AZ.	2	
	ACAN. 240/22	2	
	ACAN. ALAS 250/22	2	
	PUNT 280 (MAX)	2	
	PUNT 400 (MAX)	2	
	CINCEL 280/24 (MAX)	2	
	CINCEL 400/24 (MAX)	2	
	CINCEL 300/80 (MAX)	2	
	ACAN. 300/26 (MAX)	2	
	ACAN. ALAS 380/35 (MAX)	2	
	Cod. MIN003		

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

MINI EXPOSITOR MINI DISPLAY • MINI ÉXPOSITEUR

CASH

Art.	Ø (mm)	Uds.	€/Unid.
 <p>BROCA DIN 338N HSS-G</p>	3,00	10	
	3,50	10	
	4,00	10	
	4,50	10	
	5,00	10	
	6,00	10	
	8,00	10	
	10,00	5	
	12,00	5	
 <p>BROCA DIN 338 N HSS-CO</p>	3,00	20	
	3,50	10	
	4,00	20	
	4,50	10	
	5,00	20	
	6,00	20	
	8,00	20	
	10,00	5	
	12,00	5	
 <p>BROCA JR PORCELANATO</p>	4X85	5	
	5X85	10	
	6X100	10	
	8X125	10	
	10X150	5	
SESABOX JR 4-5-6-6-8	3		
 <p>BROCA MADERA 3 PUNTAS</p>	3,00	5	
	4,00	5	
	5,00	5	
	6,00	5	
	8,00	5	
	10,00	5	
	12,00	5	
 <p>CORONAS BIMETAL M42</p>	16	3	
	20	3	
	24	3	
	27	3	
	30	3	
	35	3	
	40	3	
	51	2	
	60	2	
	70	2	
	83	2	
A1 14-30	3		
A2T 32-152	3		

Cod. MIN004

1.774,55

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

MUEBLES EXPOSITORES

PRODUCT DISPLAYS • PRÉSENTATION PRODUIT

EXPOSITOR SOBREMESA JRB PORCELANATO

BASIC DISPLAY JRB PORCELANIC
ÉXPOSITEUR BASE TABLE JRB CÉRAMIQUE

NEW

Expositor MINI
470 x 190 x 140 mm



Ø (mm)	L (mm)	Uds. / Pcs.	€/Unid.
4,00	85	8	
5,00	85	16	
6,00	100	16	
8,00	125	8	
10,00	150	8	
SET BROCA JR 5 PIEZAS SET 5 PIECES		5	
COD. JR061		61	486,46

NOTA: Composición con 5 ganchos / Stand with 5 hooks / Présentoirs avec 5 crochets



EXPOSITOR - DISPENSADOR DE SOBREMESA CERRADO

DISPLAY - CLOSED DESKTOP DISPENSER
ÉXPOSITEUR - DISTRIBUTEUR DE BUREAU FERMÉ

NEW

Calidad / Quality	Uds. Pcs.	Cod.	€/Unid.
HSS WHITE WHITE	475	EXP01 BW	517,59
HSS-G	475	EXP01 AR	854,17
HSS-CO 5%	475	EXP01 CO	1.438,61
HSS-G INOX PROGRESIVA PROGRESSIVE INOX	475	EXP01 IP	1.497,06
TIN	475	EXP01 TI	1.637,15



Ø (mm)	Uds. / Pcs.	Ø (mm)	Uds. / Pcs.	Ø (mm)	Uds. / Pcs.	Ø (mm)	Uds. / Pcs.	Ø (mm)	Uds. / Pcs.	Ø (mm)	Uds. / Pcs.
2,00	50	4,00	50	5,50	30	7,00	20	8,50	15	11,00	5
3,00	50	4,50	40	6,00	30	7,50	20	9,00	10	12,00	5
3,50	50	5,00	40	6,50	30	8,00	15	10,00	10	13,00	5

EXPOSITOR - DISPENSADOR COMBINADO DE SOBREMESA CERRADO

DISPLAY - CLOSED COMBINED DESKTOP DISPENSER
ÉXPOSITEUR - DISTRIBUTEUR DE BUREAU COMBINÉ FERMÉ

NEW

Composición / Contains / Composition				Uds. / Pcs.	Cod.	€/Unid.
BASIC EXPO	HSS HSS WHITE	+	BASIC MADERA	610	EXP02 BASIC	553,23
STANDARD EXPO	HSS-G HSS G	+	GRANITO MADERA	610	EXP02 STANDARD	863,42
ADVANCE EXPO	HSS-CO 5% HSS CO	+	TORNADO MADERA	610	EXP02 ADVANCE	1.477,51

Ø (mm)	Uds. / Pcs.	Ø (mm)	Uds. / Pcs.	Ø (mm)	Uds. / Pcs.	Ø (mm)	Uds. / Pcs.	Ø (mm)	Uds. / Pcs.	Ø (mm)	Uds. / Pcs.
3,00	50	6,00	40	3,00	50	6,00	30	3,00	50	6,00	30
4,00	50	8,00	20	4,00	50	8,00	15	4,00	50	8,00	15
5,00	50	10,00	10	5,00	40	10,00	10	5,00	40	10,00	10

METAL / METAL / MÉTAL

MADERA / WOOD / BOIS

CONSTRUCCIÓN / CONSTRUCTION / CONSTRUCTION

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

BROCA JR PARA PORCELANATO JR DRILL-BIT FOR PORCELANIC • FORET JR POUR CÉRAMIQUE

CONSTRUCCIÓN CONSTRUCTION • CONSTRUCTION

advance
MAXIMO RENDIMIENTO

NEW



Ø (mm)	L (mm)	Uds. / Pcs.	€/Unid.
3,00	85	10	
4,00	85	10	
4,00	85	10	
5,00	85	10	
5,00	100	10	
6,00	100	10	
6,00	100	10	
6,00	100	10	
6,00	100	10	
6,00	100	10	
6,00	100	10	
7,00	125	10	
8,00	125	10	
8,00	125	10	
8,00	125	10	
10,00	150	8	
10,00	150	8	
12,00	150	8	
Cod. HR01JR		174	1.139,06



*Composición con 18 ganchos / Stand with 18 hooks / Présentoirs avec 18 crochets *Detalles del producto en la página 35 / Product information at page 35 / Info sur le produit à la page 35

BASIC BASIC • BASIC

CONSTRUCCIÓN CONSTRUCTION • CONSTRUCTION

Basic



Ø (mm)	L (mm)	Uds. / Pcs.	€/Unid.
3,00	60	20	
4,00	75	20	
5,00	85	20	
6,00	100	15	
6,00	100	15	
8,00	120	15	
8,00	120	15	
10,00	120	10	
10,00	120	10	
12,00	150	8	
12,00	150	8	
14,00	150	5	
14,00	150	5	
16,00	150	5	
18,00	160	5	
20,00	160	5	
6,00	200	10	
8,00	200	10	
10,00	200	5	
12,00	200	5	
14,00	200	5	
Cod. HR01BA		216	447,69



*Composición con 21 ganchos / Stand with 21 hooks / Présentoirs avec 21 crochets *Detalles del producto en la página 42 / Product information at page 42 / Info sur le produit à la page 42

MUEBLES EXPOSITORES

PRODUCT DISPLAYS • PRÉSENTATION PRODUIT

GRANITO GRANITO • GRANITO

CONSTRUCCIÓN CONSTRUCTION • CONSTRUCTION



DIN 8039



Ø (mm)	L (mm)	Uds. / Pcs.	€/Unid.
3,00	60	20	
4,00	75	20	
5,00	85	20	
6,00	100	15	
6,00	100	15	
8,00	120	15	
8,00	120	15	
10,00	120	10	
10,00	120	10	
12,00	150	8	
12,00	150	8	
14,00	150	5	
14,00	150	5	
16,00	150	5	
18,00	160	5	
20,00	160	5	
6,00	200	10	
8,00	200	10	
10,00	200	5	
12,00	200	5	
14,00	200	5	
Cod. HR01GR		216	877,04



*Composición con 21 ganchos / Stand with 21 hooks / Présentoirs avec 21 crochets *Detalles del producto en la página 41 / Product information at page 41 / Info sur le produit á la page 41

TORNADO TORNADO • TORNADO

CONSTRUCCIÓN CONSTRUCTION • CONSTRUCTION

advance
MAXIMO RENDIMIENTO



DIN 8039



Ø (mm)	L (mm)	Uds. / Pcs.	€/Unid.
3,00	60	20	
4,00	75	20	
5,00	85	20	
6,00	100	15	
6,00	100	15	
8,00	120	15	
8,00	120	15	
10,00	120	10	
10,00	120	10	
12,00	150	8	
12,00	150	8	
14,00	150	5	
14,00	150	5	
16,00	150	5	
18,00	160	5	
20,00	160	5	
6,00	200	10	
8,00	200	10	
10,00	200	5	
12,00	200	5	
14,00	200	5	
Cod. HR01TN		216	1.560,23



*Composición con 21 ganchos / Stand with 21 hooks / Présentoirs avec 21 crochets *Detalles del producto en la página 39 / Product information at page 39 / Info sur le produit á la page 39

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

SDS-PLUS CYCLONE *CYCLONE SDS-PLUS • SDS-PLUS CYCLONE*

CONSTRUCCIÓN *CONSTRUCTION • CONSTRUCTION*

Basic



DIN 8035



Ø (mm)	L (mm)	Uds. / Pcs.	€/Unid.
3,00	60	20	
4,00	75	20	
5,00	85	20	
6,00	100	15	
6,00	100	15	
8,00	120	15	
8,00	120	15	
10,00	120	10	
10,00	120	10	
12,00	150	8	
12,00	150	8	
14,00	150	5	
14,00	150	5	
16,00	150	5	
18,00	160	5	
20,00	160	5	
6,00	200	10	
8,00	200	10	
10,00	200	5	
12,00	200	5	
14,00	200	5	
Cod. HR01CY		164	1.084,29



*Composición con 21 ganchos / Stand with 21 hooks / Présentoirs avec 21 crochets *Detalles del producto en la página 44 / Product information at page 44 / Info sur le produit à la page 44

SDS-PLUS ST-2 *ST-2 SDS-PLUS • SDS-PLUS ST-2*

CONSTRUCCIÓN *CONSTRUCTION • CONSTRUCTION*



DIN 8035



Ø (mm)	L (mm)	Uds. / Pcs.	€/Unid.
4,00	110	8	
5,00	110	8	
6,00	110	8	
8,00	110	8	
10,00	110	8	
6,00	160	8	
6,00	160	8	
8,00	160	8	
8,00	160	8	
10,00	160	8	
12,00	160	8	
14,00	160	5	
16,00	160	5	
18,00	200	5	
8,00	260	5	
10,00	260	5	
12,00	260	5	
14,00	260	5	
16,00	450	4	
18,00	450	4	
20,00	450	4	
Cod. HR01ST		135	1.358,60



*Composición con 21 ganchos / Stand with 21 hooks / Présentoirs avec 21 crochets *Detalles del producto en la página 45 / Product information at page 45 / Info sur le produit à la page 45

MUEBLES EXPOSITORES

PRODUCT DISPLAYS • PRÉSENTATION PRODUIT

SDS-PLUS HURRICANE HURRICANE SDS-PLUS • SDS-PLUS HURRICANE

CONSTRUCCIÓN CONSTRUCTION • CONSTRUCTION



Ø (mm)	L (mm)	Uds. / Pcs.	€/Unid.
5,00	110	8	
6,00	110	8	
8,00	110	8	
10,00	110	8	
6,00	160	8	
6,00	160	8	
6,00	160	8	
8,00	160	8	
8,00	160	8	
10,00	160	8	
12,00	160	8	
14,00	160	8	
8,00	210	5	
10,00	210	5	
12,00	210	5	
14,00	210	5	
12,00	260	5	
14,00	310	5	
16,00	310	4	
18,00	450	4	
20,00	450	4	
Cod. HR01HU		138	2.830,99



*Composición con 21 ganchos / Stand with 21 hooks / Présentoirs avec 21 crochets *Detalles del producto en la página 46 / Product information at page 46 / Info sur le produit à la page 46

SDS-MAX STORM SDS-MAX STORM • SDS-MAX STORM

CONSTRUCCIÓN CONSTRUCTION • CONSTRUCTION



Ø (mm)	L (mm)	Uds. / Pcs.	€/Unid.
12,00	340	2	
14,00	340	2	
16,00	340	2	
18,00	340	2	
20,00	340	2	
22,00	340	2	
24,00	340	2	
14,00	540	2	
16,00	540	2	
18,00	540	2	
20,00	540	2	
22,00	540	2	
25,00	540	2	
30,00	570	2	
Cod. HR01SM		28	2.504,12



*Composición con 14 ganchos / Stand with 14 hooks / Présentoirs avec 14 crochets *Detalles del producto en la página 48 / Product information at page 48 / Info sur le produit à la page 48

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

PUNTEROS Y CINCELES CHISELS AND POINTERS • BURINS ET PICS

CONSTRUCCIÓN CONSTRUCTION • CONSTRUCTION



Descripción / Description	L (mm)	Uds. / Pcs.	€/Unid.
SDS-PLUS			
Puntero / Point Chisel	250	4	
Puntero / Point Chisel	250	4	
Cinzel / Flat Chisel	250 / 20	3	
Cinzel / Flat Chisel	250 / 20	3	
Cinzel ancho / Spade Chisel	200 / 40	3	
Acanalador / Hollow Chisel	240 / 22	3	
Cinzel azulejo / Tile Chisel	200 / 40	3	
SDS-MAX			
Puntero / Point Chisel	400	3	
Puntero / Point Chisel	400	3	
Cinzel / Flat Chisel	400 / 24	3	
Cinzel / Flat Chisel	400 / 24	3	
Cinzel ancho / Spade Chisel	300 / 80	3	
Acanalador / Hollow Chisel	300 / 26	3	
Cinzel azulejo / Tile Chisel	300 / 50	3	
Cod. HR01CP		44	949,33



*Composición con 14 ganchos / Stand with 14 hooks / Présentoirs avec 14 crochets

*Detalles del producto en las páginas 53-54 / Product information at pages 53-54 / Info sur le produit à les pages 53-54

BROCA MADERA 3 PUNTAS
STANDARD BRAD POINT DRILL BIT • FORET 3 POINTES STANDARD

MADERA WOOD • BOIS



Ø (mm)	L (mm)	Uds. / Pcs.	€/Unid.
3,00	70	20	
4,00	80	20	
5,00	90	20	
6,00	100	20	
7,00	110	15	
8,00	120	15	
9,00	130	10	
10,00	133	10	
11,00	150	10	
12,00	155	10	
13,00	160	8	
14,00	160	8	
15,00	165	8	
6,00	245	20	
7,00	245	15	
8,00	245	15	
9,00	245	10	
10,00	245	10	
11,00	245	10	
12,00	245	10	
13,00	245	8	
14,00	245	8	
15,00	245	8	
Cod. HR02BL		288	620,70



*Composición con 21 ganchos / Stand with 21 hooks / Présentoirs avec 21 crochets *Detalles del producto en la página 82 / Product information at page 82 / Info sur le produit à la page 82

MUEBLES EXPOSITORES

PRODUCT DISPLAYS • PRÉSENTATION PRODUIT

BROCAS PALA B FLAT DRILL BIT TYPE B • MÉCHE PLATE TIPE B

MADERA WOOD • BOIS



Ø (mm)	Uds. / Pcs.	€/Unid.
6,00	15	
8,00	15	
10,00	15	
12,00	15	
14,00	15	
15,00	15	
16,00	15	
18,00	15	
19,00	15	
20,00	15	
22,00	15	
24,00	15	
25,00	15	
26,00	15	
28,00	15	
30,00	15	
32,00	10	
33,00	10	
34,00	10	
35,00	10	
36,00	10	
38,00	10	
40,00	10	
Cod. HR02PB	310	1.139,32



*Composición con 21 ganchos / Stand with 21 hooks / Présentoirs avec 21 crochets *Detalles del producto en la página 84 / Product information at page 84 / Info sur le produit à la page 84

BROCAS PALA C FLAT DRILL BIT TYPE C • MÉCHE PLATE TIPE C

MADERA WOOD • BOIS



Ø (mm)	Uds. / Pcs.	€/Unid.
6,00	8	
8,00	8	
10,00	8	
12,00	8	
14,00	8	
15,00	8	
16,00	8	
18,00	8	
19,00	8	
20,00	8	
22,00	8	
24,00	8	
25,00	8	
26,00	8	
28,00	8	
30,00	8	
32,00	8	
33,00	8	
34,00	8	
35,00	8	
36,00	8	
38,00	8	
40,00	8	
Cod. HR02PC	184	787,40



*Composición con 21 ganchos / Stand with 21 hooks / Présentoirs avec 21 crochets *Detalles del producto en la página 85 / Product information at page 85 / Info sur le produit à la page 85

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

LEWIS LEWIS • LEWIS

MADERA WOOD • BOIS



Ø (mm)	L (mm)	Uds. / Pcs.	€/Unid.
6,00	200	4	
8,00	200	4	
10,00	200	4	
12,00	200	4	
14,00	200	4	
16,00	200	4	
18,00	200	4	
8,00	300	3	
10,00	300	3	
12,00	300	3	
14,00	300	3	
16,00	300	3	
18,00	300	3	
20,00	300	3	
10,00	450	2	
12,00	450	2	
14,00	450	2	
16,00	450	2	
18,00	450	2	
20,00	450	2	
22,00	450	2	
Cod. HR02LE		63	1.781,58



*Composición con 21 ganchos / Stand with 21 hooks / Présentoirs avec 21 crochets *Detalles del producto en la página 88 / Product information at page 88 / Info sur le produit à la page 88

DIN 338N HSS-G ALTO RENDIMIENTO

DIN 338N HSS-G HIGH PERFORMANCE DRILL BIT • DIN 338N HSS-G GRAND PERFORMANCE

NEW

BLISTER RÍGIDO RIGID BLISTER • BLISTER RIGIDE

METAL METAL • MÉTAL



Ø (mm)	Uds. / Pcs.	€/Unid.
1,00	30	
1,50	20	
2,00	30	
2,50	20	
3,00	30	
3,50	20	
4,00	30	
4,50	20	
5,00	30	
5,50	20	
6,00	30	
7,00	5	
8,00	20	
9,00	5	
10,00	10	
11,00	5	
12,00	10	
13,00	5	
Cod. HR03ARB	340	765,32



*Composición con 18 ganchos / Stand with 18 hooks / Présentoirs avec 18 crochets *Detalles del producto en la página 102 / Product information at page 102 / Info sur le produit à la page 102

MUEBLES EXPOSITORES

PRODUCT DISPLAYS • PRÉSENTATION PRODUIT

DIN 338N HSS-G ALTO RENDIMIENTO

DIN 338N HSS-G HIGH PERFORMANCE DRILL BIT • DIN 338N HSS-G GRAND PERFORMANCE

METAL METAL • MÉTAL



Ø (mm)	Uds. / Pcs.	€/Unid.
1,00	30	
1,50	20	
2,00	30	
2,50	20	
3,00	20	
3,25	10	
3,50	10	
4,00	30	
4,25	10	
4,50	10	
5,00	30	
5,25	10	
5,50	10	
6,00	30	
7,00	5	
8,00	20	
9,00	5	
10,00	10	
11,00	5	
12,00	10	
13,00	5	
Cod. HR03AR	330	664,91



*Composición con 21 ganchos / Stand with 21 hooks / Présentoirs avec 21 crochets *Detalles del producto en la página 103 / Product information at page 103 / Info sur le produit à la page 103

DIN 338N HSS-CO DIN 338N HSS-CO • DIN 338N HSS-E COBALT

NEW

BLISTER RÍGIDO RIGID BLISTER • BLISTER RIGIDE

METAL METAL • MÉTAL



Ø (mm)	Uds. / Pcs.	€/Unid.
1,00	30	
1,50	20	
2,00	30	
2,50	20	
3,00	30	
3,50	20	
4,00	30	
4,50	20	
5,00	30	
5,50	20	
6,00	30	
7,00	5	
8,00	20	
9,00	5	
10,00	10	
11,00	5	
12,00	10	
13,00	5	
Cod. HR03COB	340	1.308,25



*Composición con 18 ganchos / Stand with 18 hooks / Présentoirs avec 18 crochets *Detalles del producto en la página 110 / Product information at page 110 / Info sur le produit à la page 110

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

DIN 338N HSS-CO *DIN 338N HSS-CO • DIN 338N HSS-E COBALT*

METAL METAL • MÉTAL



Ø (mm)	Uds. / Pcs.	€/Unid.
1,00	30	
1,50	20	
2,00	30	
2,50	20	
3,00	20	
3,25	10	
3,50	10	
4,00	30	
4,25	10	
4,50	10	
5,00	30	
5,25	10	
5,50	10	
6,00	30	
7,00	5	
8,00	20	
9,00	5	
10,00	10	
11,00	5	
12,00	10	
13,00	5	
Cod. HR03CO	330	1.168,76



*Composición con 21 ganchos / Stand with 21 hooks / Présentoirs avec 21 crochets *Detalles del producto en la página 111 / Product information at page 111 / Info sur le produit à la page 111

DIN 338N HSS-G INOX PROGRESIVA
DIN 338N HSS-G PROGRESSIVE INOX
DIN 338N HSS-G INOX PROGRESSIVE WHITE



METAL METAL • MÉTAL



Ø (mm)	Uds. / Pcs.	€/Unid.
1,00	30	
1,50	20	
2,00	30	
2,50	20	
3,00	20	
3,25	10	
3,50	10	
4,00	30	
4,25	10	
4,50	10	
5,00	30	
5,25	10	
5,50	10	
6,00	30	
7,00	5	
8,00	20	
9,00	5	
10,00	10	
11,00	5	
12,00	10	
13,00	5	
Cod. HR03IP	330	1.115,43



*Composición con 21 ganchos / Stand with 21 hooks / Présentoirs avec 21 crochets *Detalles del producto en la página 114 / Product information at page 114 / Info sur le produit à la page 114

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

MUEBLES EXPOSITORES

PRODUCT DISPLAYS • PRÉSENTATION PRODUIT

DIN 338N HSS-CO INOX DIN 338N HSS-CO SPECIAL INOX DIN 338N HSS-CO SPÉCIAL INOX

METAL METAL • MÉTAL

advance
MAXIMO RENDIMIENTO



Ø (mm)	Uds. / Pcs.	€/Unid.
1,00	30	
1,50	20	
2,00	30	
2,50	20	
3,00	20	
3,25	10	
3,50	10	
4,00	30	
4,25	10	
4,50	10	
5,00	30	
5,25	10	
5,50	10	
6,00	30	
7,00	5	
8,00	20	
9,00	5	
10,00	10	
11,00	5	
12,00	10	
13,00	5	
Cod. HRC03IC	330	2.086,93

*Composición con 21 ganchos / Stand with 21 hooks / Présentoirs avec 21 crochets *Detalles del producto en la página 115 / Product information at page 115 / Info sur le produit à la page 115

DIN 338N HSS-G + TIN DIN 338N HSS-G + TIN • DIN 338N HSS-G + TiN

METAL METAL • MÉTAL



Ø (mm)	Uds. / Pcs.	€/Unid.
1,00	30	
1,50	20	
2,00	30	
2,50	20	
3,00	20	
3,25	10	
3,50	10	
4,00	30	
4,25	10	
4,50	10	
5,00	30	
5,25	10	
5,50	10	
6,00	30	
7,00	5	
8,00	20	
9,00	5	
10,00	10	
11,00	5	
12,00	10	
13,00	5	
Cod. HRC03TI	330	1.258,86

*Composición con 21 ganchos / Stand with 21 hooks / Présentoirs avec 21 crochets *Detalles del producto en la página 116 / Product information at page 116 / Info sur le produit à la page 116

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

DIN338N M/RED. HSS-G *DIN 338N HSS-G REDUCED SHANK • DIN338N HSS-G QUEUE RÉDUITE*

METAL METAL • MÉTAL



Ø (mm)	Uds. / Pcs.	€/Unid.
13,00	6	
13,50	3	
14,00	6	
14,50	3	
15,00	5	
15,50	2	
16,00	5	
16,50	2	
17,00	4	
17,50	2	
18,00	4	
18,50	2	
19,00	4	
19,50	2	
20,00	4	
20,50	2	
21,00	4	
21,50	2	
22,00	3	
22,50	2	
23,00	3	
23,50	2	
24,00	3	
24,50	2	
25,00	3	
Cod. HRC03MR	80	2.668,42



*Composición con 23 ganchos / Stand with 23 hooks / Présentoirs avec 23 crochets
*Detalles del producto en la página 120 / Product information at page 120 / Info sur le produit à la page 120

DIN 338N M/RED. HSS-Co *DIN 338N HSS-CO REDUCED SHANK • DIN 338N HSS-CO QUEUE RÉDUITE*

METAL METAL • MÉTAL



Ø (mm)	Uds. / Pcs.	€/Unid.
12,00	3	
12,00	3	
13,00	3	
13,50	2	
14,00	3	
14,00	3	
15,00	3	
15,50	2	
16,00	3	
16,00	3	
16,00	3	
16,50	2	
17,00	3	
17,50	2	
18,00	3	
18,00	3	
18,50	2	
19,00	3	
19,50	2	
20,00	3	
20,00	3	
Cod. HR03MC	57	2.588,92



*Composición con 21 ganchos / Stand with 21 hooks / Présentoirs avec 21 crochets *Detalles del producto en la página 121 / Product information at page 121 / Info sur le produit à la page 121

MUEBLES EXPOSITORES

PRODUCT DISPLAYS • PRÉSENTATION PRODUIT

CORONAS BIMETAL M42

BIMETAL HOLE SAWS M42
SCIES TRÉPAN BIMETAL M42

METAL METAL • MÉTAL



HSS-CO 8%

4-6 TPI

Ø (mm)	Uds. / Pcs.	€/Unid.
16,00	3	
19,00	3	
20,00	3	
22,00	3	
25,00	3	
27,00	3	
30,00	3	
32,00	2	
33,00	2	
35,00	2	
38,00	2	
44,00	2	
48,00	2	
51,00	2	
Husillo / Arbor A0	3	
Husillo / Arbor A1	3	
Husillo / Arbor A2T	2	
Husillo / Arbor A3T	2	
Cod. HR03CB	45	642,80

*Composición con 18 ganchos / Stand with 18 hooks / Présentoirs avec 18 crochets

*Detalles del producto en la página 163 / Product information at page 163 / Info sur le produit à la page 163



COMBINADO STANDARD

STANDARD COMBINED
STANDARD COMBINÉE



BLISTER RÍGIDO RIGID BLISTER • BLISTER RIGIDE

COMBINADO COMBINED • COMBINÉ

	Ø (mm)	Uds. / Pcs.	€/Unid.
HSS-G METAL METAL METAL	3,00	20	
	4,00	20	
	5,00	30	
	6,00	30	
	8,00	20	
	10,00	10	
GRANITO GRANITE	3,00	20	
	4,00	20	
	5,00	30	
	6,00	30	
	8,00	20	
	10,00	10	
MADERA WOOD BOIS	3,00	20	
	4,00	20	
	5,00	30	
	6,00	30	
	8,00	20	
	10,00	10	
Cod. HR0STAND		390	792,82

*Composición con 18 ganchos / Stand with 18 hooks / Présentoirs avec 18 crochets



CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

COMBINADO BROCAS AMARRE 1/4" HEXAGONAL
 COMBINED PRODUCT DISPLAY 1/4" HEXAGONAL SHANK DRILL BITS
 DPRÉSENTATION COMBINÉE FORETS QUEUE 1/4" HEXAGONALE

HEXAGONAL HEXAGONAL • HEXAGONAL



Ø (mm)	Uds. / Pcs.	€/Unid.
METAL M2 / METAL		
3,00	15	
4,00	15	
5,00	15	
6,00	15	
6,00	15	
8,00	10	
MADERA 3P / WOOD		
3,00	15	
4,00	15	
5,00	15	
6,00	15	
6,00	15	
8,00	10	
8,00	10	
CONSTRUCCIÓN JX Y MULTIUSOS/ CONSTRUCTION		
JX		
4,00	10	
5,00	10	
6,00	20	
MULTIUSOS		
4,00	10	
6,00	20	
8,00	15	
10,00	10	
Cod. HR06HX	285	1.667,61



*Composición con 21 ganchos / Stand with 21 hooks / Présentoirs avec 21 crochets
 *Detalles del producto en las páginas 376-378
 Product information at pages 376-378 / Info sur le produit à les pages 376-378

MUEBLES EXPOSITORES

PRODUCT DISPLAYS • PRÉSENTATION PRODUIT

ESTUCHES SETS • COFFRETS

Descripción / Description	Calidad / Composition	Uds. / Pcs.	€/Unid.
CRT 19 Pcs. 1 - 10 x 0,5 mm.	HSS-G	4	
CRT 19 Pcs. 1 - 10 x 0,5 mm.	HSS-CO 5%	4	
CRT 19 Pcs. 1 - 10 x 0,5 mm.	TIN	4	
SESABOX 5 Pcs. 3 - 5 - 6 - 8 mm	HSS-G	2	
SESABOX 5 Pcs. 3 - 5 - 6 - 8 mm	HSS-CO 5%	2	
SESABOX 5 Pcs. 3 - 5 - 6 - 8 mm	TIN	2	
Cod. HR03ET		18	933,61

*Composición con 9 ganchos / Stand with 9 hooks / Présentoirs avec 9 crochets



ESTUCHES SESABOX SESABOX SET • COFFRETS SESABOX

Descripción / Description	Uds. / Pcs.	Uds. / Pcs.	€/Unid.
SESABOX 5 Pcs.	HSS-G	4	
SESABOX 5 Pcs.	HSS-CO 5%	4	
SESABOX 5 Pcs.	HSS TIN	4	
SESABOX 5 Pcs.	TORNADO	4	
SESABOX 5 Pcs.	GRANITO	4	
SESABOX 5 Pcs.	JR	4	
SESABOX 8 Pcs.	HSS-G	3	
SESABOX 8 Pcs.	HSS-CO 5%	3	
SESABOX 8 Pcs.	TORNADO	3	
SESABOX 8 Pcs.	GRANITO	3	
SESABOX 8 Pcs.	MADERA 3P STANDARD BRAD POINT	3	
Cod. HR03ES		39	925,11

*Composición con 11 ganchos / Stand with 11 hooks / Présentoirs avec 11 crochets



CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

CONSTRUCCIÓN
 CONSTRUCTION • CONSTRUCTION

MADERA
 WOOD • BOIS

METAL
 METAL • METAL

FRESADO
 MILLING • FRAISAGE

ROSCADO
 THREADING • FILETAGE

ACCESORIOS
 ACCESSORIES • ACCESSOIRES

HEXAGONAL
 HEXAGONAL • HEXAGONAL

METROLOGÍA
 METROLOGY • MÉTROLOGIE

DISPLAYS
 DISPLAYS • DISPLAYS



MUEBLES EXPOSITORES

PRODUCT DISPLAYS • PRÉSENTATION PRODUIT

DOBLE METRO LINEAL "COMBINADO"

"COMBINED" DOUBLE METRE DISPLAY • PRÉSENTOIRE DOUBLE "COMBINÉ"

Cod.	Expositor / Displays	€/Unid.	Cod.	Expositor / Displays	€/Unid.
HR03AR	DIN 338 HSS M2 / DIN 338 HSS M2	664,91	HR01GR	Granito / Granito	877,04
HR03CO	DIN 338 HSSCO / DIN 338 HSSCO	1.168,76	HR01TN	Tornado / Tornado	1.560,23
HR03IP	DIN 338N HSS-INOX Progresiva / DIN 338N HSS Progressive INOX	1.115,43	HR01HU	SDS-PLUS Hurricane / Hurricane SDS-PLUS	2.830,99
HR03MR	DIN338N M/RED. HSS-G / DIN 338N HSS-G Reduced Shank	2.668,42	HR01ST	SDS-PLUS ST-2 / SDS-PLUS ST-2	1.358,60
HR03CB	Corona Bi-Metal / Bimetal Hole Saw	642,80	HR01SM	SDS-MAX Storm / Storm SDS-MAX	2.504,12
HR03ET	Estuches / Sets	933,61	HR01CP	Punteros y Cinceles / Chisels and Pointers	949,33
HR03ES	SESABOX / SESABOX	925,11	HR02LE	Lewis / Lewis	1.781,58
HR06HX	Amarre 1/4" Hexagonal / 1/4" Hexagonal Shank Drill Bits	1.667,61	HR02PC	Brocas Pala Tipo C / Flat Drill Bit Type C	787,40
HR01JR	JR para Porcelanato / JR Drill-Bit for Porcelanic	1.139,06	HR02BL	Madera 3 Puntas / Standard Brad Point Drill Bit	620,70
MLCOM					24.195,71

METRO LINEAL "PROFESIONAL"

"PROFESSIONAL" METRE DISPLAY
PRÉSENTOIRE METRE "PROFESSIONNEL"

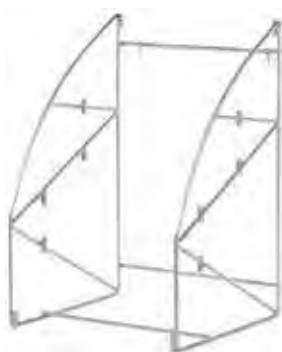
Cod.	Expositor / Displays	€/Unid.
HR03AR	DIN 338 HSS M2 / DIN 338 HSS M2	664,91
HR03CO	DIN 338 HSSCO / DIN 338 HSSCO	1.168,76
HR03CB	Corona Bi-Metal / Bimetal Hole Saw	642,80
HR01TN	Tornado / Tornado	1.560,23
HR01ST	SDS-PLUS ST-2 / SDS-PLUS ST-2	1.358,60
HR01JR	JR para Porcelanato / JR Drill-Bit for Porcelanic	1.139,06
HR03ES	SESABOX / SESABOX	925,11
HR03ET	Estuches / Sets	933,61
HR02PB	Brocas Pala Tipo B / Flat Drill Bit Type B	1.139,32
MLPRO		9.532,40

METRO LINEAL "FERRETERÍA"

"IRONMONGERY" METRE DISPLAY
PRÉSENTOIRE METRE "QUINCAILLERIE"

Cod.	Expositor / Displays	€/Unid.
HR03AR	DIN 338 HSS M2 / DIN 338 HSS M2	664,91
HR03CO	DIN 338 HSSCO / DIN 338 HSSCO	1.168,76
HR03CB	Corona Bi-Metal / Bimetal Hole Saw	642,80
HR01BA	Basic / Basic	447,69
HR01CY	SDS-PLUS Cyclone / Cyclone SDS-PLUS	1.084,29
HR01JR	JR para Porcelanato / JR Drill-Bit for Porcelanic	1.139,06
HR03ES	SESABOX / SESABOX	925,11
HR02PC	Brocas Pala Tipo C / Flat Drill Bit Type C	787,40
HR02BL	Madera 3 Puntas / Standard Brad Point Drill Bit	620,70
MLFER		7.480,71

PIECERÍA PIECES • PIÈCES



ESTRUCTURA / STRUCTURE / STRUCTURE

Cod.	€/Unid.
HR0	78,75



CESTA / BASKET / CORBEILLE

Cod.	€/Unid.
HR0CES	31,50



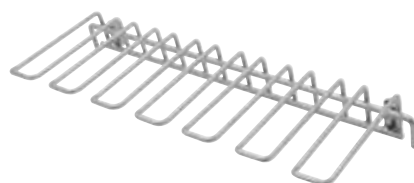
SOPORTE CARÁTULA
LABEL BASE / BASÉ ÉTIQUETTE

Cod.	€/Unid.
HR0CAR	14,49



GANCHO REDONDO
ROUND HOOK / CROCHET ROND

Cod.	€/Unid.
HR0GRD	2,94



TIRA DE GANCHOS
HOOK BAND / BANDE DE CROCHETS

Cod.	€/Unid.
HR0T7IN	11,76
HR0T6IN	11,76



BASE PARA GANCHO
BASE FOR HOOKS / BASE POUR CROCHETS

Cod.	€/Unid.
HR0BAS	12,50

Hasta fin de existencias / Until end of stock
Jusqu'à épuisement des stocks

*Para otras composiciones consultar / *For other compositions, request / *Présentoirs avec 11 crochets

Hasta fin de existencias / Until end of stock
Jusqu'à épuisement des stocks

EXPOSITOR INDIVIDUAL

INDIVIDUAL DISPLAY • DISPLAY INDIVIDUEL

METACRILATO
540 x 370 x 735
mm

METAL METAL • MÉTAL

Calidad / Quality	Uds. / Pcs.	Cod.	€/Unid.
HSS-G ALTO RENDIMIENTO HIGH PERFORMANCE	1.630	3EM01	3.322,69
HSS WHITE WHITE	1.630	3EM02	2.028,42
HSS-CO 5%	1.630	3EM03	5.702,53
HSS-G	1.630	3EM04	5.752,66
HSS-CO 5%	1.630	3EM05	10.760,76
TIN	1.630	3EM06	6.334,02



Contenido / Contains / Contenu

Ø (mm)	Uds. / Pcs.	Ø (mm)	Uds. / Pcs.	Ø (mm)	Uds. / Pcs.	Ø (mm)	Uds. / Pcs.
1,00	40	4,00	160	6,50	40	10,00	50
1,50	40	4,25	70	7,00	40	10,50	20
2,00	70	4,50	60	7,50	40	11,00	20
2,50	80	5,00	150	8,00	40	11,50	20
3,00	140	5,25	50	8,50	40	12,00	25
3,25	60	5,50	70	9,00	25	12,50	20
3,50	140	6,00	80	9,50	20	13,00	20
TOTAL							1.630

EXPOSITOR COMBINADO HSS-G + HSS-CO

HSS-G + HSS-CO COMBINATED DISPLAY
DISPLAY COMBINÉ HSS-G + HSS-CO

METACRILATO
540 x 370 x 735
mm

METAL METAL • MÉTAL

Calidad / Quality	Uds. / Pcs.	Cod.	€/Unid.
HSS-G HSS-CO 5%	1.630	3EM08	4.467,97



Contenido / Contains / Contenu

HSS-G			
Ø (mm)	Uds. / Pcs.	Ø (mm)	Uds. / Pcs.
1,00	20	6,50	20
1,50	20	7,00	20
2,00	40	7,50	20
2,50	40	8,00	20
3,00	70	8,50	20
3,25	30	9,00	15
3,50	70	9,50	10
4,00	80	10,00	25
4,25	40	10,50	10
4,50	30	11,00	10
5,00	80	11,50	10
5,25	30	12,00	15
5,50	40	12,50	10
6,00	40	13,00	10
TOTAL		845	

HSS-CO 5%			
Ø (mm)	Uds. / Pcs.	Ø (mm)	Uds. / Pcs.
1,00	20	6,50	20
1,50	20	7,00	20
2,00	30	7,50	20
2,50	40	8,00	20
3,00	70	8,50	20
3,25	30	9,00	10
3,50	70	9,50	10
4,00	80	10,00	25
4,25	30	10,50	10
4,50	30	11,00	10
5,00	70	11,50	10
5,25	20	12,00	10
5,50	30	12,50	10
6,00	40	13,00	10
TOTAL		785	

MUEBLES EXPOSITORES

PRODUCT DISPLAYS • PRÉSENTATION PRODUIT

EXPOSITOR COMBINADO

COMBINED DISPLAY • DISPLAY COMBINÉ

METAL METAL • MÉTAL

Uds. / Pcs.	Cod.	€/Unid.
1.630	3EM07	4.912,61

METACRILATO
540 x 370 x 735
mm



Contenido / Contains / Contenu

HSS-G		HSS-CO 5%	
Ø (mm)	Uds. / Pcs.	Ø (mm)	Uds. / Pcs.
1,00	10	1,00	10
1,50	10	1,50	10
2,00	40	2,00	10
2,50	40	2,50	10
3,00	90	3,00	20
3,25	30	3,25	10
3,50	90	3,50	20
4,00	90	4,00	20
4,25	40	4,25	10
4,50	30	4,50	10
5,00	90	5,00	20
5,25	20	5,25	10
5,50	40	5,50	10
6,00	40	6,00	10
6,50	10	6,50	10
7,00	10	7,00	10
7,50	10	7,50	10
8,00	10	8,00	10
8,50	10	8,50	10
9,00	10	9,00	5
9,50	5	9,50	5
10,00	20	10,00	10
10,50	5	10,50	5
11,00	5	11,00	5
11,50	5	11,50	5
12,00	10	12,00	5
12,50	5	12,50	5
13,00	5	13,00	5
TOTAL	780	TOTAL	280

HSS-G		INOX	TIN	
Ø (mm)	Uds. / Pcs.		Ø (mm)	Uds. / Pcs.
1,00	10		1,00	10
1,50	10		1,50	10
2,00	10		2,00	10
2,50	20		2,50	10
3,00	20		3,00	10
3,25	10		3,25	10
3,50	20		3,50	10
4,00	30		4,00	20
4,25	10		4,25	10
4,50	10		4,50	10
5,00	30		5,00	10
5,25	10		5,25	10
5,50	10		5,50	10
6,00	20		6,00	10
6,50	10		6,50	10
7,00	10		7,00	10
7,50	10		7,50	10
8,00	10		8,00	10
8,50	10		8,50	10
9,00	5		9,00	5
9,50	5		9,50	5
10,00	10		10,00	10
10,50	5		10,50	5
11,00	5		11,00	5
11,50	5		11,50	5
12,00	5		12,00	5
12,50	5		12,50	5
13,00	5		13,00	5
TOTAL	320		TOTAL	250

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILETAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

EXPOSITORES ROSCADO MANUAL

HAND THREADING DISPLAY
DISPLAY FILETAGE MANUEL

METACRILATO
390 x 155 x 235
mm

ROSCADO *THREADING • FILÉTAGE*

HSS-G

Cod.	Descripción / Description	Uds. / Pcs.	€/Unid.
Giramachos con Crique / Tap Holder with Ratchet / Porte Tarauds			
1R10001	Gr. 1/C	3	
1R10002	Gr. 2/C	2	
Juegos de Machos / Hand Taps / Tarauds À Main			
2R27326	M3 x 0,5	5	
2R27330	M4 x 0,7	5	
2R27334	M5 x 0,8	5	
2R27338	M6 x 1,0	10	
2R27342	M8 x 1,25	5	
2R27346	M10 x 1,50	5	
2R27350	M12 x 1,75	5	
Cojinetes / Round Dies / Filières Rondes			
4R27434	M5 x 0,8 - 20 x 7	3	
4R27438	M6 x 1,0 - 20 x 7	3	
4R27442	M8 x 1,25 - 25 x 9	3	
4R27446	M10 x 1,50 - 30 x 11	3	
4R27450	M12 x 1,75 - 38 x 14	3	
COD. 19RAJV		60	1.243,86



EXPOSITORES MACHOS ANCLAJE 1/4"

1/4" SHANK TAPS DISPLAY
PRÉSENTOIR TARAUDS MÉCHE 1/4"

METACRILATO
190 x 190 x 175
mm

ROSCADO *THREADING • FILÉTAGE*

HSS-G



Descripción / Description	Uds. / Pcs.	€/Unid.
Machos / Taps / Tarauds		
M3	10	
M4	10	
M5	10	
M6	10	
M8	10	
M10	10	
Brocas / Drill Bits / Forets		
2,5 mm.	10	
3,3 mm.	10	
4,2 mm.	10	
5,0 mm.	10	
6,8 mm.	10	
8,5 mm.	10	
Cod. 3R48960	120	990,26



MUEBLES EXPOSITORES

PRODUCT DISPLAYS • PRÉSENTATION PRODUIT

EXPOSITORES MACHOS MÁQUINA

MACHINE TAPS DISPLAY

PRÉSENTOIR TARAUDS MACHINE

ROSCADO THREADING • FILÉTAGE

METACRILATO
330 x 140 x 180
mm



Contenido / Contains / Contenu

Calidad / Quality				Mat.	Banda Ring	Nº Filas Rows N°	€/Unid.	M3	M4	M5	M6	M8	M10	M12	TOTAL
PM	HL	DIN 371/376	FORM B	INOX		1	405,57	1	1	2	2	2	1	1	10
PM	HL	DIN 371/376	FORM C/35°	INOX		1	359,70	1	1	2	2	2	1	1	10
HSS-E-V3	TIN	DIN 371/376	FORM B	MULTIUSOS		1	243,88	1	1	2	2	2	1	1	10
HSS-E-V3	TIN	DIN 371/376	FORM C/35°	MULTIUSOS		1	266,85	1	1	2	2	2	1	1	10
HSS-CO 5%		DIN 371/376	FORM B	ACERO 820-1100 Nitro2		1	220,75	1	1	2	2	2	1	1	10
HSS-CO 5%		DIN 371/376	FORM C/40°	ACERO 820-1100 Nitro2		1	270,24	1	1	2	2	2	1	1	10
PM	FUTURA	DIN 371/376	FORM B	ACERO 1100-1400 Nitro2		1	355,96	1	1	2	2	2	1	1	10
PM	FUTURA	DIN 371/376	FORM C/40°	ACERO 1100-1400 Nitro2		1	399,84	1	1	2	2	2	1	1	10
PM	ALUSPEED	DIN 371/376	FORM B	AL		1	302,39	1	1	2	2	2	1	1	10
PM	ALUSPEED	DIN 371/376	FORM C/45°	AL		1	330,84	1	1	2	2	2	1	1	10
HSS-CO 5%	TIN	DIN 371/376	FORM B	ACERO 800-800 Nitro2		1	254,94	1	1	2	2	2	1	1	10
HSS-CO 5%	TIN	DIN 371/376	FORM C/35°	ACERO 800-800 Nitro2		1	281,19	1	1	2	2	2	1	1	10
HSS-CO 5%		DIN 371/376	FORM C	ACERO 800-800 Nitro2		2	254,50	2	2	4	4	4	2	2	20
HSS-CO 5%		DIN 371/376	FORM B	ACERO 800-800 Nitro2		3	403,99	3	3	6	6	6	3	3	30
HSS-CO 5%		DIN 371/376	FORM C/35°	ACERO 800-800 Nitro2		3	475,44	3	3	6	6	6	3	3	30
COD. 3R48932					TOTAL FILAS	20	4.826,07							TOTAL PZAS	200

CONSTRUCCIÓN
CONSTRUCTION • CONSTRUCTION

MADERA
WOOD • BOIS

METAL
METAL • MÉTAL

FRESADO
MILLING • FRAISAGE

ROSCADO
THREADING • FILÉTAGE

ACCESORIOS
ACCESSORIES • ACCESSOIRES

HEXAGONAL
HEXAGONAL • HEXAGONAL

METROLOGÍA
METROLOGY • MÉTROLOGIE

DISPLAYS
DISPLAYS • DISPLAYS

FILOS DE CORTE / SHARPENED / AFFUTAGE

	PUNTA CONVENCIONAL CONVENTIONAL POINT POINTE UNIVERSEL		PUNTA SPLIT POINT SPLIT POINT AFFUTAGE EN CROIX		GEOMETRÍA RECTA STRAIGHT HEAD GEOMETRY GÉOMÉTRIE DROITE
	PUNTA FILO CORREGIDO LIP CORRECTION LÈVRE CORRIGÉ		PUNTA PLACA DE CARBURO CARBIDE TIPPED POINTE CARBURE		GEOMETRÍA RADIAL RADIAL HEAD GEOMETRY GÉOMÉTRIE RADIALE
	PUNTA CENTRADORA CENTERING POINT POINTE À CENTRER		CORTE AL CENTRO 2 DIENTES CENTER CUTTING 2 FLUTES 2 DENTS ET COUPE AU CENTRE		CORTE AL CENTRO 3 DIENTES CENTER CUTTING 3 FLUTES 3 DENTS ET COUPE AU CENTRE
	CORTE AL CENTRO 4 Ó MÁS DIENTES CENTER CUTTING 4 OR MORE FLUTES 4 DENTS OU PLUS ET COUPE AU CENTRE				

CORTES / CUTS / DENTS

	Nº DE CORTES Nº OF CUTS / Nº DE DENTS 2Z / 3Z / 4Z / 3Z - 5Z / 4Z - 6Z		DIENTES POR PULGADA TOOTH PER INCH DENT PAR POUCE		DIENTES POR PULGADA TOOTH PER INCH DENT PAR POUCE
	DENTADO DE ACABADO TIPO N N FINISHING FINITION N		DENTADO PARA GRAN DESBASTE TIPO NR NR GRINDING NR DÉGROSSISSAGE		DENTADO PARA DESBASTE FINO TIPO NRF NR-F FINE GRINDING NR-F DÉGROSSISSEMENT FIN
	DENTADO PARA GRAN DESBASTE EN MATERIALES DUROS COARSE ROUGHING FOR HARD METALS EBAUCHE GROSSIÈRE POUR MATÉRIAUX DURS		DENTADO PARA DESBASTE FINO EN MATERIALES DUROS FINE PITCH ROUGHING FOR HARD MATERIALS EBAUCHE PAS FIN POUR MATÉRIAUX DURS		

TIPO ROSCA / THREAD TYPE / TYPE FILETAGE

	FORMA A A FORM FORME A		FORMA D D FORM FORME D		FORMA B-AZ B-AZ FORM FORME B-AZ
	FORMA B B FORM FORME B		FORMA C/° C° FORM - FORME C° C/15° - C/35° - C/39° - C/40° - C/50°		FORMA COJINETE A DIES FORM A FILIERE FORME A
	FORMA C C FORM FORME C				

ÁNGULOS HÉLICES / HELIX ANGLES / ANGLE D'HÉLICE

	HÉLICE ÁNGULO ° ° HELIX ANGLE ANGLE D'HELICE ° 8° / 30° / 35° / 40° / 45°		HÉLICE TIPO "S" "S" TYPE HELIX HÉLICE TIPE "S"
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ANGULOS DE PUNTA / POINT ANGLES / ANGLES POINTES

	ÁNGULO PUNTA ° ° TIP ANGLE ANGLE DE POINTE ° 118° / 120° / 130° / 135° / 140°
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ÁNGULO DE ASIENTO Y AVELLANADO / ANGLES / ANGLES

	35° 35° / 60° / 90° / 180°
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MANGOS / SHANK TYPES / QUEUES

	SDS MAX SDS MAX SDS MAX		MANGO CILÍNDRICO STRAIGHT SHANK QUEUE CYLINDRIQUE		MANGO CÓNICO MORSE TAPER SHANK QUEUE CONIQUE
	SDS PLUS SDS PLUS SDS PLUS		MANGO HEXAGONAL HEXAGONAL SHANK QUEUE HEXAGONALE		MANGO MÁQUINA NEUMÁTICA PNEUMATIC MACHINE SHANK QUEUE MACHINE PNEUMATIQUE
	SDS TOP SDS TOP SDS TOP		MANGO HEXAGONAL 1/4 HEXAGONAL SHANK 1/4 QUEUE HEXAGONALE 1/4		ANCLAJE WELDON DIN 1835B WELDON SHANK DIN 1835B QUEUE WELDON DIN 1835B
	MANGO 3 PLANOS 3 FLAT SHANK QUEUE 3 PLANS		MANGO REBAJADO REDUCED SHANK QUEUE RÉDUITE		ANCLAJE WELDON 19,00 WELDON SHANK 19,00 QUEUE WELDON 19,00

TOLERANCIAS / TOLERANCES / TOLERANCES

	6H / 7H / 6g / 6e / 2B / ISO2X / 3B / ISO1 - 4H ISO2 - 6H / 6H + 0,1mm / 6HX / 6GX
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SISTEMAS ANCLAJE / ANCHOR SYSTEMS / SYSTÈME ANCRAGE

	SISTEMA 1:8 1:8 SYSTEM SYSTÈME 1:8		SISTEMA M16 M16 SYSTEM SYSTÈME M16		SISTEMA M14 M14 SYSTEM SYSTÈME M14
	DIN 138 DIN 138 DIN 138				






ÍNDICE ICONOGRAFÍA

ICONOGRAPHY INDEX • INDEX ICONOGRAPHIE
















OTROS ICONOS / OTHER ICONOGRAPHY / AUTRE ICONOGRAPHIE

	REFRIGERACIÓN COOLING REFROIDISSEMENT		SIN REFRIGERACIÓN NO COOLING SANS RÉFROIDISSEMENT		CORTE IZQUIERDA LEFT HAND COUP À GAUCHE
	PERCUSION PERCUSSION PERCUSSION		SIN PERCUSIÓN NO PERCUSSION NON PERCUSSION		ALTIMA DE SEGMENTO SEGMENT HEIGHT HAUTEUR SEGMENT
	PGM PGM PGM		RPM RPM RPM		












CALIDAD HERRAMIENTA Y RECUBRIMIENTOS / TOOL COMPOSITION AND COATINGS / CALITÉ OUTILS ET RECOUVREMENTS

	ACERO RÁPIDO HSS-G (M2) HIGH SPEED STEEL HSS-G (M2) ACIER RAPIDE HSS-G (M2)		ACERO RÁPIDO COBALTO 8% (M42) HIGH SPEED 8% COBALT STEEL (M42) ACIER RAPIDE COBALTO 8% (M42)		NITRURO DE TIT. ALUMINIO (RECUBRIMIENTO) TITANIUM ALUMINIUM NITRIDE NITRURE DE TITANE ALUMINIUM
	ACERO RÁPIDO HSS HIGH SPEED STEEL HSS ACIER RAPIDE HSS		LAMINADO ROLL FORGED LAMINÉ		NITRURO DE TITANIO (RECUBRIMIENTO) TITANIUM NITRIDE (COATING) NITRURE DE TITANE (RECOUVREMENT)
	ACERO RÁPIDO COBALTO 5% (M35) HIGH SPEED 5% COBALT STEEL (M35) ACIER RAPIDE COBALTO 5% (M35)		METAL DURO - CARBURO DE TUNGSTENO HARD METAL - CARBURE TUNGSTEN METAL DUR - CARBURE TUNGSTÈNE		VAPORIZADO (TRATAMIENTO) VAPORIZED (TREATMENT) VAPORISÉ (TRAITEMENT)
	METAL DURO INTEGRAL HARD METAL INTEGRAL METAL DUR PLEIN		PULVIMETALÚRGICO POWDER METALURGY MÉTALLURGIE DES POUDRES		ACERO RÁPIDO VANADIO 3% HIGH SPEED STEEL 3% VANADIUM ACIER RAPIDE VANADIUM 3%
	NITRURO DE TITANIO ALUMINIO TITANIUM ALUMINIUM NITRIDE NITRURE DE TITANE ALUMINIUM		NITRURO DE CROMO ALUMINIO ALUMINIUM CHROMIUM NITRIDE NITRURE DE CHROME ALUMINIUM		HARD LUBE HARD LUBE HARD LUBE
	FUTURA FUTURA FUTURA		ALUSPEED ALUSPEED ALUSPEED		

APLICACIONES CONSTRUCCIÓN / APPLICATIONS CONSTRUCTION / APPLICATIONS CONSTRUCTION

	HORMIGÓN REFORZADO REINFORCED CONCRETE BÉTON ARMÉ		HORMIGÓN CONCRETE BÉTON		HORMIGÓN BLOQUE CONCRETE BLOCK BRIQUE BÉTON
	PIEDRA NATURAL - GRANITO - MÁRMOL NATURAL STONE - GRANITE - MARBLE PIERRE NATURELLE		PIEDRA ARTIFICIAL ARTIFICIAL STONE PIERRE ARTIFICIELLE		CERÁMICA - PORCELANATO - GRES CERAMIC - GRES - HARD TILE CÉRAMIQUE - GRÈS
	VIDRIO GLASS VERRE		LADRILLO BRICK BRIQUE		TEJA TILE TILE
	MAMPOSTERÍA PLYWOOD MAÇONNERIE		MULTIUSOS MULTIPURPOSE MULTIMATÉRIEL		PVC - ACRÍLICO PVC PVC
	MADERA WOOD BOIS		AGLOMERADO SOFTWOOD AGGLOMÉRÉS		CONTRACHAPADO PLYWOOD CONTRAPLAQUÉ

APLICACIONES METAL / METAL APPLICATIONS / APPLICATIONS MÉTAL

	ACERO 400-800 STEEL 400-800 ACIER 400-800		ALUMINIO ALUMINIUM ALUMINIUM		INOX STAINLESS STEEL INOX		TITANIO TITANIUM TITANIUM
	ACERO 800-1100 STEEL 800-1100 ACIER 800-1100		COBRE COPPER CUIVRE		ALEACIONES ESPECIALES SPECIAL ALLOYS ALLIAGES SPÉCIAUX		LATÓN BRASS LAITON
	ACERO 1100-1400 STEEL 1100-1400 ACIER 1100-1400		FUNDICIÓN CAST IRON FONTE		PLÁSTICO PLASTIC PLASTIQUE		

ENVASES / PACKAGINGS / EMBALLAGES

	BLISTER BLISTER BLISTER		COLGADOR CLIP CLIP		PETACA PACK PACK		TUBO TUBE TUBE
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CARACTERÍSTICAS DEL ACERO

CHARACTERISTICS OF STEEL
CARACTERISTIQUES DE L'ACIER

HSS

Acero rápido con buena tenacidad y rendimiento para herramientas de corte.

High Speed Steel with good toughness and good performance for cutting tools.

Acier rapide avec une bonne ténacité et une bonne performance pour les outils de coupe.

HSS-G

Acero rápido de gran rendimiento y buena tenacidad, para el trabajo en materiales hasta 850 N/mm².

Very high performance HSS with good toughness, for milling and cutting of materials up to 850 N/mm².

Acier rapide à haut rendement et bonne ténacité, pour le broyage et le coupe des matériaux jusqu'à 850 N/mm².

HSS-CO 5%

Acero rápido de gran rendimiento y buena tenacidad, para el fresado de materiales hasta 1200 n/mm²

Very high performance HSS with good toughness, for milling of materials up to 1200 n/mm²

Acier rapide à haut rendement et bonne ténacité, pour le broyage des matériaux jusqu'à 1200 n/mm²

HSS-CO 8%

Acero rápido de excelente rendimiento, buena tenacidad y gran resistencia a la temperatura. para el fresado de materiales de gran dureza.

Extra high performance HSS with good toughness and great temperature resistance. For milling of hard materials.

Acier rapide à excellent rendement, bonne ténacité et haute résistance à la température. Pour l'usinage de matériaux très durs.

HSS-E-V3

Acero rápido de gran rendimiento y buena tenacidad. especialmente usado en piezas de gran diámetro y fresas de disco.

HSS with high performance and good toughness. Applicable for tools of big diameters and for face milling cutters.

Acier rapide à haut rendement et bonne ténacité, notamment utilisé dans les pièces à grand diamètre et fraises de disque.

PM

Acero rápido pulvi-metalúrgico. estructura homogénea, gran estabilidad y mayor vida útil de las herramientas. para trabajar materiales muy duros.

Powder metallurgical HSS, extra high performance. Homogeneous structure, more stability and longer life for tools. For very hard materials.

Acier rapide pulvimétallurgique. Structure homogène, grande stabilité et durée de vie des outils prolongée. Pour l'usinage de matériaux très durs.

MDI

Aleación sinterizada de Carburo de Tungsteno, de gran dureza, estabilidad y resistencia al desgaste, que permite trabajar a velocidades muy altas y en grandes producciones.

Sintered alloy of Tungsten Carbide, with great hardness, excellent stability and resistance to wear, which allows working at very high speeds and in large productions.

Alliage fritté de carbure de tungstène, avec une grande dureté, une excellente stabilité et une résistance à l'usure, ce qui permet de travailler à des vitesses très élevées et dans les grandes productions.

RECUBRIMIENTOS

COATINGS
REVETEMENTS

TIALN

Recubrimiento que aumenta la resistencia, la dureza y la oxidación a altas temperaturas. Permite trabajar a altas velocidades sin refrigerar.

Increases resistance, hardness and high temperature oxidation. It allows high speed without cooling.

Revêtement qui accroît la résistance, la dureté et l'oxydation à des températures élevées. Possibilité de travail à des vitesses élevées sans réfrigérer.

ALTIN

Mayor contenido en Al que el TiAlN. Aumenta ligeramente la dureza respecto a éste.

With more Al than TiAlN. Lightly increases hardness.

Teneur plus importante que celle du "TIALN".

ALCrN

Recubrimiento con excelente resistencia a la tracción en caliente.

Great tensile strength and excellent hot hardness.

Revêtement avec excellente résistance à la traction à chaud.

TIN

Disminuye el coeficiente de fricción, aumenta la vida útil de la herramienta.

More sliding properties and tool life increase.

Diminution du coefficient de frottement, prolongation de la durée de vie utile de l'outil.

HL

Disminuye mucha la fricción. Gran adhesión del recubrimiento en todo tipo de materiales.

Very good sliding properties. Great adhesion to all kind of tools.

Réduction considérable des frottements.

FUTURA

Mejora la dureza, disminuye la fricción y aumenta la resistencia química.

Increases hardness, better sliding properties and chemical resistance.

Amélioration de la dureté, diminution des frottement et accroissement de la résistance chimique.

ALUSPEED

Recubrimiento antiadherente AISi al 10%. Propiedades auto-lubricantes y muy buena evacuación de viruta debido a su baja fricción.

Better sliding properties. AISi 10% coating. Low friction coefficient and chip extraction.

Revêtement anti-adhésif "ALSI" à 10 % des propriétés auto-lubrifiantes et très bonne évacuation des copeaux en raison de sa faible friction.

VAP

Recubrimiento PVD, mayor vida útil de la herramienta y mayor productividad con menor coste.

PVD coating: longer tool life and higher productivity at a lower cost.

Revêtement PVD: durée de vie outils prolongée et une meilleure productivité à moindre coût de l'outil.

CONDICIONES GENERALES DE VENTA

GENERAL CONDITIONS OF SALES • CONDITIONS GENERALES DE VENTE

1º. CONDICIONES DE PAGO

- La forma de pago será adecuada a la ley vigente en cada país. En el mercado nacional, según la Ley 15/2010 del 05 de Julio de 2010.
- Reposición, mediante cheque o transferencia a los 11 días de fecha factura tendrá un Dto. Adicional del 2%.

2º. VENCIMIENTOS FIJOS

En caso de fechas fijas de pago que rebasen los plazos de pago estipulados, giraremos a la fecha fijada pero inmediatamente anterior, según corresponda, siendo el plazo máximo el límite establecido por la ley vigente de cada país.

3º. SEGURO

Las mercancías viajarán siempre por exclusiva cuenta y riesgo del comprador, siendo a cargo del mismo la prima del seguro que se realice, en los casos en los que el cliente desee asegurarla.

4º. RECLAMACIONES

En discrepancias por diferencias observadas en la recepción del material, se atenderán todas aquellas reclamaciones que se planteen dentro de los 8 días siguientes a la recepción del material, no aceptando ninguna devolución sin previo conocimiento de SESA TOOLS, S.A.

5º. CONDICIONALIDAD

La aceptación de las mercancías sin el rechazo inmediato por parte del comprador, supone la aprobación de estas condiciones generales de venta y su modificación sólo tendrá validez si consta por escrito la conformidad de SESA TOOLS, S.A.

6º. GARANTIAS

Todas las herramientas del programa de ventas están garantizadas contra cualquier defecto de fabricación y materiales, sin responsabilizarse SESA TOOLS, S.A. de la utilización inadecuada de las mismas. En cualquier caso, nuestra responsabilidad estará limitada al valor de la herramienta suministrada. Nos reservamos el derecho de modificar, sin previo aviso, las dimensiones, calidades de acero y en general todas las características técnicas de las herramientas. No será sustituida ninguna herramienta sin el informe previo de nuestro Departamento de Control de Calidad. Para la elaboración de dicho informe será imprescindible remitir debidamente cumplimentada la ficha de devolución del producto correspondiente.

7º. DEVOLUCIONES

No se admitirá ninguna devolución sin comunicación previa del cliente y es necesario el consentimiento de SESA TOOLS, S.A., estipulando como plazo máximo para atenderlas un **periodo de 30 días** desde la recepción de la mercancía por parte del cliente.

Cualquier devolución deberá ser documentada adjuntando el albarán o factura de venta del material afectado. En caso de tratarse de una devolución **por error en el pedido efectuado por el cliente o no venta**, siendo consentida por SESA TOOLS, S.A., se realizará un cargo de un 15% en factura de abono en concepto de gastos de manipulación, reenvasado, etc. Siempre deberán realizarse a portes pagados. **No se aceptarán** devoluciones de herramientas

enviadas a portes debidos por agencias no autorizadas por SESA TOOLS, S.A.

Para la tramitación de una **devolución de un producto en caso de incidencia**, será necesario que se adjunte un formulario con las condiciones de trabajo, que será proporcionado por SESA TOOLS, S.A.

Una vez recibida la herramienta, nuestro departamento de calidad lo verificará y emitirá el informe correspondiente.

8º. PORTES

PENINSULA Y BALEARES

- Pedidos inferiores a 150 €NETOS por expedición: Portes debidos o cargados en factura, siempre que se utilicen nuestros medios habituales.
- Pedidos superiores a 150 €NETOS: PORTES PAGADOS

CANARIAS, CEUTA Y MELILLA

- PAGADOS, exclusivamente en pedidos superiores a 600 €NETOS, por Vía MARÍTIMA.
- Otros envíos por paquete postal express, mensajeros, etc., se cargarán en factura los costos de envío, más los gastos de DESPACHO, si los hubiera.

PORTUGAL

- Pedidos inferiores a 150 €NETOS por expedición: Portes debidos o cargados en factura, siempre que se utilicen nuestros medios habituales.
- Pedidos superiores a 150 €NETOS: PORTES PAGADOS.

FRANCIA

- Pedidos inferiores a 300 € Portes debidos o cargados en factura
- Pedidos superiores a 300 € PORTES PAGADOS.

9º. IMPORTE MÍNIMO DE PEDIDO

No existe límite mínimo de pedido. A los pedidos inferiores a 50 € se cargará un coste adicional del **10%** sobre factura.

10º. I.V.A.

Todos los precios están sujetos al Impuesto sobre el Valor Añadido, siendo a cargo del cliente el recargo correspondiente.

11º. RESERVA DE DOMINIO

Nuestras ventas se consideran siempre bajo la condición de "RESERVA DE DOMINIO", según el artículo 1.506 del C.C. hasta que se haya hecho efectivo íntegramente el pago de todo lo adeudado.

12º. JURISDICCIÓN COMPETENTE

Para cualquier discrepancia acerca de la interpretación de estas condiciones, o litigio por razón de incumplimiento por cualquiera de las partes, ambas se someterán al fuero de los Juzgados y Tribunales de San Sebastián, con renuncia al que pudiera corresponderles.

1º. TERMS OF PAYMENT

- Payment shall be made in accordance with the laws in force in each country. Payment in Spain shall be governed by Law 15/2010 of 05 July 2010.
- Payment by means of a cheque or bank transfer 11 days after the invoice due date shall be subject to an additional charge of 2%.

2º. FIXED MATURITIES

In the case of fixed payment dates exceeding the predefined payment deadlines, we shall bill on the date immediately previous to the set date, as applicable, up to the maximum deadline established under the law in force in each country.

3º. INSURANCE

Goods shall be transported at the sole risk of the purchaser, which shall also be responsible for the respective insurance premium in cases where the customer wishes to take out insurance coverage.

4º. COMPLAINTS

In relation to discrepancies detected on delivery of the goods, only complaints filed within 8 days of receipt of the material will be dealt with, and no returned goods will be accepted without the previous knowledge of SESA TOOLS, S.A.

5º. CONDITIONALITY

The acceptance of goods with no immediate rejection by the purchaser implies the approval of these general conditions of sale and the amendment of the same shall only be valid with the written consent of SESA TOOLS, S.A.

6º. GUARANTEES

All sales program tools are guaranteed against any manufacturing and material defects, and SESA TOOLS, S.A. shall not be held liable for any improper use of the same. Furthermore, our liability shall be limited to the value of the tool supplied. We reserve the right to modify the dimensions, steel quality and overall technical characteristics of the tools. No tool shall be replaced without the submission of a report by our quality control department. This report shall only be issued on receipt of the duly completed product rejection sheet for the item in question.

7º. RETURNS

No return will be accepted without previous communication from the client and the consent of SESA TOOLS, S.A. is required. To attend returns, it's stipulated a maximum term of **30 days** from the receipt of the goods by the client.

Any return must be documented attaching the delivery note or invoice of the affected items. In case of a return **by customer's mistake placing the order or non-sale**, previously being consented by SESA TOOLS, SA shall be subject to a 15% surcharge for handling, repackaging, etc.

Returns should always be done free of freight. SESA TOOLS, S.A. **shall not accept** returned tools with freight charged by not authorized agencies.

For processing of a return of items in **the event of an incident**, it will be necessary to send attached a form with working conditions. This document will be provided by SESA TOOLS, S.A.

Once the tool is received, our quality department will verify it and issue the corresponding report.

8°. FREIGHT

THE MAINLAND AND THE BALEARIC ISLANDS

- Orders below €150 net per shipment: Freight paid or billed by invoice whenever using our habitual means.
- Orders above €150 net: FREIGHT INCLUDED.

THE CANARY ISLANDS, CEUTA AND MELILLA

- INCLUDED, exclusively for orders of over €600 net, by SEA.
- Other express delivery services via courier, etc., delivery costs will be billed for by invoice, plus shipment costs, if applicable.

PORTUGAL

- Orders below €150 net per shipment: Freight paid or billed by invoice whenever using our habitual means.
- Orders above €150 net: FREIGHT INCLUDED.

FRANCE

- Orders below €300 net: Freight paid or billed by invoice.
- Orders above €300 net: FREIGHT INCLUDED.

9°. MINIMUM ORDERS

There is no minimum order limit. Orders of less than €50 shall be subject to an additional cost of **10%** over the billing.

10°. I.V.A. (VAT)

All prices are subject to value added tax and the customer shall bear the cost of the same.

11°. RESERVATION OF RIGHT OF OWNERSHIP

Our sales are always conducted under the condition of "RIGHT OF OWNERSHIP" in accordance with article 1506 of the Constitution until full payment of all that is owed has been effected.

12°. JURISDICTION

All disputes arising from the interpretation of these terms or litigation due to non-compliance by either party shall be settled by the courts of the city of San Sebastian, with the express waiver of any other.

1°. CONDITIONS DE PAIEMENT

- Le mode de paiement sera adapté à la loi en vigueur de chaque pays. Sur le marché national, il sera conforme à la Loi 15/2010 du 05 juillet 2010.
- Lors du paiement par chèque ou virement dans les 11 jours à partir de la date de facturation vous aurez droit à une remise supplémentaire de 2%.

2°. ECHEANCES FIXES

Dans le cas de dates de règlement fixes qui réduiraient les délais de paiement établis, nous procéderons au virement à la date fixe la plus immédiatement antérieure audit délai correspondant, le délai maximum étant la limite établie par la loi en vigueur dans chaque pays.

3°. ASSURANCE

Les marchandises voyageront toujours à la charge et au risque de l'acheteur, qui devra prendre en charge la prime de l'assurance éventuellement souscrite, si le client souhaite assurer ses marchandises.

4°. RECLAMATIONS

En cas de divergences suite à des non-conformités par rapport à la commande constatées lors de la réception du matériel, nous répondrons à toutes les réclamations présentées dans un délai de 8 jours après la réception du matériel, aucun retour de marchandise ne sera accepté sans que SESA TOOLS, S.A. en soit informée au préalable.

5°. CONDITIONS

L'acceptation des marchandises sans leur refus immédiat de la part de l'acheteur implique l'approbation des présentes conditions générales de vente et toute modification de ces dernières ne sera valide que si elle est approuvée par écrit par SESA TOOLS, S.A.

6°. GARANTIES

Tous les outils de notre programme de ventes sont garantis contre tout défaut de fabrication et de matériels, sans que SESA TOOLS, S.A. puisse être tenue pour responsable d'une utilisation inadéquate de ses produits. Dans tous les cas, notre responsabilité est limitée à la valeur de l'outil fourni. Nous nous réservons le droit de modifier sans préavis les dimensions, les qualités d'acier et en général toutes les caractéristiques techniques des outils. Aucun outil ne sera remplacé sans le rapport préalable de notre Département de Contrôle Qualité. Pour l'élaboration dudit rapport il sera indispensable de remplir comme il se doit la fiche de retour du produit concerné.

7°. RETOUR DE MARCHANDISES

Aucun retour ne sera accepté sans une communication préalable du client et le consentement de SESA TOOLS, S.A. est requis. Il est stipulé un délai maximum de **30 jours** à compter de la réception des marchandises par le client pour y assister.

Tout retour doit être documenté en joignant le bon de livraison ou la facture des articles concernés. Dans le cas d'un retour **par erreur dans la commande du client ou de la non-vente**, préalablement consenti par SESA TOOLS, SA, sera soumis à un supplément de 15% pour la manutention, le reconditionnement, etc.

Les retours doivent toujours être effectués sans fret. SESA TOOLS, S.A. n'acceptera pas de retours d'outils qui arriveraient avec le fret sans payer par l'intermédiaire d'agences non autorisées.

Pour le traitement d'un retour d'articles **en cas d'incident**, il sera nécessaire d'envoyer ci-joint un formulaire avec conditions de travail. Ce document sera fourni par SESA TOOLS, S.A.

Une fois l'outil reçu, notre service qualité le vérifie et émet le rapport correspondant.

8°. FRAIS DE PORT

PENINSULE IBERIQUE ET BALEARES

- Pour les commandes inférieures à 150€ NETS par expédition : Port dû ou inclus dans la facture, à condition d'utiliser nos moyens de livraison habituels.
- Pour les commandes supérieures à 150€ NETS : PORT PAYE.

CANARIES, CEUTA ET MELILLA

- PORT PAYE exclusivement pour les commandes supérieures à 600€ NETS, par VOIE MARITIME.
- Pour les autres modes d'envoi par colis postal express, messagerie, etc., les frais d'envoi, ainsi que les frais d'EXPEDITION, si existantes, seront inclus dans la facture.

PORTUGAL

- Pour les commandes inférieures à 150€ NETS par expédition : Port dû ou inclus dans la facture, à condition d'utiliser nos moyens de livraison habituels.
- Pour les commandes supérieures à 150€ NETS : PORT PAYE.

FRANCE

- Pour les commandes inférieures 300€ : Port dû ou inclus dans la facture
- Pour les commandes supérieures à 300€ : PORT PAYE.

9°. MONTANT MINIMUM DE LA COMMANDE

Il n'y a pas de limite minimum de commande. Un coût additionnel de 10% sur la facture sera appliqué aux commandes inférieures à 50€.

10°. T.V.A.

Tous les prix sont soumis à la Taxe sur la Valeur Ajoutée, qui sera à la charge du client.

11°. RESERVE DE PROPRIETE

Nos ventes se font toujours sous la condition de "RESERVE DE PROPRIETE", conformément aux dispositions de l'article 1.506 du C.C. jusqu'au recouvrement effectif et intégral du montant dû.

12°. JURISDICTION COMPETENTE

Pour toute divergence concernant l'interprétation des présentes conditions ou tout litige découlant du non-accomplissement de ses obligations par l'une des parties, les deux parties se soumettront à la juridiction des Tribunaux de San Sebastián, en renonçant à tout autre tribunal.