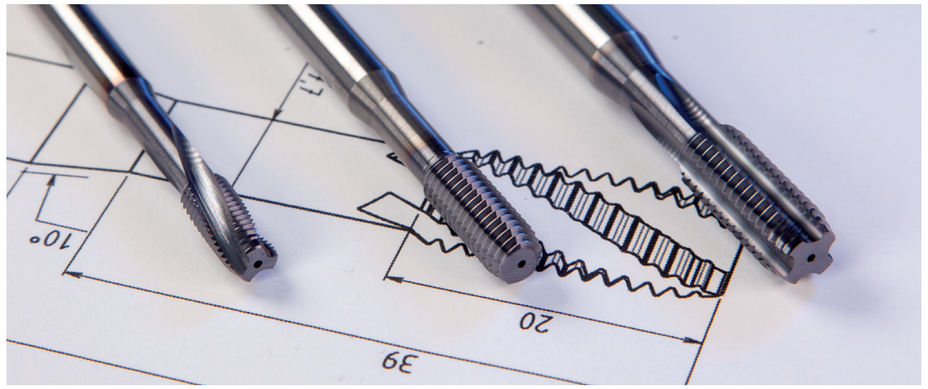
HMIG

TECNOLOGIA DI FILETTATURA MASCHI

THREADING TECHNOLOGY TAPS



Con i maschi HMIG di IGUTENSILI le lavorazioni di filettatura vengono eseguite rapidamente e in modo produttivo senza rinunciare alla qualità della lavorazione.

Questi utensili sono impiegabili su di una vastissima gamma di macchinari a controllo numerico e/o tradizionali come CENTRI di LAVORO, CENTRI di TORNITURA, TRANSFER 0°ed anche su LINEE DI PRODUZIONE AVANZATA ove è indispensabile abbattere i tempi di lavorazione. L'utensile HMIG-Maschi è une conseguenza di questo impegno nel realizzare filettature in modo VELOCE e con la massima EFFICACIA, HMIG utilizza valori di taglio fino ad 80 m/min. parametro improponibili peR 0°maschi tradizionali. Nella gamma HMIG sono presenti diverse tipologie di utensile, proponiamo maschi a TAGLIARE e RULLARE peR 0°utilizzi su materiali docili o con durezze pari a 65 HRC, la gamma di utensili HMIG è dotata di REFRIGERAZIONE forzata INTERNA alla TESTA, garantendo in questo modo un'ottima lubrificazione nel punto di taglio ed una eccellente evacuazione del truciolo.

Gli utensili HMIG-Maschi, sono rivestiti TNF o LTM in funzione del materiale da lavorare, raggiungono alti valori di taglio e lunga durata, garantendo sempre la massima stabilità del ciclo produttivo, inoltre gli HMIG, nonostante la complessa tecnologia costruttiva, permettono le operazioni di affilatura e rivestimento, donando all'utensile stesso nuova vita con rendimenti eccellenti.

Da non sottovalutare la possibilità di produrre Maschi HMIG speciali a disegno, IGUTENSILI è in grado di sviluppare un'infinita gamma di filettature peR 0°le più svariate applicazioni, di seguito alcuni esempi, MJ DIN ISO 5855, NPSFR 0°ANSI B1.20.3, W keg DIN 477, W zyl DIN 477, EG M DIN 8140-2, LK-M, TR 0°DIN 103, Tr-F DIN 103, Rd DIN 405 ...

With the HMIG taps by IGUTENSILI the threading operations are performed quickly and productively without sacrificing the quality of the processing.

These tools can be used on a very wide range of CNC machines and/oR 0°traditional machinery such as WORK CENTRES, TURNING CENTRES, TRANSFER 0°and even ADVANCED PRODUCTION LINES where it is essential to reduce processing times. The HMIG-Taps tool is a consequence of this commitment in making threads FAST and with maximum EFFICACY, HMIG uses cutting values up to 80 m/min. impossible parameters foR 0°traditional taps. The HMIG range includes different types of tools, we offeR 0°CUT and ROLL taps foR 0°uses on soft materials oR 0°with hardness equal to 65 HRC, the range of HMIG tools is equipped with INTERNAL HEAD forced COOLANT, thus guaranteeing an excellent lubrication at the cutting point and excellent chip evacuation.

The HMIG-Taps tools are TNF oR 0°LTM coated according to the material to be processed, reaching high cutting values and long life, always guaranteeing the maximum stability of the production cycle; also, HMIG, despite the complex manufacturing technology, allow sharpening and coating operations, giving the tool a new lease of life with excellent yields.

Not to underestimate the possibility of producing special HMIG Taps with special designs, IGUTENSILI is able to develop an infinite range of threads foR 0°the most varied applications, below some examples, MJ DIN ISO 5855, NPSFR 0°ANSI B1.20.3, W keg DIN 477, W zyl DIN 477, EG M DIN 8140-2, LK-M, TR 0°DIN 103, Tr-F DIN 103, Rd DIN 405...

I valori di velocità di taglio / periferica (vc in m/min) qui elencati sono puramente indicativi e devono essere adattati alle condizioni d'impiego (materiale, lubrorefrigerazione, macchina utensile ecc.). Confronto internazionale dei materiali, vedere pagina Z • 21

The cutting speeds (vc in m/min) listed in the respective columns are standard values which have to be adjusted to individual work conditions (material, lubrication, machine etc.). International comparison of materials, see page Z • 21

Vc = Velocità di taglio (m/min) Vc = Cutting speed (m/min)

M
MF
UNC
UNF
G, RP, W
BSW, BSF
NPT
NPTF
BSPT
MJ
UNJ
M-EXT, MJ-EXT
PG
EGM

		Materiale	Material		Material examples	Mat. numbers
P		Acciai	Steel materials			
		Acciai estrusi a freddo	Cold-extrusion steel		Cq15	1.1132
	1.1	Acciai da costruzione	Costruction steels	≤ 600 N/mm2	S235JR 0°(St37-2)	1.0037
		Acciai alta velocità	Free-cutting steel, etc.		10SPb20	1.0722
		Acciai da costruzione	Costruction steels		E360 (St70-2)	1.0070
	2.1	Acciai da cementazione	Cementation steel	≤ 800 N/mm2	16MnCr5	1.7131
		Fusione d'acciaio, ecc.	Steel casting, etc.		GS-25CrMo4	1.7218
		Acciai da cementazione	Cementation steel		20MoCr3	1.7320
	3.1	Acciai da bonifica	Heat-treatable steels	≤ 1000 N/mm2	42CrMo4	1.7225
		Acciai peR 0°lavorazioni a freddo, ecc.	Cold work steels, etc.		102Cr6	1.2067
		Acciai da bonifica	Heat-treatable steels		50CrMo4	1.7228
	4.1	Acciai peR 0°lavorazioni a freddo	Cold work steels	≤ 1200 N/mm2	X45NiCrMo4	1.2767
		Acciai da nitrurazione, ecc.	Nitriding steels, etc.		31CrMo12	1.8515
		Acciai fortemente legati	High-alloyed steels		X38CrMoV5-3	1.2367
	5.1	Acciai peR 0°lavorazioni a freddo	Cold work steels	≤ 1400 N/mm2	X100CrMoV8-1-1	1.2990
		Acciai peR 0°lavorazioni a caldo, ecc.	Hot work steels, etc.		X40CrMoV5-1	1.2344
M		Acciai inossidabili	Stainless steel materials			
	1.1	Ferritici, martensitici	Ferritic, martensitic	≤ 950 N/mm2	X2CrTi12	1.4512
	2.1	Austenitici	Austenitic	≤ 950 N/mm2	X6CrNiMoTi17-12-2	1.4571
	3.1	Austenitici-ferritici (Duplex)	Austenitic-ferritic (Duplex)	≤ 1100 N/mm2	X2CrNiMoN22-5-3	1.4462
	4.1	Austenitici-ferritici resistenti al calore (SupeR 0°Duplex)	Austenitic-ferritic heat-resistant (SupeR 0°Duplex)	≤ 1250 N/mm2	X2CrNiMoN25-7-4	1.4410
K		Ghise	Cast materials			
	1.1	Ghise con grafite lamellare (GJL)	Cast iron with lamellaR 0°graphite (GJL)	100-250 N/mm2	EN-GJL-200 (GG20)	EN-JL-1030
	1.2			250-450 N/mm2	EN-GJL-300 (GG30)	EN-JL-1050
	2.1	Ghise con grafite nodulare (GJS)	Cast iron with nodulaR 0°graphite (GJS)	350-500 N/mm2	EN-GJS-400-15 (GGG40)	EN-JS-1030
	2.2			500-900 N/mm2	EN-GJS-700-2 (GGG70)	EN-JS-1070
	3.1	Ghise con grafite vermicolare (GJV)	Cast iron with vermicularR 0°graphite (GJV)	300-400 N/mm2	GJV 300	
	3.2			400-500 N/mm2	GJV 450	
	4.1	Ghise malleabili (GTMW, GTMB)	Malleable cast iron (GTMW, GTMB)	250-500 N/mm2	EN-GJMW-350-4 (GTW-35)	EN-JM-1010
	4.2			500-800 N/mm2	EN-GJMB-450-6 (GTS-45)	EN-JM-1140
N		Materiali non ferrosi	Non ferrous materials			
		Leghe di alluminio	Aluminium alloys			
	1.1	Leghe di alluminio malleabili	Aluminium wrought alloys	≤ 200 N/mm2	EN AW-AlMn1	EN AW-3103
	1.2			≤ 350 N/mm2	EN AW-AlMgSi	EN AW-6060
	1.3			≤ 550 N/mm2	EN AW-AlZn5Mg3Cu	EN AW-7022
	1.4	Leghe fuse di alluminio	Aluminium cast alloys	Si ≤ 7%	EN AC-AlMg5	EN AC-51300
	1.5			7% < Si ≤ 12%	EN AC-AlSi9Cu3	EN AC-46500
	1.6			12% < Si ≤ 17%	GD-AlSi17Cu4FeMg	
		Leghe di rame	CoppeR 0°alloys			
	2.1	Rame puro, Rame poco legato	Pure copper, low-alloyed copper	≤ 400 N/mm2	E-Cu 57	EN CW 004 A
	2.2	Leghe rame-zinco (ottone, truciolo lungo)	Copper-zinc alloys (brass, long-chipping)	≤ 550 N/mm2	CuZn37 (Ms63)	EN CW 508 L
	2.3	Leghe rame-zinco (ottone, truciolo corto)	Copper-zinc alloys (brass, short-chipping)	≤ 550 N/mm2	CuZn36Pb3 (Ms58)	EN CW 603 N
	2.4	Leghe rame-alluminio (alubronzo, truciolo lungo)	Copper-aluminium alloys (alu bronze, long-chipping)	≤ 800 N/mm2	CuAl10Ni5Fe4	EN CW 307 G
	2.5	Leghe rame-stagno (bronzo, truciolo lungo)	Copper-tin alloys (tin bronze, long-chipping)	≤ 700 N/mm2	CuSn8P	EN CW 459 K
	2.6	Leghe rame-stagno (bronzo, truciolo corto)	Copper-tin alloys (tin bronze, short-chipping)	≤ 400 N/mm2	CuSn7 ZnPb (Rg7)	2.1090
	2.7	Leghe di rame speciali	Special coppeR 0°alloys	≤ 600 N/mm2	(AMPCO® 8)	
	2.8			≤ 1400 N/mm2	(AMPCO® 45)	
		Leghe di magnesio	Magnesium alloys			
	3.1	Leghe di magnesio malleabili	Magnesium wrought alloys	≤ 500 N/mm2	MgAl6Zn	3.5612
	3.2	Leghe peR 0°getti di magnesio	Magnesium cast alloys	≤ 500 N/mm2	EN-MCMgAl9Zn1	EN-MC21120
		Materie plastiche	Synthetics			
	4.1	Materie plastiche termoindurenti (truciolo corto)	Duroplastics (short-chipping)		Bakelit, Pertinax	
	4.2	Resine termoplastiche (truciolo lungo)	Thermoplastics (long-chipping)		PMMA, POM, PVC	
	4.3	Resine epossidiche (percentuale di fibre ≤ 30%)	Fibre-reinforced synthetics (fibre content ≤ 30%)		GFK, CFK, AFK	
	4.4	Resine epossidiche (percentuale di fibre > 30%)	Fibre-reinforced synthetics (fibre content > 30%)		GFK, CFK, AFK	
		Materiali speciali	Special materials			
	5.1	Grafite	Graphite		C 8000	
	5.2	Leghe tungsteno-rame	Tungsten-coppeR 0°alloys		W-Cu 80/20	
	5.3	Materiali compositi	Composite materials		Hylite, Alucobond	
S		Materiali speciali	Special materials			
		Leghe di titanio	Titanium alloys			
	1.1	Titanio puro	Pure titanium	≤ 450 N/mm2	Ti1	3.7025
	1.2	Leghe di titanio	Titanium alloys	≤ 900 N/mm2	TiAl6V4	3.7165
	1.3			≤ 1250 N/mm2	TiAl4Mo4Sn2	3.7185
		Leghe di nichel, cobalto e ferro	Nickel alloys, cobalt alloys and iron alloys			
	2.1	Nichel puro	Pure nickel	≤ 600 N/mm2	Ni 99,6	2.4060
	2.2	Leghe base nichel	Nickel-base alloys	≤ 1000 N/mm2	Monel 400	2.4360
	2.3			≤ 1600 N/mm2	Inconel 718	2.4668
	2.4	Leghe base cobalto	Cobalt-base alloys	≤ 1000 N/mm2	Udimet 605	
	2.5			≤ 1600 N/mm2	Haynes 25	2.4964
	2.6	Leghe base ferro	Iron-base alloys	≤ 1500 N/mm2	Incoloy 800	1.4958
H		Materiali duri	Hard materials			
	1.1	"Acciai ad alta resistenza, Acciai temprati, Ghise in conchiglia	High strength steels, hardened steels, hard castings"	44 - 50 HRC	Weldox 1100	
	1.2			50 - 55 HRC	Hardox 550	
	1.3			55 - 60 HRC	Armox 600T	
	1.4			60 - 63 HRC	Ferro-Titanit	
	1.5			63 - 66 HRC	HSSE	

5E 15, 5E 17, 5E 49, 5E 51	5E 15,5E 17					
5E 19,5E 21,5E 25	5E 19,5E 21,5E 25					
5E 27,5E 29	5E 27,5E 29					
5E 31,5E 33,5E 35	5E 31,5E 33,5E 35					
5E 25,5E 53	5E 25					
	5E 45,5E 47					

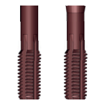
Vc Uncoated	Vc Coated NFS	F = 3 to 5 mm	F =5 to 8 mm	F =8 to 12 mm	F =12 to 16 mm		
							P
						1.1	
						2.1	
	15 - 35					3.1	
	10 - 20					4.1	
	4 - 10					5.1	
							M
						1.1	
						2.1	
						3.1	
						4.1	
							K
	40 - 80					1.1	
	30 - 60					1.2	
	30 - 60					2.1	
	10 - 40					2.2	
	20 - 40					3.1	
	20 - 40					3.2	
	40 - 80					4.1	
	30 - 60					4.2	
							N
30 - 90						1.1	
30 - 90						1.2	
30 - 90						1.3	
30 - 70						1.4	
30 - 70	30 - 70					1.5	
30 - 70	30 - 60					1.6	
						2.1	
						2.2	
						2.3	
						2.4	
						2.5	
	20 - 40					2.6	
	12 - 25					2.7	
						2.8	
	50 - 70					3.1	
						3.2	
						4.1	
						4.2	
	5 - 25					4.3	
	5 - 25					4.4	
						5.1	
						5.2	
						5.3	
							S
						1.1	
						1.2	
						1.3	
						2.1	
						2.2	
						2.3	
	4 - 8					2.4	
						2.5	
						2.6	
							H
						1.1	
						1.2	
						1.3	
						1.4	
						1.5	

I valori di velocità di taglio / periferica (vc in m/min) qui elencati sono puramente indicativi e devono essere adattati alle condizioni d'impiego (materiale, lubrorefrigerazione, macchina utensile ecc.). Confronto internazionale dei materiali, vedere pagina Z • 21

The cutting speeds (vc in m/min) listed in the respective columns are standard values which have to be adjusted to individual work conditions (material, lubrication, machine etc.). International comparison of materials, see page Z • 21

Vc = Velocità di taglio (m/min) Vc = Cutting speed (m/min)

IGUTENSILI



M	5E 15, 5E 17, 5E 23
MF	5E 23
UNC	
UNF	
G, RP, W	
BSW, BSF	
NPT	
NPTF	
BSPT	
MJ	
UNJ	
M-EXT, MJ-EXT	
PG	
EGM	

		Materiale	Material		Material examples	Mat. numbers	Vc Coated LTM	F = 3 to 5 mm	F =5 to 8 mm	F =8 to 12 mm	F =12 to 16 mm
P		Acciai	Steel materials								
	1.1	Acciai estrusi a freddo	Cold-extrusion steel	≤ 600 N/mm2	Cq15	1.1132					
		Acciai da costruzione	Costruction steels		S235JR 0°(St37-2)	1.0037					
		Acciai alta velocità	Free-cutting steel, etc.		10SPb20	1.0722					
	2.1	Acciai da costruzione	Costruction steels	≤ 800 N/mm2	E360 (St70-2)	1.0070					
		Acciai da cementazione	Cementation steel		16MnCr5	1.7131					
		Fusione d'acciaio, ecc.	Steel casting, etc.		GS-25CrMo4	1.7218					
	3.1	Acciai da cementazione	Cementation steel	≤ 1000 N/mm2	20MoCr3	1.7320					
		Acciai da bonifica	Heat-treatable steels		42CrMo4	1.7225					
		Acciai peR 0°lavorazioni a freddo, ecc.	Cold work steels, etc.		102Cr6	1.2067					
	4.1	Acciai da bonifica	Heat-treatable steels	≤ 1200 N/mm2	50CrMo4	1.7228					
		Acciai peR 0°lavorazioni a freddo	Cold work steels		X45NiCrMo4	1.2767					
		Acciai da nitrurazione, ecc.	Nitriding steels, etc.		31CrMo12	1.8515					
	5.1	Acciai fortemente legati	High-alloyed steels	≤ 1400 N/mm2	X38CrMoV5-3	1.2367					
		Acciai peR 0°lavorazioni a freddo	Cold work steels		X100CrMoV8-1-1	1.2990					
		Acciai peR 0°lavorazioni a caldo, ecc.	Hot work steels, etc.		X40CrMoV5-1	1.2344					
M		Acciai inossidabili	Stainless steel materials								
	1.1	Ferritici, martensitici	Ferritic, martensitic	≤ 950 N/mm2	X2CrTi12	1.4512					
	2.1	Austenitici	Austenitic	≤ 950 N/mm2	X6CrNiMoTi17-12-2	1.4571					
	3.1	Austenitici-ferritici (Duplex)	Austenitic-ferritic (Duplex)	≤ 1100 N/mm2	X2CrNiMoN22-5-3	1.4462					
	4.1	Austenitici-ferritici resistenti al calore (SupeR 0°Duplex)	Austenitic-ferritic heat-resistant (SupeR 0°Duplex)	≤ 1250 N/mm2	X2CrNiMoN25-7-4	1.4410					
K		Ghise	Cast materials								
	1.1	Ghise con grafite lamellare (GJL)	Cast iron with lamellaR 0°graphite (GJL)	100-250 N/mm2	EN-GJL-200 (GG20)	EN-JL-1030					
	1.2			250-450 N/mm2	EN-GJL-300 (GG30)	EN-JL-1050					
	2.1	Ghise con grafite nodulare (GJS)	Cast iron with nodulaR 0°graphite (GJS)	350-500 N/mm2	EN-GJS-400-15 (GGG40)	EN-JS-1030					
	2.2			500-900 N/mm2	EN-GJS-700-2 (GGG70)	EN-JS-1070					
	3.1	Ghise con grafite vermicolare (GJV)	Cast iron with vermiculaR 0°graphite (GJV)	300-400 N/mm2	GJV 300						
	3.2			400-500 N/mm2	GJV 450						
	4.1	Ghise malleabili (GTMW, GTMB)	Malleable cast iron (GTMW, GTMB)	250-500 N/mm2	EN-GJMW-350-4 (GTW-35)	EN-JM-1010					
	4.2			500-800 N/mm2	EN-GJMB-450-6 (GTS-45)	EN-JM-1140					
N		Materiali non ferrosi	Non ferrous materials								
		Leghe di alluminio	Aluminium alloys								
	1.1	Leghe di alluminio malleabili	Aluminium wrought alloys	≤ 200 N/mm2	EN AW-AlMn1	EN AW-3103					
	1.2			≤ 350 N/mm2	EN AW-AlMgSi	EN AW-6060					
	1.3			≤ 550 N/mm2	EN AW-AlZn5Mg3Cu	EN AW-7022					
	1.4	Leghe fuse di alluminio	Aluminium cast alloys	Si ≤ 7%	EN AC-AlMg5	EN AC-51300					
	1.5			7% < Si ≤ 12%	EN AC-AlSi9Cu3	EN AC-46500					
	1.6			12% < Si ≤ 17%	GD-AlSi17Cu4FeMg						
		Leghe di rame	CoppeR 0°alloys								
	2.1	Rame puro, Rame poco legato	Pure copper, low-alloyed copper	≤ 400 N/mm2	E-Cu 57	EN CW 004 A					
	2.2	Leghe rame-zinco (ottone, truciolo lungo)	Copper-zinc alloys (brass, long-chipping)	≤ 550 N/mm2	CuZn37 (Ms63)	EN CW 508 L					
	2.3	Leghe rame-zinco (ottone, truciolo corto)	Copper-zinc alloys (brass, short-chipping)	≤ 550 N/mm2	CuZn36Pb3 (Ms58)	EN CW 603 N					
	2.4	Leghe rame-alluminio (alubronzo, truciolo lungo)	Copper-aluminium alloys (alu bronze, long-chipping)	≤ 800 N/mm2	CuAl10Ni5Fe4	EN CW 307 G					
	2.5	Leghe rame-stagno (bronzo, truciolo lungo)	Copper-tin alloys (tin bronze, long-chipping)	≤ 700 N/mm2	CuSn8P	EN CW 459 K					
	2.6	Leghe rame-stagno (bronzo, truciolo corto)	Copper-tin alloys (tin bronze, short-chipping)	≤ 400 N/mm2	CuSn7 ZnPb (Rg7)	2.1090					
	2.7	Leghe di rame speciali	Special coppeR 0°alloys	≤ 600 N/mm2	(AMPCO® 8)						
	2.8			≤ 1400 N/mm2	(AMPCO® 45)						
		Leghe di magnesio	Magnesium alloys								
	3.1	Leghe di magnesio malleabili	Magnesium wrought alloys	≤ 500 N/mm2	MgAl6Zn	3.5612					
	3.2	Leghe peR 0°getti di magnesio	Magnesium cast alloys	≤ 500 N/mm2	EN-MCMgAl9Zn1	EN-MC21120					
		Materie plastiche	Synthetics								
	4.1	Materie plastiche termoindurenti (truciolo corto)	Duroplastics (short-chipping)		Bakelit, Pertinax						
	4.2	Resine termoplastiche (truciolo lungo)	Thermoplastics (long-chipping)		PMMA, POM, PVC						
	4.3	Resine epossidiche (percentuale di fibre ≤ 30%)	Fibre-reinforced synthetics (fibre content ≤ 30%)		GFK, CFK, AFK						
	4.4	Resine epossidiche (percentuale di fibre > 30%)	Fibre-reinforced synthetics (fibre content > 30%)		GFK, CFK, AFK						
		Materiali speciali	Special materials								
	5.1	Grafite	Graphite		C 8000						
	5.2	Leghe tungsteno-rame	Tungsten-coppeR 0°alloys		W-Cu 80/20						
	5.3	Materiali compositi	Composite materials		Hylite, Alucobond						
S		Materiali speciali	Special materials								
		Leghe di titanio	Titanium alloys								
	1.1	Titanio puro	Pure titanium	≤ 450 N/mm2	Ti1	3.7025					
	1.2	Leghe di titanio	Titanium alloys	≤ 900 N/mm2	TiAl6V4	3.7165					
	1.3			≤ 1250 N/mm2	TiAl4Mo4Sn2	3.7185					
		Leghe di nichel, cobalto e ferro	Nickel alloys, cobalt alloys and iron alloys								
	2.1	Nichel puro	Pure nickel	≤ 600 N/mm2	Ni 99,6	2.4060					
	2.2	Leghe base nichel	Nickel-base alloys	≤ 1000 N/mm2	Monel 400	2.4360					
	2.3			≤ 1600 N/mm2	Inconel 718	2.4668					
	2.4	Leghe base cobalto	Cobalt-base alloys	≤ 1000 N/mm2	Udimet 605		4 - 8				
	2.5			≤ 1600 N/mm2	Haynes 25	2.4964					
	2.6	Leghe base ferro	Iron-base alloys	≤ 1500 N/mm2	Incoloy 800	1.4958					
H		Materiali duri	Hard materials								
	1.1	"Acciai ad alta resistenza, Acciai temprati, Ghise in conchiglia	High strength steels, hardened steels, hard castings"	44 - 50 HRC	Weldox 1100		2 - 4				
	1.2			50 - 55 HRC	Hardox 550		2 - 4				
	1.3			55 - 60 HRC	Armox 600T						
	1.4			60 - 63 HRC	Ferro-Titanit						
	1.5			63 - 66 HRC	HSSE						

HMIG

I valori di velocità di taglio / periferica (vc in m/min) qui elencati sono puramente indicativi e devono essere adattati alle condizioni d'impiego (materiale, lubrorefrigerazione, macchina utensile ecc.). Confronto internazionale dei materiali, vedere pagina Z • 21

The cutting speeds (vc in m/min) listed in the respective columns are standard values which have to be adjusted to individual work conditions (material, lubrication, machine etc.). International comparison of materials, see page Z • 21

Vc = Velocità di taglio (m/min)

Vc = Cutting speed (m/min)

M
MF
UNC
UNF
G, RP, W
BSW, BSF
NPT
NPTF
BSPT
MJ
UNJ
M-EXT, MJ-EXT
PG
EGM

		Materiale	Material		Material examples	Mat. numbers
P		Acciai	Steel materials			
	1.1	Acciai estrusi a freddo	Cold-extrusion steel		Cq15	1.1132
		Acciai da costruzione	Costruction steels	≤ 600 N/mm2	S235JR 0°(St37-2)	1.0037
		Acciai alta velocità	Free-cutting steel, etc.		10SPb20	1.0722
	2.1	Acciai da costruzione	Costruction steels		E360 (St70-2)	1.0070
		Acciai da cementazione	Cementation steel	≤ 800 N/mm2	16MnCr5	1.7131
		Fusione d'acciaio, ecc.	Steel casting, etc.		GS-25CrMo4	1.7218
	3.1	Acciai da cementazione	Cementation steel		20MoCr3	1.7320
		Acciai da bonifica	Heat-treatable steels	≤ 1000 N/mm2	42CrMo4	1.7225
		Acciai peR 0°lavorazioni a freddo, ecc.	Cold work steels, etc.		102Cr6	1.2067
	4.1	Acciai da bonifica	Heat-treatable steels		50CrMo4	1.7228
		Acciai peR 0°lavorazioni a freddo	Cold work steels	≤ 1200 N/mm2	X45NiCrMo4	1.2767
		Acciai da nitrurazione, ecc.	Nitriding steels, etc.		31CrMo12	1.8515
	5.1	Acciai fortemente legati	High-alloyed steels		X38CrMoV5-3	1.2367
		Acciai peR 0°lavorazioni a freddo	Cold work steels	≤ 1400 N/mm2	X100CrMoV8-1-1	1.2990
		Acciai peR 0°lavorazioni a caldo, ecc.	Hot work steels, etc.		X40CrMoV5-1	1.2344
M		Acciai inossidabili	Stainless steel materials			
	1.1	Ferritici, martensitici	Ferritic, martensitic	≤ 950 N/mm2	X2CrTi12	1.4512
	2.1	Austenitici	Austenitic	≤ 950 N/mm2	X6CrNiMoTi17-12-2	1.4571
	3.1	Austenitici-ferritici (Duplex)	Austenitic-ferritic (Duplex)	≤ 1100 N/mm2	X2CrNiMoN22-5-3	1.4462
	4.1	Austenitici-ferritici resistenti al calore (SupeR 0°Duplex)	Austenitic-ferritic heat-resistant (SupeR 0°Duplex)	≤ 1250 N/mm2	X2CrNiMoN25-7-4	1.4410
K		Ghise	Cast materials			
	1.1	Ghise con grafite lamellare (GJL)	Cast iron with lamellaR 0°graphite (GJL)	100-250 N/mm2	EN-GJL-200 (GG20)	EN-JL-1030
	1.2			250-450 N/mm2	EN-GJL-300 (GG30)	EN-JL-1050
	2.1	Ghise con grafite nodulare (GJS)	Cast iron with nodulaR 0°graphite (GJS)	350-500 N/mm2	EN-GJS-400-15 (GGG40)	EN-JS-1030
	2.2			500-900 N/mm2	EN-GJS-700-2 (GGG70)	EN-JS-1070
	3.1	Ghise con grafite vermicolare (GJV)	Cast iron with vermiculaR 0°graphite (GJV)	300-400 N/mm2	GJV 300	
	3.2			400-500 N/mm2	GJV 450	
	4.1	Ghise malleabili (GTMW, GTMB)	Malleable cast iron (GTMW, GTMB)	250-500 N/mm2	EN-GJMW-350-4 (GTW-35)	EN-JM-1010
	4.2			500-800 N/mm2	EN-GJMB-450-6 (GTS-45)	EN-JM-1140
N		Materiali non ferrosi	Non ferrous materials			
		Leghe di alluminio	Aluminium alloys			
	1.1	Leghe di alluminio malleabili	Aluminium wrought alloys	≤ 200 N/mm2	EN AW-AlMn1	EN AW-3103
	1.2			≤ 350 N/mm2	EN AW-AlMgSi	EN AW-6060
	1.3			≤ 550 N/mm2	EN AW-AlZn5Mg3Cu	EN AW-7022
	1.4	Leghe fuse di alluminio	Aluminium cast alloys	Si ≤ 7%	EN AC-AlMg5	EN AC-51300
	1.5			7% < Si ≤ 12%	EN AC-AlSi9Cu3	EN AC-46500
	1.6			12% < Si ≤ 17%	GD-AlSi17Cu4FeMg	
		Leghe di rame	CoppeR 0°alloys			
	2.1	Rame puro, Rame poco legato	Pure copper, low-alloyed copper	≤ 400 N/mm2	E-Cu 57	EN CW 004 A
	2.2	Leghe rame-zinco (ottone, truciolo lungo)	Copper-zinc alloys (brass, long-chipping)	≤ 550 N/mm2	CuZn37 (Ms63)	EN CW 508 L
	2.3	Leghe rame-zinco (ottone, truciolo corto)	Copper-zinc alloys (brass, short-chipping)	≤ 550 N/mm2	CuZn36Pb3 (Ms58)	EN CW 603 N
	2.4	Leghe rame-alluminio (alubronzo, truciolo lungo)	Copper-aluminium alloys (alu bronze, long-chipping)	≤ 800 N/mm2	CuAl10Ni5Fe4	EN CW 307 G
	2.5	Leghe rame-stagno (bronzo, truciolo lungo)	Copper-tin alloys (tin bronze, long-chipping)	≤ 700 N/mm2	CuSn8P	EN CW 459 K
	2.6	Leghe rame-stagno (bronzo, truciolo corto)	Copper-tin alloys (tin bronze, short-chipping)	≤ 400 N/mm2	CuSn7 ZnPb (Rg7)	2.1090
	2.7	Leghe di rame speciali	Special coppeR 0°alloys	≤ 600 N/mm2	(AMPCO® 8)	
	2.8			≤ 1400 N/mm2	(AMPCO® 45)	
		Leghe di magnesio	Magnesium alloys			
	3.1	Leghe di magnesio malleabili	Magnesium wrought alloys	≤ 500 N/mm2	MgAl6Zn	3.5612
	3.2	Leghe peR 0°getti di magnesio	Magnesium cast alloys	≤ 500 N/mm2	EN-MCMgAl9Zn1	EN-MC21120
		Materie plastiche	Synthetics			
	4.1	Materie plastiche termoindurenti (truciolo corto)	Duroplastics (short-chipping)		Bakelit, Pertinax	
	4.2	Resine termoplastiche (truciolo lungo)	Thermoplastics (long-chipping)		PMMA, POM, PVC	
	4.3	Resine epossidiche (percentuale di fibre ≤ 30%)	Fibre-reinforced synthetics (fibre content ≤ 30%)		GFK, CFK, AFK	
	4.4	Resine epossidiche (percentuale di fibre > 30%)	Fibre-reinforced synthetics (fibre content > 30%)		GFK, CFK, AFK	
		Materiali speciali	Special materials			
	5.1	Grafite	Graphite		C 8000	
	5.2	Leghe tungsteno-rame	Tungsten-coppeR 0°alloys		W-Cu 80/20	
	5.3	Materiali compositi	Composite materials		Hylite, Alucobond	
S		Materiali speciali	Special materials			
		Leghe di titanio	Titanium alloys			
	1.1	Titanio puro	Pure titanium	≤ 450 N/mm2	Ti1	3.7025
	1.2	Leghe di titanio	Titanium alloys	≤ 900 N/mm2	TiAl6V4	3.7165
	1.3			≤ 1250 N/mm2	TiAl4Mo4Sn2	3.7185
		Leghe di nichel, cobalto e ferro	Nickel alloys, cobalt alloys and iron alloys			
	2.1	Nichel puro	Pure nickel	≤ 600 N/mm2	Ni 99,6	2.4060
	2.2	Leghe base nichel	Nickel-base alloys	≤ 1000 N/mm2	Monel 400	2.4360
	2.3			≤ 1600 N/mm2	Inconel 718	2.4668
	2.4	Leghe base cobalto	Cobalt-base alloys	≤ 1000 N/mm2	Udimet 605	
	2.5			≤ 1600 N/mm2	Haynes 25	2.4964
	2.6	Leghe base ferro	Iron-base alloys	≤ 1500 N/mm2	Incoloy 800	1.4958
H		Materiali duri	Hard materials			
	1.1	"Acciai ad alta resistenza, Acciai temprati, Ghise in conchiglia	High strength steels, hardened steels, hard castings"	44 - 50 HRC	Weldox 1100	
	1.2			50 - 55 HRC	Hardox 550	
	1.3			55 - 60 HRC	Armox 600T	
	1.4			60 - 63 HRC	Ferro-Titanit	
	1.5			63 - 66 HRC	HSSE	

5E 37,5E 39	5E 37,5E 39
5E 41,5E 43	5E 41,5E 43

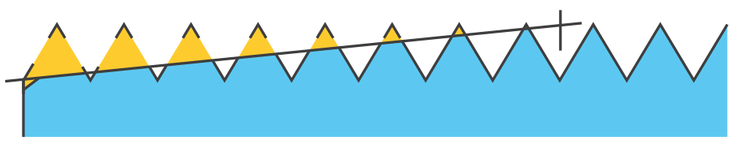
Vc Uncoated	Vc Coated NFS	F = 3 to 5 mm	F =5 to 8 mm	F =8 to 12 mm	F =12 to 16 mm	
						P
	30 - 40					1.1
	20 - 60					2.1
	20 - 50					3.1
	15 - 35					4.1
						5.1
						M
	10 - 25					1.1
	10 - 25					2.1
	10 - 25					3.1
						4.1
						K
						1.1
						1.2
						2.1
						2.2
						3.1
						3.2
						4.1
						4.2
						N
30 - 90	25 - 80					1.1
30 - 90						1.2
30 - 90						1.3
30 - 70						1.4
30 - 70	30 - 80					1.5
30 - 70	30 - 80					1.6
						2.1
	25 - 50					2.2
	25 - 60					2.3
						2.4
						2.5
						2.6
						2.7
						2.8
						3.1
						3.2
						4.1
						4.2
						4.3
						4.4
						5.1
						5.2
						5.3
						S
	12 - 35					1.1
						1.2
						1.3
						2.1
						2.2
						2.3
						2.4
						2.5
						2.6
						H
						1.1
						1.2
						1.3
						1.4
						1.5

FORME D'IMBOCCO
CHAMFER 0°FORMS

Forme e lunghezza d'imbocco peR 0°maschi a tagliare secondo DIN 2197
ChamfeR 0°forms and chamfeR 0°lengths foR 0°taps acc. DIN 2197

Forma A
Form A

Lunghezza d'imbocco 6 - 8 filetti
PeR 0°scanalature diritte
FoR 0°straight flutes
ChamfeR 0°length 6-8 threads



Forma B
Form B

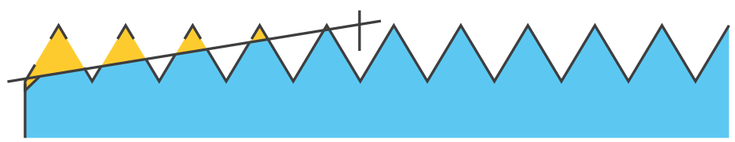
Lunghezza d'imbocco di 3,5-5,5 filetti
PeR 0°scanalature diritte con imbocco corretto
ChamfeR 0°length 3.5-5.5 threads
FoR 0°straight flutes with spiral point

Forma C
Form C

Lunghezza d'imbocco di 2-3 filetti
PeR 0°scanalature diritte o elicoidali
ChamfeR 0°length 2-3 threads
FoR 0°straight oR 0°spiral fl utes

Forma D
Form D

Lunghezza d'imbocco di 3,5-5 filetti
PeR 0°scanalature diritte o elicoidali
ChamfeR 0°length 3.5-5 threads
FoR 0°straight oR 0°spiral flutes



Forma E
Form E

Lunghezza d'imbocco di 1,5-2 filetti
PeR 0°scanalature diritte o elicoidali
ChamfeR 0°length 1.5-2 threads
FoR 0°straight oR 0°spiral flutes

Forma F
Form F

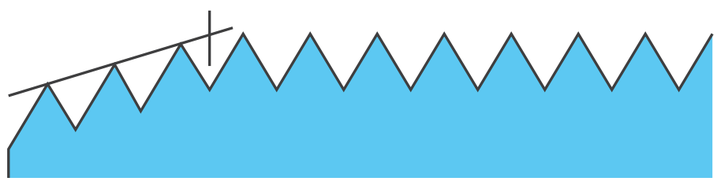
Lunghezza d'imbocco di 1-1,5 filetti
PeR 0°scanalature diritte o elicoidali
ChamfeR 0°length 1-1,5 threads
FoR 0°straight oR 0°spiral flutes

FORME D'IMBOCCO
LEAD TAPER 0°FORMS

Forme e lunghezza d'imbocco peR 0°maschi a rullare secondo DIN 2175
Lead tapeR 0°forms and lead tapeR 0°lengths foR 0°cold-forming taps acc. DIN 2175

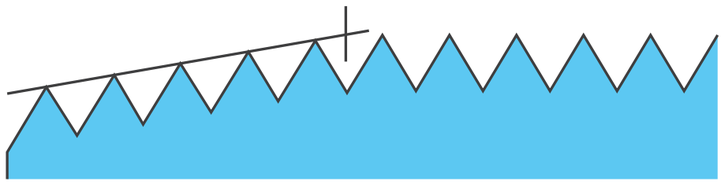
Forma C
Form C

Lunghezza d'imbocco di 2-3 filetti
ChamfeR 0°length 2-3 threads



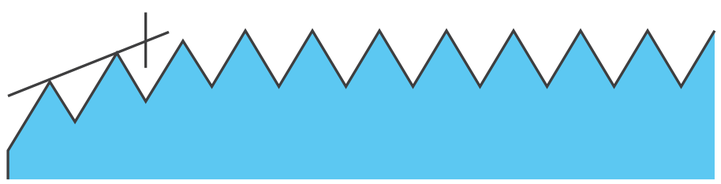
Forma D
Form D

Lunghezza d'imbocco di 3,5-5 filetti
ChamfeR 0°length 3.5-5 threads



Forma E
Form E

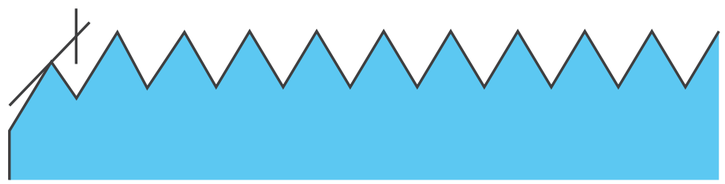
Lunghezza d'imbocco di 1,5-2 filetti
ChamfeR 0°length 1.5-2 threads



IGUTENSILI

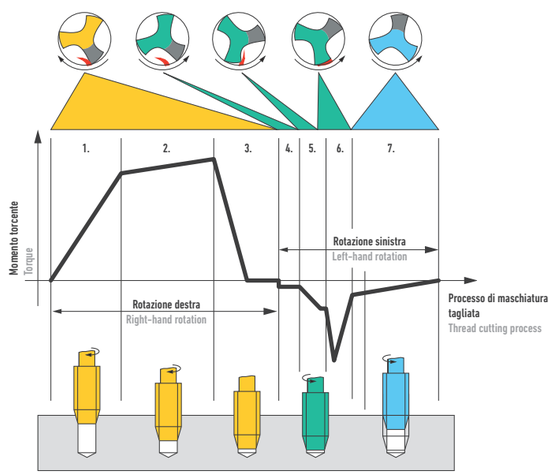
Forma F
Form F

Lunghezza d'imbocco di 1-1,5 filetti
ChamfeR 0°length 1-1,5 threads



MASCHI A TAGLIARE
CUTTING TAPS

Diagramma schematico del momento torcente nella maschiatura tagliata
Schematic of torque curve during a thread cutting process



1) Primo taglio del maschio fino al contatto completo di tutti i denti d'imbocco

2) Taglio del maschio con tutti i denti d'imbocco

3) Decelerazione del mandrino macchina fino all'arresto

4) Inizio del movimento di ritorno del mandrino fino al contatto del dorso del dente con il truciolo residuo

5) Rottura del truciolo

6) Evaquazione del truciolo residuo (la sua dimensione dipende dall'angolo di spoglia dell'imbocco e dall'angolo di taglio dorsale del maschio)

7) Attrito radente fra maschio e pezzo

1) Beginning of cut to full contact of all chamfeR 0°teeth

2) Cutting torque of the tap which is now cutting with all its chamfeR 0°teeth

3) Braking the machine spindle to a stop

4) Beginning reversal of the spindle to contact of the tooth back with the chip root left standing by the next cutting tap tooth

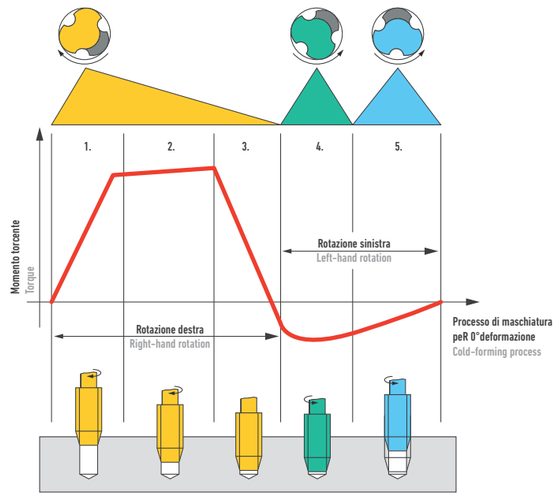
5) Shearing off the chip root

6) Squashing back the chip root remains left afteR 0°the shearing off of the chip root (size depending on the chamfeR 0°relief angle of the tap and on the reaR 0°cutting angle of the tap tooth)

7) Sliding friction between tap and workpiece

MASCHI A RULLARE
FORMING TAPS

Diagramma schematico del momento torcente nella maschiatura rullata
Schematic of torque curve in the cold forming of threads



1) Prima deformazione del maschio a rullare fino al completo contatto di tutti i lobi in imbocco

2) Massimo sforzo dell'imbocco completamente inserito nel materiale

3) Decelerazione del mandrino macchina fino all'arresto

4) Inizio del movimento di ritorno del mandrino con attrito radente

5) Attrito radente fra maschio a rullare e pezzo

1) Beginning of forming process until all lead tapeR 0°teeth are in contact.

2) Forming work of the lead tapeR 0°which is now in full contact

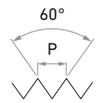
3) Braking the machine spindle to a stop

4) Beginning reversal of the spindle with sliding friction

5) Sliding friction between cold-forming tap and workpiece

M

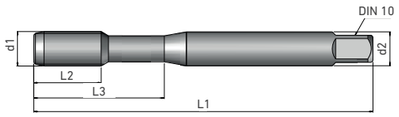
DIN13



DIN 371

VHM 6HX

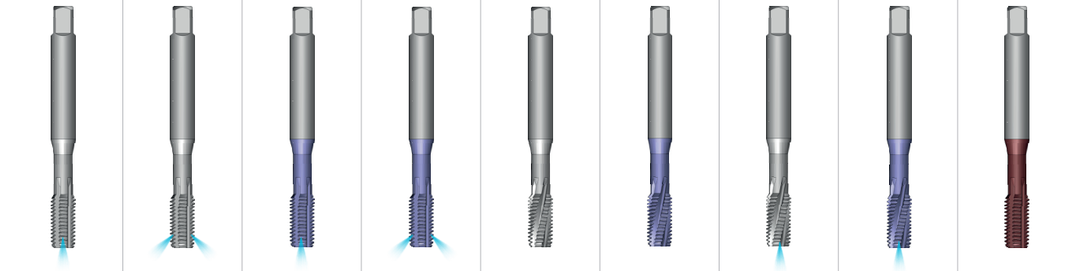
ESECUZIONI SPECIALI A DISEGNO
CUSTOMIZED DESIGN ON REQUEST



DATI TECNICI
TECHNICAL DATA
page 5E • 13

	R 0° - RR	R 0° - RR
TRATTAMENTO SUPERFICIALE SURFACE TREATMENT	Uncoated	Coated NFS
MATERIALI LAVORABILI WORKING MATERIALS page 5E • 3	N1.1-N1.5	P3.1-P5.1 K1.1-K4.2 N1.5-N1.6 N2.6-N3.1 N4.3-N4.4 S2.5-S2.6

Filetto - Thread	Pitch mm	d1	d2	L1	L2	L3	Z	Z type TX	Preforo		
M3X0.5	0.50	3.0	3.5	56	11	18	3	4	2.5	HMIG110.M3X0.5.N	HMIG110.M3X0.5.T
M3.5X0.6	0.60	3.5	4.0	56	12	20	3		2.9	HMIG110.M3.5X0.6.N	HMIG110.M3.5X0.6.T
M4X0.7	0.70	4.0	4.5	63	13	21	3	4	3.3	HMIG110.M4X0.7.N	HMIG110.M4X0.7.T
M4.5X0.75	0.75	4.5	6.0	70	16	25	3		3.75	HMIG110.M4.5X0.75.N	HMIG110.M4.5X0.75.T
M5X0.8	0.80	5.0	6.0	70	16	25	4	4	4.2	HMIG110.M5X0.8.N	HMIG110.M5X0.8.T
M6X1	1.00	6.0	6.0	80	19	30	4	5	5.0	HMIG110.M6X1.N	HMIG110.M6X1.T
M8X1,25	1.25	8.0	8.0	90	22	35	4	5	6.8	HMIG110.M8X1.25.N	HMIG110.M8X1.25.T
M9X1,25	1.25	9.0	9.0	90	22	35	4		7.8	HMIG110.M9X1.25.N	HMIG110.M9X1.25.T
M10X1,5	1.50	10.0	10.0	100	24	39	4	5	8.5	HMIG110.M10X1.5.N	HMIG110.M10X1.5.N

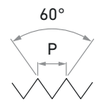


R 0° - RR	R 0° - RR	R 0° - RR	R 0° - RR	R 15° - RR	R 15° - RR	R 15° - RR	R 15° - RR	R 0°- RR
Uncoated	Uncoated	Coated NFS	Coated NFS	Uncoated	Coated NFS	Uncoated	Coated NFS	Coated LTM
N1.1-N1.5	N1.1-N1.5	P3.1-P5.1 K1.1-K4.2 N1.5-N1.6 N2.6-N3.1 N4.3-N4.4 S2.5-S2.6	P3.1-P5.1 K1.1-K4.2 N1.5-N1.6 N2.6-N3.1 N4.3-N4.4 S2.5-S2.6	N1.1-N1.5	P3.1-P5.1 K1.1-K4.2 N1.5-N1.6 N2.6-N3.1 N4.3-N4.4 S2.5-S2.6	N1.1-N1.5	P3.1-P5.1 K1.1-K4.2 N1.5-N1.6 N2.6-N3.1 N4.3-N4.4 S2.5-S2.6	S2.4-S2.5 H1.1-H1.2

				HMIG310.M3X0.5.N	HMIG310.M3X0.5.T			HMIG550.M3X0.5.TX
				HMIG310.M3.5X0.6.N	HMIG310.M3.5X0.6.T			
				HMIG310.M4X0.7.N	HMIG310.M4X0.7.T			HMIG550.M4X0.7.TX
				HMIG310.M4.5X0.75.N	HMIG310.M4.5X0.75.T			
				HMIG310.M5X0.8.N	HMIG310.M5X0.8.T			HMIG550.M5X0.8.TX
HMIG110.M6X1.NF	HMIG110.M6X1.NG	HMIG110.M6X1.F	HMIG110.M6X1.TG	HMIG310.M6X1.N	HMIG310.M6X1.T	HMIG310.M6X1.NF	HMIG310.M6X1.F	HMIG550.M6X1.TX
HMIG110.M8X1.25.NF	HMIG110.M8X1.25.NG	HMIG110.M8X1.25.F	HMIG110.M8X1.25.TG	HMIG310.M8X1.25.N	HMIG310.M8X1.25.T	HMIG310.M8X1.25.NF	HMIG310.M8X1.25.F	HMIG550.M8X1.25.TX
HMIG110.M9X1.25.NF	HMIG110.M9X1.25.NG	HMIG110.M9X1.25.F	HMIG110.M9X1.25.TG	HMIG310.M9X1.25.N	HMIG310.M9X1.25.T	HMIG310.M9X1.25.NF	HMIG310.M9X1.25.F	
HMIG110.M10X1.5.NF	HMIG110.M10X1.5.NG	HMIG110.M10X1.5.F	HMIG110.M10X1.5.TG	HMIG310.M10X1.5.N	HMIG310.M10X1.5.T	HMIG310.M10X1.5.NF	HMIG310.M10X1.5.F	HMIG550.M10X1.5.TX

M

DIN13

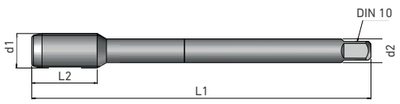


DIN 376

VHM 6HX

R 0° - RR | R 0° - RR

ESECUZIONI SPECIALI A DISEGNO
CUSTOMIZED DESIGN ON REQUEST



TRATTAMENTO SUPERFICIALE
SURFACE TREATMENT

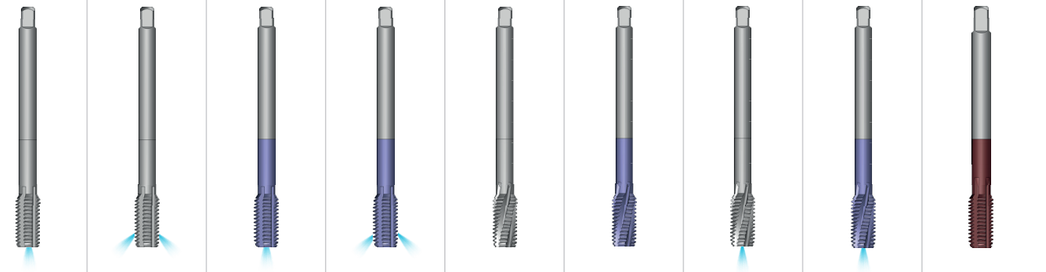
Uncoated | Coated NFS

MATERIALI LAVORABILI
WORKING MATERIALS
page 5E • 3

N1.1-N1.5 | P3.1-P5.1, K1.1-K4.2, N1.5-N1.6, N2.6-N3.1, N4.3-N4.4, S2.5-S2.6

DATI TECNICI
TECHNICAL DATA
page 5E • 13

Filetto - Thread	Pitch mm	d1	d2	L1	L2	Z	Z type TX	Preforo		
M4X0.7	0.70	4.0	2.8	63	13	3		3.3	HMIG120.M4X0.7.N	HMIG120.M4X0.7.T
M5X0.8	0.80	5.0	3.5	70	16	4		4.2	HMIG120.M5X0.8.N	HMIG120.M5X0.8.T
M6X1	1.00	6.0	4.5	80	19	4		5.0	HMIG120.M6X1.N	HMIG120.M6X1.T
M8X1.25	1.25	8.0	6.0	90	22	4		6.75	HMIG120.M8X1.25.N	HMIG120.M8X1.25.T
M10X1.5	1.50	10.0	7.0	100	24	4		8.5	HMIG120.M10X1.5.N	HMIG120.M10X1.5.T
M11X1.5	1.50	11.0	8.0	100	24	4		9.5	HMIG120.M11X1.5.N	HMIG120.M11X1.5.T
M12X1.75	1.75	12.0	9.0	110	28	5	5	10.25	HMIG120.M12X1.75.N	HMIG120.M12X1.75.T
M14X2	2.00	14.0	11.0	110	30	5	6	12.0	HMIG120.M14X2.N	HMIG120.M14X2.T
M16X2	2.00	16.0	12.0	110	32	5	6	14.0	HMIG120.M16X2.N	HMIG120.M16X2.T
M18X2.5	2.50	18.0	14.0	125	34	5	6	15.5	HMIG120.M18X2.5.N	HMIG120.M18X2.5.T
M20X2.5	2.50	20.0	16.0	140	34	5	6	17.5	HMIG120.M20X2.5.N	HMIG120.M20X2.5.T

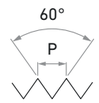


R 0° - RR	R 0° - RR	R 0° - RR	R 0° - RR	R 15° - RR	R 15° - RR	R 15° - RR	R 15° - RR	R 0° - RR
Uncoated	Uncoated	Coated NFS	Coated NFS	Uncoated	Coated NFS	Uncoated	Coated NFS	Coated LTM
N1.1-N1.5	N1.1-N1.5	P3.1-P5.1, K1.1-K4.2, N1.5-N1.6, N2.6-N3.1, N4.3-N4.4, S2.5-S2.6	P3.1-P5.1, K1.1-K4.2, N1.5-N1.6, N2.6-N3.1, N4.3-N4.4, S2.5-S2.6	N1.1-N1.5	P3.1-P5.1, K1.1-K4.2, N1.5-N1.6, N2.6-N3.1, N4.3-N4.4, S2.5-S2.6	N1.1-N1.5	P3.1-P5.1, K1.1-K4.2, N1.5-N1.6, N2.6-N3.1, N4.3-N4.4, S2.5-S2.6	S2.4-S2.5, H1.1-H1.2

				HMIG320.M4X0.7.N	HMIG320.M4X0.7.T			
				HMIG320.M5X0.8.N	HMIG320.M5X0.8.T			
HMIG120.M6X1.NF	HMIG120.M6X1.NG	HMIG120.M6X1.F	HMIG120.M6X1.TG	HMIG320.M6X1.N	HMIG320.M6X1.T	HMIG320.M6X1.NF	HMIG320.M6X1.F	
HMIG120.M8X1.25.NF	HMIG120.M8X1.25.NG	HMIG120.M8X1.25.F	HMIG120.M8X1.25.TG	HMIG320.M8X1.25.N	HMIG320.M8X1.25.T	HMIG320.M8X1.25.NF	HMIG320.M8X1.25.F	
HMIG120.M10X1.5.NF	HMIG120.M10X1.5.NG	HMIG120.M10X1.5.F	HMIG120.M10X1.5.TG	HMIG320.M10X1.5.N	HMIG320.M10X1.5.T	HMIG320.M10X1.5.NF	HMIG320.M10X1.5.F	
HMIG120.M11X1.5.NF	HMIG120.M11X1.5.NG	HMIG120.M11X1.5.F	HMIG120.M11X1.5.TG	HMIG320.M11X1.5.N	HMIG320.M11X1.5.T	HMIG320.M11X1.5.NF	HMIG320.M11X1.5.F	
HMIG120.M12X1.75.NF	HMIG120.M12X1.75.NG	HMIG120.M12X1.75.F	HMIG120.M12X1.75.TG	HMIG320.M12X1.75.N	HMIG320.M12X1.75.T	HMIG320.M12X1.75.NF	HMIG320.M12X1.75.F	HMIG560.M12X1.75.TX
HMIG120.M14X2.NF	HMIG120.M14X2.NG	HMIG120.M14X2.F	HMIG120.M14X2.TG	HMIG320.M14X2.N	HMIG320.M14X2.T	HMIG320.M14X2.NF	HMIG320.M14X2.F	HMIG560.M14X2.TX
HMIG120.M16X2.NF	HMIG120.M16X2.NG	HMIG120.M16X2.F	HMIG120.M16X2.TG	HMIG320.M16X2.N	HMIG320.M16X2.T	HMIG320.M16X2.NF	HMIG320.M16X2.F	HMIG560.M16X2.TX
HMIG120.M18X2.5.NF	HMIG120.M18X2.5.NG	HMIG120.M18X2.5.F	HMIG120.M18X2.5.TG	HMIG320.M18X2.5.N	HMIG320.M18X2.5.T	HMIG320.M18X2.5.NF	HMIG320.M18X2.5.F	HMIG560.M18X2.5.TX
HMIG120.M20X2.5.NF	HMIG120.M20X2.5.NG	HMIG120.M20X2.5.F	HMIG120.M20X2.5.TG	HMIG320.M20X2.5.N	HMIG320.M20X2.5.T	HMIG320.M20X2.5.NF	HMIG320.M20X2.5.F	HMIG560.M20X2.5.TX

MF

DIN13

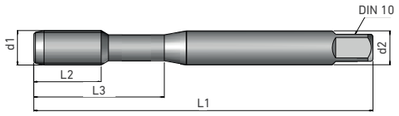


DIN 371

VHM

6HX

ESECUZIONI SPECIALI A DISEGNO
CUSTOMIZED DESIGN ON REQUEST



DATI TECNICI
TECHNICAL DATA
page 5E • 133

	R 0° - RR	R 0° - RR
TRATTAMENTO SUPERFICIALE SURFACE TREATMENT	Uncoated	Coated NFS
MATERIALI LAVORABILI WORKING MATERIALS page 5E • 3	N1.1-N1.5	P3.1-P5.1 K1.1-K4.2 N1.5-N1.6 N2.6-N3.1 N4.3-N4.4 S2.5-S2.6

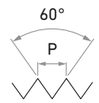
Filetto - Thread	Pitch mm	d1	d2	L1	L2	L3	Z	Preforo		
MF4X0.5	0.50	4.0	4.5	63	10	21	3	3.5	HMIG210.MF4X0.5.N	HMIG210.MF4X0.5.T
MF5X0.5	0.50	5.0	6.0	70	12	25	4	4.5	HMIG210.MF5X0.5.N	HMIG210.MF5X0.5.T
MF6X0.5	0.50	6.0	6.0	80	14	30	4	5.5	HMIG210.MF6X0.5.N	HMIG210.MF6X0.5.T
MF6X0.75	0.75	6.0	6.0	80	14	30	4	5.2	HMIG210.MF6X0.75.N	HMIG210.MF6X0.75.T
MF7X0.75	0.75	7.0	7.0	80	14	30	4	6.2	HMIG210.MF7X0.75.N	HMIG210.MF7X0.75.T
MF8X0.5	0.50	8.0	8.0	80	18	30	4	7.5	HMIG210.MF8X0.5.N	HMIG210.MF8X0.5.T
MF8X0.75	0.75	8.0	8.0	80	18	30	4	7.2	HMIG210.MF8X0.75.N	HMIG210.MF8X0.75.T
MF8X1	1.00	8.0	8.0	90	22	35	4	7.0	HMIG210.MF8X1.N	HMIG210.MF8X1.T
MF9X0.5	0.50	9.0	9.0	90	18	35	4	8.5	HMIG210.MF9X0.5.N	HMIG210.MF9X0.5.T
MF9X0.75	0.75	9.0	9.0	90	18	35	4	8.2	HMIG210.MF9X0.75.N	HMIG210.MF9X0.75.T
MF9X1	1.00	9.0	9.0	90	22	35	4	8.0	HMIG210.MF9X1.N	HMIG210.MF9X1.T
MF10X0.5	0.50	10.0	10.0	90	20	35	4	9.5	HMIG210.MF10X0.5.N	HMIG210.MF10X0.5.T
MF10X0.75	0.75	10.0	10.0	90	20	35	4	9.2	HMIG210.MF10X0.75.N	HMIG210.MF10X0.75.T
MF10X1	1.00	10.0	10.0	90	20	35	4	9.0	HMIG210.MF10X1.N	HMIG210.MF10X1.T
MF10X1.25	1.25	10.0	10.0	100	24	39	4	8.8	HMIG210.MF10X1.25.N	HMIG210.MF10X1.25.T

R 0° - RR	R 0° - RR	R 0° - RR	R 0° - RR	R 15° - RR	R 15° - RR	R 15° - RR	R 15° - RR
Uncoated	Uncoated	Coated NFS	Coated NFS	Uncoated	Coated NFS	Uncoated	Coated NFS
N1.1-N1.5	N1.1-N1.5	P3.1-P5.1 K1.1-K4.2 N1.5-N1.6 N2.6-N3.1 N4.3-N4.4 S2.5-S2.6	P3.1-P5.1 K1.1-K4.2 N1.5-N1.6 N2.6-N3.1 N4.3-N4.4 S2.5-S2.6	N1.1-N1.5	P3.1-P5.1 K1.1-K4.2 N1.5-N1.6 N2.6-N3.1 N4.3-N4.4 S2.5-S2.6	N1.1-N1.5	P3.1-P5.1 K1.1-K4.2 N1.5-N1.6 N2.6-N3.1 N4.3-N4.4 S2.5-S2.6

				HMIG410.MF4X0.5.N	HMIG410.MF4X0.5.T		
				HMIG410.MF5X0.5.N	HMIG410.MF5X0.5.T		
HMIG210.MF6X0.5.NF	HMIG210.MF6X0.5.NG	HMIG210.MF6X0.5.F	HMIG210.MF6X0.5.TG	HMIG410.MF6X0.5.N	HMIG410.MF6X0.5.T	HMIG410.MF6X0.5.NF	HMIG410.MF6X0.5.F
HMIG210.MF6X0.75.NF	HMIG210.MF6X0.75.NG	HMIG210.MF6X0.75.F	HMIG210.MF6X0.75.TG	HMIG410.MF6X0.75.N	HMIG410.MF6X0.75.T	HMIG410.MF6X0.75.NF	HMIG410.MF6X0.75.F
HMIG210.MF7X0.75.NF	HMIG210.MF7X0.75.NG	HMIG210.MF7X0.75.F	HMIG210.MF7X0.75.TG	HMIG410.MF7X0.75.N	HMIG410.MF7X0.75.T	HMIG410.MF7X0.75.NF	HMIG410.MF7X0.75.F
HMIG210.MF8X0.5.NF	HMIG210.MF8X0.5.NG	HMIG210.MF8X0.5.F	HMIG210.MF8X0.5.TG	HMIG410.MF8X0.5.N	HMIG410.MF8X0.5.T	HMIG410.MF8X0.5.NF	HMIG410.MF8X0.5.F
HMIG210.MF8X0.75.NF	HMIG210.MF8X0.75.NG	HMIG210.MF8X0.75.F	HMIG210.MF8X0.75.TG	HMIG410.MF8X0.75.N	HMIG410.MF8X0.75.T	HMIG410.MF8X0.75.NF	HMIG410.MF8X0.75.F
HMIG210.MF8X1.NF	HMIG210.MF8X1.NG	HMIG210.MF8X1.F	HMIG210.MF8X1.TG	HMIG410.MF8X1.N	HMIG410.MF8X1.T	HMIG410.MF8X1.NF	HMIG410.MF8X1.F
HMIG210.MF9X0.5.NF	HMIG210.MF9X0.5.NG	HMIG210.MF9X0.5.F	HMIG210.MF9X0.5.TG	HMIG410.MF9X0.5.N	HMIG410.MF9X0.5.T	HMIG410.MF9X0.5.NF	HMIG410.MF9X0.5.F
HMIG210.MF9X0.75.NF	HMIG210.MF9X0.75.NG	HMIG210.MF9X0.75.F	HMIG210.MF9X0.75.TG	HMIG410.MF9X0.75.N	HMIG410.MF9X0.75.T	HMIG410.MF9X0.75.NF	HMIG410.MF9X0.75.F
HMIG210.MF9X1.NF	HMIG210.MF9X1.NG	HMIG210.MF9X1.F	HMIG210.MF9X1.TG	HMIG410.MF9X1.N	HMIG410.MF9X1.T	HMIG410.MF9X1.NF	HMIG410.MF9X1.F
HMIG210.MF10X0.5.NF	HMIG210.MF10X0.5.NG	HMIG210.MF10X0.5.F	HMIG210.MF10X0.5.TG	HMIG410.MF10X0.5.N	HMIG410.MF10X0.5.T	HMIG410.MF10X0.5.NF	HMIG410.MF10X0.5.F
HMIG210.MF10X0.75.NF	HMIG210.MF10X0.75.NG	HMIG210.MF10X0.75.F	HMIG210.MF10X0.75.TG	HMIG410.MF10X0.75.N	HMIG410.MF10X0.75.T	HMIG410.MF10X0.75.NF	HMIG410.MF10X0.75.F
HMIG210.MF10X1.NF	HMIG210.MF10X1.NG	HMIG210.MF10X1.F	HMIG210.MF10X1.TG	HMIG410.MF10X1.N	HMIG410.MF10X1.T	HMIG410.MF10X1.NF	HMIG410.MF10X1.F
HMIG210.MF10X1.25.NF	HMIG210.MF10X1.25.NG	HMIG210.MF10X1.25.F	HMIG210.MF10X1.25.TG	HMIG410.MF10X1.25.N	HMIG410.MF10X1.25.T	HMIG410.MF10X1.25.NF	HMIG410.MF10X1.25.F

MF

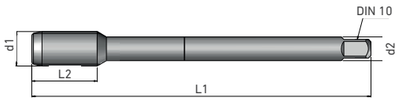
DIN13



DIN 374

VHM 6HX

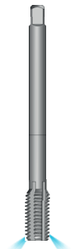
ESECUZIONI SPECIALI A DISEGNO
CUSTOMIZED DESIGN ON REQUEST

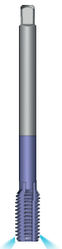


DATI TECNICI
TECHNICAL DATA
page 5E • 13

	R 0° - RR	R 0° - RR
TRATTAMENTO SUPERFICIALE SURFACE TREATMENT	Uncoated	Coated NFS
MATERIALI LAVORABILI WORKING MATERIALS page 5E • 3	N1.1-N1.5	P3.1-P5.1 K1.1-K4.2 N1.5-N1.6 N2.6-N3.1 N4.3-N4.4 S2.5-S2.6

Filetto - Thread	Pitch mm	d1	d2	L1	L2	Z	Preforo		
MF5X0.5	0.50	5.0	3.5	70	12	4	4.5	HMIG220.MF5X0.5.N	HMIG220.MF5X0.5.T
MF6X0.5	0.50	6.0	4.5	80	14	4	5.5	HMIG220.MF6X0.5.N	HMIG220.MF6X0.5.T
MF6X0.75	0.75	6.0	4.5	80	14	4	5.25	HMIG220.MF6X0.75.N	HMIG220.MF6X0.75.T
MF6.5X0.75	0.75	6.5	5.5	80	14	4	5.75	HMIG220.MF6.5X0.75.N	HMIG220.MF6.5X0.75.T
MF7X0.75	0.75	7.0	5.5	80	14	4	6.25	HMIG220.MF7X0.75.N	HMIG220.MF7X0.75.T
MF8X0.5	0.50	8.0	6.0	80	18	4	7.5	HMIG220.MF8X0.5.N	HMIG220.MF8X0.5.T
MF8X0.75	0.75	8.0	6.0	80	18	4	7.25	HMIG220.MF8X0.75.N	HMIG220.MF8X0.75.T
MF8X1	1.00	8.0	6.0	90	22	4	7.0	HMIG220.MF8X1.N	HMIG220.MF8X1.T
MF9X1	1.00	9.0	7.0	90	22	4	8.0	HMIG220.MF9X1.N	HMIG220.MF9X1.T
MF10X0.5	0.50	10.0	7.0	90	20	4	9.5	HMIG220.MF10X0.5.N	HMIG220.MF10X0.5.T
MF10X0.75	0.75	10.0	7.0	90	20	4	9.25	HMIG220.MF10X0.75.N	HMIG220.MF10X0.75.T
MF10X1	1.00	10.0	7.0	90	20	4	9.0	HMIG220.MF10X1.N	HMIG220.MF10X1.T
MF10X1.25	1.25	10.0	7.0	100	24	4	8.75	HMIG220.MF10X1.25.N	HMIG220.MF10X1.25.T
MF11X0.75	0.75	11.0	8.0	90	20	4	10.25	HMIG220.MF11X0.75.N	HMIG220.MF11X0.75.T
MF11X1	1.00	11.0	8.0	90	20	4	10.0	HMIG220.MF11X1.N	HMIG220.MF11X1.T
MF12X0.5	0.50	12.0	9.0	100	22	5	11.5	HMIG220.MF12X0.5.N	HMIG220.MF12X0.5.T
MF12X0.75	0.75	12.0	9.0	100	22	5	11.25	HMIG220.MF12X0.75.N	HMIG220.MF12X0.75.T
MF12X1	1.00	12.0	9.0	100	22	5	11.0	HMIG220.MF12X1.N	HMIG220.MF12X1.T
MF12X1.25	1.25	12.0	9.0	100	22	5	10.75	HMIG220.MF12X1.25.N	HMIG220.MF12X1.25.T
MF12X1.5	1.50	12.0	9.0	100	22	5	10.5	HMIG220.MF12X1.5.N	HMIG220.MF12X1.5.T
MF13X1	1.00	13.0	11.0	100	22	5	12.0	HMIG220.MF13X1.N	HMIG220.MF13X1.T
MF13X1.25	1.25	13.0	11.0	100	22	5	11.75	HMIG220.MF13X1.25.N	HMIG220.MF13X1.25.T
MF13X1.5	1.50	13.0	11.0	100	22	5	11.5	HMIG220.MF13X1.5.N	HMIG220.MF13X1.5.T
MF14X1	1.00	14.0	11.0	100	22	5	13.0	HMIG220.MF14X1.N	HMIG220.MF14X1.T
MF14X1.25	1.25	14.0	11.0	100	22	5	12.75	HMIG220.MF14X1.25.N	HMIG220.MF14X1.25.T
MF14X1.5	1.50	14.0	11.0	100	22	5	12.5	HMIG220.MF14X1.5.N	HMIG220.MF14X1.5.T
MF15X1	1.00	15.0	12.0	100	22	5	14.0	HMIG220.MF15X1.N	HMIG220.MF15X1.T
MF15X1.25	1.25	15.0	12.0	100	22	5	13.75	HMIG220.MF15X1.25.N	HMIG220.MF15X1.25.T
MF15X1.5	1.50	15.0	12.0	100	22	5	13.5	HMIG220.MF15X1.5.N	HMIG220.MF15X1.5.T
MF16X1	1.00	16.0	12.0	100	22	5	15.0	HMIG220.MF16X1.N	HMIG220.MF16X1.T
MF16X1.25	1.25	16.0	12.0	100	22	5	14.75	HMIG220.MF16X1.25.N	HMIG220.MF16X1.25.T
MF16X1.5	1.50	16.0	12.0	100	22	5	14.5	HMIG220.MF16X1.5.N	HMIG220.MF16X1.5.T
MF17X1	1.00	17.0	12.0	100	22	5	16.0	HMIG220.MF17X1.N	HMIG220.MF17X1.T
MF17X1.5	1.50	17.0	12.0	100	22	5	15.5	HMIG220.MF17X1.5.N	HMIG220.MF17X1.5.T
MF18X1	1.00	18.0	14.0	110	25	5	17.0	HMIG220.MF18X1.N	HMIG220.MF18X1.T
MF18X1.5	1.50	18.0	14.0	110	25	5	16.5	HMIG220.MF18X1.5.N	HMIG220.MF18X1.5.T
MF18X2	2.00	18.0	14.0	125	34	5	16.0	HMIG220.MF18X2.N	HMIG220.MF18X2.T
MF19X1	1.00	19.0	14.0	110	25	5	18.0	HMIG220.MF19X1.N	HMIG220.MF19X1.T
MF19X1.5	1.50	19.0	14.0	110	25	5	17.5	HMIG220.MF19X1.5.N	HMIG220.MF19X1.5.T
MF20X1	1.00	20.0	16.0	125	25	5	19.0	HMIG220.MF20X1.N	HMIG220.MF20X1.T
MF20X1.5	1.50	20.0	16.0	125	25	5	18.5	HMIG220.MF20X1.5.N	HMIG220.MF20X1.5.T
MF20X2	2.00	20.0	16.0	140	34	5	18.0	HMIG220.MF20X2.N	HMIG220.MF20X2.T

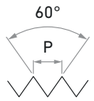




R 0° - RR	R 0° - RR	R 0° - RR	R 0° - RR	R 15° - RR	R 15° - RR	R 15° - RR	R 15° - RR
Uncoated	Uncoated	Coated NFS	Coated NFS	Uncoated	Coated NFS	Uncoated	Coated NFS
N1.1-N1.5	N1.1-N1.5	P3.1-P5.1 K1.1-K4.2 N1.5-N1.6 N2.6-N3.1 N4.3-N4.4 S2.5-S2.6	P3.1-P5.1 K1.1-K4.2 N1.5-N1.6 N2.6-N3.1 N4.3-N4.4 S2.5-S2.6	N1.1-N1.5	P3.1-P5.1 K1.1-K4.2 N1.5-N1.6 N2.6-N3.1 N4.3-N4.4 S2.5-S2.6	N1.1-N1.5	P3.1-P5.1 K1.1-K4.2 N1.5-N1.6 N2.6-N3.1 N4.3-N4.4 S2.5-S2.6
				HMIG420.MF5X0.5.N	HMIG420.MF5X0.5.T		
HMIG220.MF6X0.5.NF	HMIG220.MF6X0.5.NG	HMIG220.MF6X0.5.F	HMIG220.MF6X0.5.TG	HMIG420.MF6X0.5.N	HMIG420.MF6X0.5.T	HMIG420.MF6X0.5.NF	HMIG420.MF6X0.5.F
HMIG220.MF6X0.75.NF	HMIG220.MF6X0.75.NG	HMIG220.MF6X0.75.F	HMIG220.MF6X0.75.TG	HMIG420.MF6X0.75.N	HMIG420.MF6X0.75.T	HMIG420.MF6X0.75.NF	HMIG420.MF6X0.75.F
HMIG220.MF6.5X0.75NF	HMIG220.MF6.5X0.75NG	HMIG220.MF6.5X0.75.F	HMIG220.MF6.5X0.75TG	HMIG420.MF6.5X0.75.N	HMIG420.MF6.5X0.75.T	HMIG420.MF6.5X0.75NF	HMIG420.MF6.5X0.75.F
HMIG220.MF7X0.75.NF	HMIG220.MF7X0.75.NG	HMIG220.MF7X0.75.F	HMIG220.MF7X0.75.TG	HMIG420.MF7X0.75.N	HMIG420.MF7X0.75.T	HMIG420.MF7X0.75.NF	HMIG420.MF7X0.75.F
HMIG220.MF8X0.5.NF	HMIG220.MF8X0.5.NG	HMIG220.MF8X0.5.F	HMIG220.MF8X0.5.TG	HMIG420.MF8X0.5.N	HMIG420.MF8X0.5.T	HMIG420.MF8X0.5.NF	HMIG420.MF8X0.5.F
HMIG220.MF8X0.75.NF	HMIG220.MF8X0.75.NG	HMIG220.MF8X0.75.F	HMIG220.MF8X0.75.TG	HMIG420.MF8X0.75.N	HMIG420.MF8X0.75.T	HMIG420.MF8X0.75.NF	HMIG420.MF8X0.75.F
HMIG220.MF8X1.NF	HMIG220.MF8X1.NG	HMIG220.MF8X1.F	HMIG220.MF8X1.TG	HMIG420.MF8X1.N	HMIG420.MF8X1.T	HMIG420.MF8X1.NF	HMIG420.MF8X1.F
HMIG220.MF9X1.NF	HMIG220.MF9X1.NG	HMIG220.MF9X1.F	HMIG220.MF9X1.TG	HMIG420.MF9X1.N	HMIG420.MF9X1.T	HMIG420.MF9X1.NF	HMIG420.MF9X1.F
HMIG220.MF10X0.5.NF	HMIG220.MF10X0.5.NG	HMIG220.MF10X0.5.F	HMIG220.MF10X0.5.TG	HMIG420.MF10X0.5.N	HMIG420.MF10X0.5.T	HMIG420.MF10X0.5.NF	HMIG420.MF10X0.5.F
HMIG220.MF10X0.75.NF	HMIG220.MF10X0.75.NG	HMIG220.MF10X0.75.F	HMIG220.MF10X0.75.TG	HMIG420.MF10X0.75.N	HMIG420.MF10X0.75.T	HMIG420.MF10X0.75.NF	HMIG420.MF10X0.75.F
HMIG220.MF10X1.NF	HMIG220.MF10X1.NG	HMIG220.MF10X1.F	HMIG220.MF10X1.TG	HMIG420.MF10X1.N	HMIG420.MF10X1.T	HMIG420.MF10X1.NF	HMIG420.MF10X1.F
HMIG220.MF10X1.25.NF	HMIG220.MF10X1.25.NG	HMIG220.MF10X1.25.F	HMIG220.MF10X1.25.TG	HMIG420.MF10X1.25.N	HMIG420.MF10X1.25.T	HMIG420.MF10X1.25.NF	HMIG420.MF10X1.25.F
HMIG220.MF11X0.75.NF	HMIG220.MF11X0.75.NG	HMIG220.MF11X0.75.F	HMIG220.MF11X0.75.TG	HMIG420.MF11X0.75.N	HMIG420.MF11X0.75.T	HMIG420.MF11X0.75.NF	HMIG420.MF11X0.75.F
HMIG220.MF11X1.NF	HMIG220.MF11X1.NG	HMIG220.MF11X1.F	HMIG220.MF11X1.TG	HMIG420.MF11X1.N	HMIG420.MF11X1.T	HMIG420.MF11X1.NF	HMIG420.MF11X1.F
HMIG220.MF12X0.5.NF	HMIG220.MF12X0.5.NG	HMIG220.MF12X0.5.F	HMIG220.MF12X0.5.TG	HMIG420.MF12X0.5.N	HMIG420.MF12X0.5.T	HMIG420.MF12X0.5.NF	HMIG420.MF12X0.5.F
HMIG220.MF12X0.75.NF	HMIG220.MF12X0.75.NG	HMIG220.MF12X0.75.F	HMIG220.MF12X0.75.TG	HMIG420.MF12X0.75.N	HMIG420.MF12X0.75.T	HMIG420.MF12X0.75.NF	HMIG420.MF12X0.75.F
HMIG220.MF12X1.NF	HMIG220.MF12X1.NG	HMIG220.MF12X1.F	HMIG220.MF12X1.TG	HMIG420.MF12X1.N	HMIG420.MF12X1.T	HMIG420.MF12X1.NF	HMIG420.MF12X1.F
HMIG220.MF12X1.25.NF	HMIG220.MF12X1.25.NG	HMIG220.MF12X1.25.F	HMIG220.MF12X1.25.TG	HMIG420.MF12X1.25.N	HMIG420.MF12X1.25.T	HMIG420.MF12X1.25.NF	HMIG420.MF12X1.25.F
HMIG220.MF12X1.5.NF	HMIG220.MF12X1.5.NG	HMIG220.MF12X1.5.F	HMIG220.MF12X1.5.TG	HMIG420.MF12X1.5.N	HMIG420.MF12X1.5.T	HMIG420.MF12X1.5.NF	HMIG420.MF12X1.5.F
HMIG220.MF13X1.NF	HMIG220.MF13X1.NG	HMIG220.MF13X1.F	HMIG220.MF13X1.TG	HMIG420.MF13X1.N	HMIG420.MF13X1.T	HMIG420.MF13X1.NF	HMIG420.MF13X1.F
HMIG220.MF13X1.25.NF	HMIG220.MF13X1.25.NG	HMIG220.MF13X1.25.F	HMIG220.MF13X1.25.TG	HMIG420.MF13X1.25.N	HMIG420.MF13X1.25.T	HMIG420.MF13X1.25.NF	HMIG420.MF13X1.25.F
HMIG220.MF13X1.5.NF	HMIG220.MF13X1.5.NG	HMIG220.MF13X1.5.F	HMIG220.MF13X1.5.TG	HMIG420.MF13X1.5.N	HMIG420.MF13X1.5.T	HMIG420.MF13X1.5.NF	HMIG420.MF13X1.5.F
HMIG220.MF14X1.NF	HMIG220.MF14X1.NG	HMIG220.MF14X1.F	HMIG220.MF14X1.TG	HMIG420.MF14X1.N	HMIG420.MF14X1.T	HMIG420.MF14X1.NF	HMIG420.MF14X1.F
HMIG220.MF14X1.25.NF	HMIG220.MF14X1.25.NG	HMIG220.MF14X1.25.F	HMIG220.MF14X1.25.TG	HMIG420.MF14X1.25.N	HMIG420.MF14X1.25.T	HMIG420.MF14X1.25.NF	HMIG420.MF14X1.25.F
HMIG220.MF14X1.5.NF	HMIG220.MF14X1.5.NG	HMIG220.MF14X1.5.F	HMIG220.MF14X1.5.TG	HMIG420.MF14X1.5.N	HMIG420.MF14X1.5.T	HMIG420.MF14X1.5.NF	HMIG420.MF14X1.5.F
HMIG220.MF15X1.NF	HMIG220.MF15X1.NG	HMIG220.MF15X1.F	HMIG220.MF15X1.TG	HMIG420.MF15X1.N	HMIG420.MF15X1.T	HMIG420.MF15X1.NF	HMIG420.MF15X1.F
HMIG220.MF15X1.25.NF	HMIG220.MF15X1.25.NG	HMIG220.MF15X1.25.F	HMIG220.MF15X1.25.TG	HMIG420.MF15X1.25.N	HMIG420.MF15X1.25.T	HMIG420.MF15X1.25.NF	HMIG420.MF15X1.25.F
HMIG220.MF15X1.5.NF	HMIG220.MF15X1.5.NG	HMIG220.MF15X1.5.F	HMIG220.MF15X1.5.TG	HMIG420.MF15X1.5.N	HMIG420.MF15X1.5.T	HMIG420.MF15X1.5.NF	HMIG420.MF15X1.5.F
HMIG220.MF16X1.NF	HMIG220.MF16X1.NG	HMIG220.MF16X1.F	HMIG220.MF16X1.TG	HMIG420.MF16X1.N	HMIG420.MF16X1.T	HMIG420.MF16X1.NF	HMIG420.MF16X1.F
HMIG220.MF16X1.25.NF	HMIG220.MF16X1.25.NG	HMIG220.MF16X1.25.F	HMIG220.MF16X1.25.TG	HMIG420.MF16X1.25.N	HMIG420.MF16X1.25.T	HMIG420.MF16X1.25.NF	HMIG420.MF16X1.25.F
HMIG220.MF16X1.5.NF	HMIG220.MF16X1.5.NG	HMIG220.MF16X1.5.F	HMIG220.MF16X1.5.TG	HMIG420.MF16X1.5.N	HMIG420.MF16X1.5.T	HMIG420.MF16X1.5.NF	HMIG420.MF16X1.5.F
HMIG220.MF17X1.NF	HMIG220.MF17X1.NG	HMIG220.MF17X1.F	HMIG220.MF17X1.TG	HMIG420.MF17X1.N	HMIG420.MF17X1.T	HMIG420.MF17X1.NF	HMIG420.MF17X1.F
HMIG220.MF17X1.5.NF	HMIG220.MF17X1.5.NG	HMIG220.MF17X1.5.F	HMIG220.MF17X1.5.TG	HMIG420.MF17X1.5.N	HMIG420.MF17X1.5.T	HMIG420.MF17X1.5.NF	HMIG420.MF17X1.5.F
HMIG220.MF18X1.NF	HMIG220.MF18X1.NG	HMIG220.MF18X1.F	HMIG220.MF18X1.TG	HMIG420.MF18X1.N	HMIG420.MF18X1.T	HMIG420.MF18X1.NF	HMIG420.MF18X1.F
HMIG220.MF18X1.5.NF	HMIG220.MF18X1.5.NG	HMIG220.MF18X1.5.F	HMIG220.MF18X1.5.TG	HMIG420.MF18X1.5.N	HMIG420.MF18X1.5.T	HMIG420.MF18X1.5.NF	HMIG420.MF18X1.5.F
HMIG220.MF18X2.NF	HMIG220.MF18X2.NG	HMIG220.MF18X2.F	HMIG220.MF18X2.TG	HMIG420.MF18X2.N	HMIG420.MF18X2.T	HMIG420.MF18X2.NF	HMIG420.MF18X2.F
HMIG220.MF19X1.NF	HMIG220.MF19X1.NG	HMIG220.MF19X1.F	HMIG220.MF19X1.TG	HMIG420.MF19X1.N	HMIG420.MF19X1.T	HMIG420.MF19X1.NF	HMIG420.MF19X1.F
HMIG220.MF19X1.5.NF	HMIG220.MF19X1.5.NG	HMIG220.MF19X1.5.F	HMIG220.MF19X1.5.TG	HMIG420.MF19X1.5.N	HMIG420.MF19X1.5.T	HMIG420.MF19X1.5.NF	HMIG420.MF19X1.5.F
HMIG220.MF20X1.NF	HMIG220.MF20X1.NG	HMIG220.MF20X1.F	HMIG220.MF20X1.TG	HMIG420.MF20X1.N	HMIG420.MF20X1.T	HMIG420.MF20X1.NF	HMIG420.MF20X1.F
HMIG220.MF20X1.5.NF	HMIG220.MF20X1.5.NG	HMIG220.MF20X1.5.F	HMIG220.MF20X1.5.TG	HMIG420.MF20X1.5.N	HMIG420.MF20X1.5.T	HMIG420.MF20X1.5.NF	HMIG420.MF20X1.5.F
HMIG220.MF20X2.NF	HMIG220.MF20X2.NG	HMIG220.MF20X2.F	HMIG220.MF20X2.TG	HMIG420.MF20X2.N	HMIG420.MF20X2.T	HMIG420.MF20X2.NF	HMIG420.MF20X2.F

M, MF

DIN13

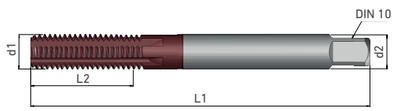


NORMA IG

VHM 6HX

Maschi a mano
Hand taps

ESECUZIONI SPECIALI A DISEGNO
CUSTOMIZED DESIGN ON REQUEST



DATI TECNICI
TECHNICAL DATA
page 5E • 13

	R 0° - RR	R 0° - RR
TRATTAMENTO SUPERFICIALE SURFACE TREATMENT	Coated LTM	Coated LTM
MATERIALI LAVORABILI WORKING MATERIALS page 5E • 5	P1.1-P5.1 M1.1-M4.1 K1.1-K4.2 N1.1-N5.3 S1.1-S2.6 H1.1-H1.5	P1.1-P5.1 M1.1-M4.1 K1.1-K4.2 N1.1-N5.3 S1.1-S2.6 H1.1-H1.5

HMIG

Filetto - Thread	Pitch mm	d1	d2	L1	L2	Z	Preforo		
M3X0.5	0.50	3.0	3.5	56	10	4	2.5		HMIG510.M3X0.5.TX
MF4X0.5	0.50	4.0	4.5	63	13	4	3.5	HMIG520.MF4X0.5.TX	
M4X0.7	0.70	4.0	4.5	63	13	4	3.3		HMIG510.M4X0.7.TX
MF5X0.5	0.50	5.0	6.0	70	13	5	4.5	HMIG520.MF5X0.5.TX	
M5X0.8	0.80	5.0	6.0	70	13	5	4.2		HMIG510.M5X0.8.TX
MF6X0.5	0.50	6.0	6.0	80	16	5	5.5	HMIG520.MF6X0.5.TX	
MF6X0.75	0.75	6.0	6.0	80	16	5	5.25	HMIG520.MF6X0.75.TX	
M6X1	1.00	6.0	6.0	80	18	5	5.0		HMIG510.M6X1.TX
MF8X0.5	0.50	8.0	8.0	90	18	5	7.5	HMIG520.MF8X0.5.TX	
MF8X0.75	0.75	8.0	8.0	90	18	5	7.25	HMIG520.MF8X0.75.TX	
MF8X1	1.00	8.0	8.0	90	18	5	7.0	HMIG520.MF8X1.TX	
M8X1.25	1.25	8.0	8.0	90	25	5	6.75		HMIG510.M8X1.25.TX
MF10X1	1.00	10.0	10.0	100	30	5	9.0	HMIG520.MF10X1.TX	
M10X1.5	1.50	10.0	10.0	100	30	5	8.5		HMIG510.M10X1.5.TX
MF12X1.5	1.50	12.0	12.0	110	30	6	10.5	HMIG520.MF12X1.5.TX	
M12X1.75	1.75	12.0	12.0	110	30	6	10.25		HMIG510.M12X1.75.TX
MF14X1.5	1.50	14.0	14.0	110	35	6	12.5	HMIG520.MF14X1.5.TX	
M14X2	2.00	14.0	14.0	110	35	6	12.0		HMIG510.M14X2.TX
MF16X1.5	1.50	16.0	16.0	110	40	6	14.5	HMIG520.MF16X1.5.TX	
M16X2	2.00	16.0	16.0	110	40	6	14.0		HMIG510.M16X2.TX
M18X2.5	2.50	18.0	18.0	125	45	6	15.5		HMIG510.M18X2.5.TX
M20X2.5	2.50	20.0	20.0	140	50	6	17.5		HMIG510.M20X2.5.TX

IGUTENSILI

HMIG

G

DIN EN ISO 228

55°
P

DIN 5156

VHM


R 0° - RR | R 0° - RR

TRATTAMENTO SUPERFICIALE
SURFACE TREATMENT

Uncoated | Coated NFS

MATERIALI LAVORABILI
WORKING MATERIALS
page 5E • 3

N1.1-N1.5 | P3.1-P5.1, K1.1-K4.2, N1.5-N1.6, N2.6-N3.1, N4.3-N4.4, S2.5-S2.6

ESECUZIONI SPECIALI A DISEGNO
CUSTOMIZED DESIGN ON REQUEST

DATI TECNICI
TECHNICAL DATA
page 5E • 13

Filetto - Thread	(TPI)	d1	d2	L1	L2	Z	Preforo		
1/8"	28	9.728	7.0	90	20	4	8.8	HMIG710.G1/8.N	HMIG710.G1/8.T
1/4"	19	13.157	11.0	100	22	5	11.8	HMIG710.G1/4.N	HMIG710.G1/4.T
3/8"	19	16.662	12.0	100	22	5	15.25	HMIG710.G3/8.N	HMIG710.G3/8.T




R 0° - RR | R 0° - RR | R 0° - RR | R 0° - RR

Uncoated | Uncoated | Coated NFS | Coated NFS

N1.1-N1.5 | N1.1-N1.5 | P3.1-P5.1, K1.1-K4.2, N1.5-N1.6, N2.6-N3.1, N4.3-N4.4, S2.5-S2.6 | P3.1-P5.1, K1.1-K4.2, N1.5-N1.6, N2.6-N3.1, N4.3-N4.4, S2.5-S2.6

HMIG710.G1/8.NF	HMIG710.G1/8.NG	HMIG710.G1/8.F	HMIG710.G1/8.TG
HMIG710.G1/4.NF	HMIG710.G1/4.NG	HMIG710.G1/4.F	HMIG710.G1/4.TG
HMIG710.G3/8.NF	HMIG710.G3/8.NG	HMIG710.G3/8.F	HMIG710.G3/8.TG

UNC

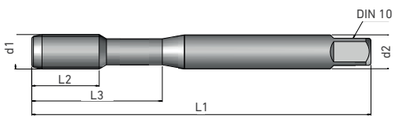
60° P

DIN 371

ASME B1.1

VHM 2B

ESECUZIONI SPECIALI A DISEGNO
CUSTOMIZED DESIGN ON REQUEST



DATI TECNICI
TECHNICAL DATA
page 5E • 13

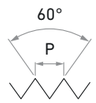
	R 0° - RR	R 0° - RR
TRATTAMENTO SUPERFICIALE SURFACE TREATMENT	Uncoated	Coated NFS
MATERIALI LAVORABILI WORKING MATERIALS page 5E • 3	N1.1-N1.5	P3.1-P5.1 K1.1-K4.2 N1.5-N1.6 N2.6-N3.1 N4.3-N4.4 S2.5-S2.6

Filetto - Thread	(TPI)	d1 inch	d2	L1	L2	L3	Z	Preforo		
Nr.4	40	0.1120	3.5	56	11	18	3	2.35	HMIG240.UNC.NR4.N	HMIG240.UNC.NR4.T
Nr.5	40	0.1250	3.5	56	11	18	3	2.65	HMIG240.UNC.NR5.N	HMIG240.UNC.NR5.T
Nr.6	32	0.1380	4.0	56	12	20	3	2.85	HMIG240.UNC.NR6.N	HMIG240.UNC.NR6.T
Nr.8	32	0.1640	4.5	63	13	21	3	3.5	HMIG240.UNC.NR8.N	HMIG240.UNC.NR8.T
Nr.10	24	0.1900	6.0	70	15	25	4	3.9	HMIG240.UNC.NR10.N	HMIG240.UNC.NR10.T
Nr.12	24	0.2160	6.0	80	16	30	4	4.5	HMIG240.UNC.NR12.N	HMIG240.UNC.NR12.T
1/4" UNC	20	0.2500	7.0	80	17	30	4	5.1	HMIG240.UNC.1/4.N	HMIG240.UNC.1/4.T
5/16" UNC	18	0.3125	8.0	90	20	35	4	6.6	HMIG240.UNC.5/16.N	HMIG240.UNC.5/16.T
3/8" UNC	16	0.3750	10.0	100	22	39	4	8.0	HMIG240.UNC.3/8.N	HMIG240.UNC.3/8.T

R 0° - RR	R 0° - RR	R 0° - RR	R 0° - RR
Uncoated	Uncoated	Coated NFS	Coated NFS
N1.1-N1.5	N1.1-N1.5	P3.1-P5.1 K1.1-K4.2 N1.5-N1.6 N2.6-N3.1 N4.3-N4.4 S2.5-S2.6	P3.1-P5.1 K1.1-K4.2 N1.5-N1.6 N2.6-N3.1 N4.3-N4.4 S2.5-S2.6

HMIG240.UNC.1/4.NF	HMIG240.UNC.1/4.NG	HMIG240.UNC.1/4.F	HMIG240.UNC.1/4.TG
HMIG240.UNC.5/16.NF	HMIG240.UNC.5/16.NG	HMIG240.UNC.5/16.F	HMIG240.UNC.5/16.TG
HMIG240.UNC.3/8.NF	HMIG240.UNC.3/8.NG	HMIG240.UNC.3/8.F	HMIG240.UNC.3/8.TG

UNC

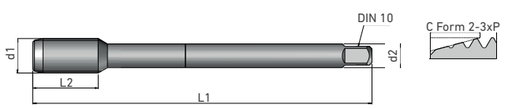


DIN 376

ASME B1.1

VHM | 2B

ESECUZIONI SPECIALI A DISEGNO
CUSTOMIZED DESIGN ON REQUEST



DATI TECNICI
TECHNICAL DATA
page 5E • 13

	R 0° - RR	R 0° - RR
TRATTAMENTO SUPERFICIALE SURFACE TREATMENT	Uncoated	Coated NFS
MATERIALI LAVORABILI WORKING MATERIALS page 5E • 3	N1.1-N1.5	P3.1-P5.1 K1.1-K4.2 N1.5-N1.6 N2.6-N3.1 N4.3-N4.4 S2.5-S2.6

Filetto - Thread	(TPI)	d1 inch	d2	L1	L2	Z	Preforo		
7/16" UNC	14	0.4375	8.0	100	22	4	9.4	HMIG250.UNC.7/16.N	HMIG250.UNC.7/16.T
1/2" UNC	13	0.5000	9.0	110	25	5	10.8	HMIG250.UNC.1/2.N	HMIG250.UNC.1/2.T
9/16" UNC	12	0.5625	11.0	110	26	5	12.2	HMIG250.UNC.9/16.N	HMIG250.UNC.9/16.T
5/8" UNC	11	0.6250	12.0	110	27	5	13.5	HMIG250.UNC.5/8.N	HMIG250.UNC.5/8.T
3/4" UNC	10	0.7500	14.0	125	30	5	16.5	HMIG250.UNC.3/4.N	HMIG250.UNC.3/4.T
7/8" UNC	9	0.8750	18.0	140	32	5	19.5	HMIG250.UNC.7/8.N	HMIG250.UNC.7/8.T

R 0° - RR	R 0° - RR	R 0° - RR	R 0° - RR
Uncoated	Uncoated	Coated NFS	Coated NFS
N1.1-N1.5	N1.1-N1.5	P3.1-P5.1 K1.1-K4.2 N1.5-N1.6 N2.6-N3.1 N4.3-N4.4 S2.5-S2.6	P3.1-P5.1 K1.1-K4.2 N1.5-N1.6 N2.6-N3.1 N4.3-N4.4 S2.5-S2.6

HMIG250.UNC.7/16.NF	HMIG250.UNC.7/16.NG	HMIG250.UNC.7/16.F	HMIG250.UNC.7/16.TG
HMIG250.UNC.1/2.NF	HMIG250.UNC.1/2.NG	HMIG250.UNC.1/2.F	HMIG250.UNC.1/2.TG
HMIG250.UNC.9/16.NF	HMIG250.UNC.9/16.NG	HMIG250.UNC.9/16.F	HMIG250.UNC.9/16.TG
HMIG250.UNC.5/8.NF	HMIG250.UNC.5/8.NG	HMIG250.UNC.5/8.F	HMIG250.UNC.5/8.TG
HMIG250.UNC.3/4.NF	HMIG250.UNC.3/4.NG	HMIG250.UNC.3/4.F	HMIG250.UNC.3/4.TG
HMIG250.UNC.7/8.NF	HMIG250.UNC.7/8.NG	HMIG250.UNC.7/8.F	HMIG250.UNC.7/8.TG

UNF

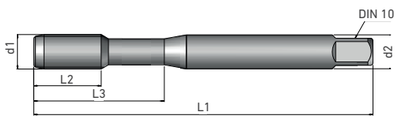
60° P

DIN 371

ASME B1.1

VHM 2B

ESECUZIONI SPECIALI A DISEGNO
CUSTOMIZED DESIGN ON REQUEST



DATI TECNICI
TECHNICAL DATA
page 5E • 13

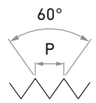
	R 0° - RR	R 0° - RR
TRATTAMENTO SUPERFICIALE SURFACE TREATMENT	Uncoated	Coated NFS
MATERIALI LAVORABILI WORKING MATERIALS page 5E • 3	N1.1-N1.5	P3.1-P5.1 K1.1-K4.2 N1.5-N1.6 N2.6-N3.1 N4.3-N4.4 S2.5-S2.6

Filetto - Thread	(TPI)	d1 inch	d2	L1	L2	L3	Z	Preforo		
Nr.4	48	0.1120	3.5	56	11	18	3	2.4	HMIG260.UNF.NR4.N	HMIG260.UNF.NR4.T
Nr.5	44	0.1250	3.5	56	11	18	3	2.7	HMIG260.UNF.NR5.N	HMIG260.UNF.NR5.T
Nr.6	40	0.1380	4.0	56	12	20	3	2.95	HMIG260.UNF.NR6.N	HMIG260.UNF.NR6.T
Nr.8	36	0.1640	4.5	63	13	21	3	3.5	HMIG260.UNF.NR8.N	HMIG260.UNF.NR8.T
Nr.10	32	0.1900	6.0	70	15	25	4	4.1	HMIG260.UNF.NR10.N	HMIG260.UNF.NR10.T
Nr.12	28	0.2160	6.0	80	16	30	4	4.6	HMIG260.UNF.NR12.N	HMIG260.UNF.NR12.T
1/4" UNF	28	0.2500	7.0	80	17	30	4	5.5	HMIG260.UNF.1/4.N	HMIG260.UNF.1/4.T
5/16" UNF	24	0.3125	8.0	90	17	35	4	6.9	HMIG260.UNF.5/16.N	HMIG260.UNF.5/16.T
3/8" UNF	24	0.3750	10.0	90	18	35	4	8.5	HMIG260.UNF.3/8.N	HMIG260.UNF.3/8.T

R 0° - RR	R 0° - RR	R 0° - RR	R 0° - RR
Uncoated	Uncoated	Coated NFS	Coated NFS
N1.1-N1.5	N1.1-N1.5	P3.1-P5.1 K1.1-K4.2 N1.5-N1.6 N2.6-N3.1 N4.3-N4.4 S2.5-S2.6	P3.1-P5.1 K1.1-K4.2 N1.5-N1.6 N2.6-N3.1 N4.3-N4.4 S2.5-S2.6

HMIG260.UNF.1/4.NF	HMIG260.UNF.1/4.NG	HMIG260.UNF.1/4.F	HMIG260.UNF.1/4.TG
HMIG260.UNF.5/16.NF	HMIG260.UNF.5/16.NG	HMIG260.UNF.5/16.F	HMIG260.UNF.5/16.TG
HMIG260.UNF.3/8.NF	HMIG260.UNF.3/8.NG	HMIG260.UNF.3/8.F	HMIG260.UNF.3/8.TG

UNF

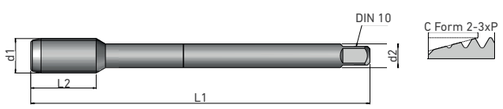


DIN 374

ASME B1.1

VHM | 2B

ESECUZIONI SPECIALI A DISEGNO
CUSTOMIZED DESIGN ON REQUEST



DATI TECNICI
TECHNICAL DATA
page 5E • 13

	R 0° - RR	R 0° - RR
TRATTAMENTO SUPERFICIALE SURFACE TREATMENT	Uncoated	Coated NFS
MATERIALI LAVORABILI WORKING MATERIALS page 5E • 3	N1.1-N1.5	P3.1-P5.1 K1.1-K4.2 N1.5-N1.6 N2.6-N3.1 N4.3-N4.4 S2.5-S2.6

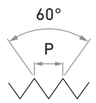
Filetto - Thread	(TPI)	d1 inch	d2	L1	L2	Z	Preforo		
7/16" UNF	20	0.4375	8.0	100	22	4	9.9	HMIG270.UNF.7/16.N	HMIG270.UNF.7/16.T
1/2" UNF	20	0.5000	9.0	100	22	5	11.5	HMIG270.UNF.1/2.N	HMIG270.UNF.1/2.T
9/16" UNF	18	0.5625	11.0	100	22	5	12.9	HMIG270.UNF.9/16.N	HMIG270.UNF.9/16.T
5/8" UNF	18	0.6250	12.0	100	22	5	14.5	HMIG270.UNF.5/8.N	HMIG270.UNF.5/8.T
3/4" UNF	16	0.7500	14.0	110	25	5	17.5	HMIG270.UNF.3/4.N	HMIG270.UNF.3/4.T
7/8" UNF	14	0.8750	18.0	125	25	5	20.4	HMIG270.UNF.7/8.N	HMIG270.UNF.7/8.T

R 0° - RR	R 0° - RR	R 0° - RR	R 0° - RR
Uncoated	Uncoated	Coated NFS	Coated NFS
N1.1-N1.5	N1.1-N1.5	P3.1-P5.1 K1.1-K4.2 N1.5-N1.6 N2.6-N3.1 N4.3-N4.4 S2.5-S2.6	P3.1-P5.1 K1.1-K4.2 N1.5-N1.6 N2.6-N3.1 N4.3-N4.4 S2.5-S2.6

HMIG270.UNF.7/16.NF	HMIG270.UNF.7/16.NG	HMIG270.UNF.7/16.F	HMIG270.UNF.7/16.TG
HMIG270.UNF.1/2.NF	HMIG270.UNF.1/2.NG	HMIG270.UNF.1/2.F	HMIG270.UNF.1/2.TG
HMIG270.UNF.9/16.NF	HMIG270.UNF.9/16.NG	HMIG270.UNF.9/16.F	HMIG270.UNF.9/16.TG
HMIG270.UNF.5/8.NF	HMIG270.UNF.5/8.NG	HMIG270.UNF.5/8.F	HMIG270.UNF.5/8.TG
HMIG270.UNF.3/4.NF	HMIG270.UNF.3/4.NG	HMIG270.UNF.3/4.F	HMIG270.UNF.3/4.TG
HMIG270.UNF.7/8.NF	HMIG270.UNF.7/8.NG	HMIG270.UNF.7/8.F	HMIG270.UNF.7/8.TG

UNEF

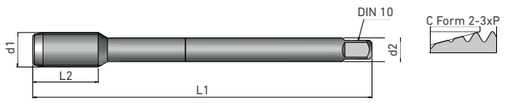
ASME B1.1



DIN 374

VHM | 2B

ESECUZIONI SPECIALI A DISEGNO
CUSTOMIZED DESIGN ON REQUEST



DATI TECNICI
TECHNICAL DATA
page 5E • 13

	R 0° - RR	R 0° - RR
TRATTAMENTO SUPERFICIALE SURFACE TREATMENT	Uncoated	Coated NFS
MATERIALI LAVORABILI WORKING MATERIALS page 5E • 3	N1.1-N1.5	P3.1-P5.1 K1.1-K4.2 N1.5-N1.6 N2.6-N3.1 N4.3-N4.4 S2.5-S2.6

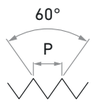
Filetto - Thread	(TPI)	d1 inch	d2	L1	L2	Z	Preforo		
1/4" UNEF	32	0.2500	4.5	80	14	4	5.55	HMIG280.UNEF.1/4.N	HMIG280.UNEF.1/4.T
5/16" UNEF	32	0.3125	6.0	80	14	4	7.15	HMIG280.UNEF.5/16.N	HMIG280.UNEF.5/16.T
3/8" UNEF	32	0.3750	7.0	90	18	4	8.7	HMIG280.UNEF.3/8.N	HMIG280.UNEF.3/8.T
7/16" UNEF	28	0.4375	8.0	90	18	4	10.2	HMIG280.UNEF.7/16.N	HMIG280.UNEF.7/16.T
1/2" UNEF	28	0.5000	9.0	100	18	5	11.8	HMIG280.UNEF.1/2.N	HMIG280.UNEF.1/2.T
9/16" UNEF	24	0.5625	11.0	100	18	5	13.2	HMIG280.UNEF.9/16.N	HMIG280.UNEF.9/16.T
5/8" UNEF	24	0.6250	12.0	100	18	5	14.8	HMIG280.UNEF.5/8.N	HMIG280.UNEF.5/8.T
3/4" UNEF	20	0.7500	14.0	110	25	5	17.8	HMIG280.UNEF.3/4.N	HMIG280.UNEF.3/4.T
7/8" UNEF	20	0.8750	18.0	125	25	5	20.95	HMIG280.UNEF.7/8.N	HMIG280.UNEF.7/8.T

R 0° - RR	R 0° - RR	R 0° - RR	R 0° - RR
Uncoated	Uncoated	Coated NFS	Coated NFS
N1.1-N1.5	N1.1-N1.5	P3.1-P5.1 K1.1-K4.2 N1.5-N1.6 N2.6-N3.1 N4.3-N4.4 S2.5-S2.6	P3.1-P5.1 K1.1-K4.2 N1.5-N1.6 N2.6-N3.1 N4.3-N4.4 S2.5-S2.6

HMIG280.UNEF.1/4.NF	HMIG280.UNEF.1/4.NG	HMIG280.UNEF.1/4.F	HMIG280.UNEF.1/4.TG
HMIG280.UNEF.5/16.NF	HMIG280.UNEF.5/16.NG	HMIG280.UNEF.5/16.F	HMIG280.UNEF.5/16.TG
HMIG280.UNEF.3/8.NF	HMIG280.UNEF.3/8.NG	HMIG280.UNEF.3/8.F	HMIG280.UNEF.3/8.TG
HMIG280.UNEF.7/16.NF	HMIG280.UNEF.7/16.NG	HMIG280.UNEF.7/16.F	HMIG280.UNEF.7/16.TG
HMIG280.UNEF.1/2.NF	HMIG280.UNEF.1/2.NG	HMIG280.UNEF.1/2.F	HMIG280.UNEF.1/2.TG
HMIG280.UNEF.9/16.NF	HMIG280.UNEF.9/16.NG	HMIG280.UNEF.9/16.F	HMIG280.UNEF.9/16.TG
HMIG280.UNEF.5/8.NF	HMIG280.UNEF.5/8.NG	HMIG280.UNEF.5/8.F	HMIG280.UNEF.5/8.TG
HMIG280.UNEF.3/4.NF	HMIG280.UNEF.3/4.NG	HMIG280.UNEF.3/4.F	HMIG280.UNEF.3/4.TG
HMIG280.UNEF.7/8.NF	HMIG280.UNEF.7/8.NG	HMIG280.UNEF.7/8.F	HMIG280.UNEF.7/8.TG

M

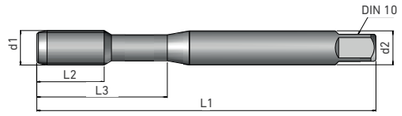
DIN13



DIN 2174

VHM 6HX

ESECUZIONI SPECIALI A DISEGNO
CUSTOMIZED DESIGN ON REQUEST



DATI TECNICI
TECHNICAL DATA
page 5E • 13

	R 0° - RR	R 0° - RR
TRATTAMENTO SUPERFICIALE SURFACE TREATMENT	Uncoated	Coated NFS
MATERIALI LAVORABILI WORKING MATERIALS page 5E • 7	N1.1-N1.6	P1.1-P4.1 M1.1-M3.1 N1.1 N1.5-N2.2 S1.1

Filetto - Thread	Pitch mm	d1	d2	L1	L2	L3	Z	Preforo		
M4X0.7	0.70	4.0	4.5	63	13	21	4	3.7	HMIG610.M4X0.7.N	HMIG610.M4X0.7.T
M5X0.8	0.80	5.0	6.0	70	16	25	4	6.65	HMIG610.M5X0.8.N	HMIG610.M5X0.8.T
M6X1	1.00	6.0	6.0	80	19	30	4	5.55	HMIG610.M6X1.N	HMIG610.M6X1.T
M7X1	1.00	7.0	7.0	80	19	30	4	6.55	HMIG610.M7X1.N	HMIG610.M7X1.T
M8X1.25	1.25	8.0	8.0	90	22	35	4	7.4	HMIG610.M8X1.25.N	HMIG610.M8X1.25.T
M9X1.25	1.25	9.0	9.0	90	22	35	5	8.4	HMIG610.M9X1.25.N	HMIG610.M9X1.25.T
M10X1.5	1.50	10.0	10.0	100	24	39	5	9.3	HMIG610.M10X1.5.N	HMIG610.M10X1.5.T

R 0° - RR	R 0° - RR	R 0° - RR	R 0° - RR
Uncoated	Uncoated	Coated NFS	Coated NFS
N1.1-N1.6	N1.1-N1.6	P1.1-P4.1 M1.1-M3.1 N1.1 N1.5-N2.2 S1.1	P1.1-P4.1 M1.1-M3.1 N1.1 N1.5-N2.2 S1.1

HMIG610.M6X1.NF	HMIG610.M6X1.NG	HMIG610.M6X1.F	HMIG610.M6X1.TG
HMIG610.M7X1.NF	HMIG610.M7X1.NG	HMIG610.M7X1.F	HMIG610.M7X1.TG
HMIG610.M8X1.25.NF	HMIG610.M8X1.25.NG	HMIG610.M8X1.25.F	HMIG610.M8X1.25.TG
HMIG610.M9X1.25.NF	HMIG610.M9X1.25.NG	HMIG610.M9X1.25.F	HMIG610.M9X1.25.TG
HMIG610.M10X1.5.NF	HMIG610.M10X1.5.NG	HMIG610.M10X1.5.F	HMIG610.M10X1.5.TG

M

DIN13

60°

P

DIN 2174

VHM 6HX

R 0° - RR

R 0° - RR

TRATTAMENTO SUPERFICIALE
SURFACE TREATMENT

Uncoated

Coated NFS

MATERIALI LAVORABILI
WORKING MATERIALS
page 5E • 7

N1.1-N1.6

P1.1-P4.1
M1.1-M3.1
N1.1
N1.5-N2.2
S1.1

ESECUZIONI SPECIALI A DISEGNO
CUSTOMIZED DESIGN ON REQUEST

DATI TECNICI
TECHNICAL DATA
page 5E • 13

Filetto - Thread	Pitch mm	d1	d2	L1	L2	Z	Preforo		
M11X1.5	1.50	11.0	8.0	100	24	5	10.3	HMIG615.M11X1.5.N	HMIG615.M11X1.5.T
M12X1.75	1.75	12.0	9.0	110	28	5	11.2	HMIG615.M12X1.75.N	HMIG615.M12X1.75.T
M14X2	2.00	14.0	11.0	110	30	6	13.1	HMIG615.M14X2.N	HMIG615.M14X2.T
M16X2	2.00	16.0	12.0	110	32	6	15.1	HMIG615.M16X2.N	HMIG615.M16X2.T
M18X2.5	2.50	18.0	14.0	125	34	6	16.8	HMIG615.M18X2.5.N	HMIG615.M18X2.5.T
M20X2.5	2.50	20.0	16.0	140	34	6	18.8	HMIG615.M20X2.5.N	HMIG615.M20X2.5.T

R 0° - RR

R 0° - RR

R 0° - RR

R 0° - RR

Uncoated

Uncoated

Coated NFS

Coated NFS

N1.1-N1.6

N1.1-N1.6

P1.1-P4.1
M1.1-M3.1
N1.1
N1.5-N2.2
S1.1

P1.1-P4.1
M1.1-M3.1
N1.1
N1.5-N2.2
S1.1

HMIG615.M11X1.5.NF	HMIG615.M11X1.5.NG	HMIG615.M11X1.5.F	HMIG615.M11X1.5.TG
HMIG615.M12X1.75.NF	HMIG615.M12X1.75.NG	HMIG615.M12X1.75.F	HMIG615.M12X1.75.TG
HMIG615.M14X2.NF	HMIG615.M14X2.NG	HMIG615.M14X2.F	HMIG615.M14X2.TG
HMIG615.M16X2.NF	HMIG615.M16X2.NG	HMIG615.M16X2.F	HMIG615.M16X2.TG
HMIG615.M18X2.5.NF	HMIG615.M18X2.5.NG	HMIG615.M18X2.5.F	HMIG615.M18X2.5.TG
HMIG615.M20X2.5.NF	HMIG615.M20X2.5.NG	HMIG615.M20X2.5.F	HMIG615.M20X2.5.TG

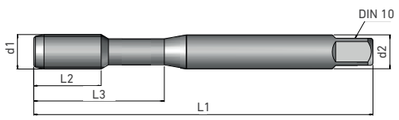
MF

DIN13

60° P **DIN 2174**

VHM 6HX

ESECUZIONI SPECIALI A DISEGNO
CUSTOMIZED DESIGN ON REQUEST



DATI TECNICI
TECHNICAL DATA
page 5E • 13

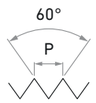
	R 0° - RR	R 0° - RR
TRATTAMENTO SUPERFICIALE SURFACE TREATMENT	Uncoated	Coated NFS
MATERIALI LAVORABILI WORKING MATERIALS page 5E • 7	N1.1-N1.6	P1.1-P4.1 M1.1-M3.1 N1.1 N1.5-N2.2 S1.1

Filetto - Thread	Pitch mm	d1	d2	L1	L2	L3	Z	Preforo		
MF6X0.75	0.75	6.0	6.0	80	14	30	4	5.65	HMIG620.MF6X0.75.N	HMIG620.MF6X0.75.T
MF7X0.75	0.75	7.0	7.0	80	14	30	4	6.65	HMIG620.MF7X0.75.N	HMIG620.MF7X0.75.T
MF8X0.75	0.75	8.0	8.0	80	18	30	4	7.65	HMIG620.MF8X0.75.N	HMIG620.MF8X0.75.T
MF8X1	1.00	8.0	8.0	90	22	35	4	7.55	HMIG620.MF8X1.N	HMIG620.MF8X1.T
MF9X0.75	0.75	9.0	9.0	90	18	35	5	8.65	HMIG620.MF9X0.75.N	HMIG620.MF9X0.75.T
MF9X1	1.00	9.0	9.0	90	22	35	5	8.55	HMIG620.MF9X1.N	HMIG620.MF9X1.T
MF10X0.75	0.75	10.0	10.0	90	20	35	5	9.65	HMIG620.MF10X0.75.N	HMIG620.MF10X0.75.T
MF10X1	1.00	10.0	10.0	90	20	35	5	9.55	HMIG620.MF10X1.N	HMIG620.MF10X1.T
MF10X1.25	1.25	10.0	10.0	100	24	39	5	9.4	HMIG620.MF10X1.25.N	HMIG620.MF10X1.25.T

R 0° - RR	R 0° - RR	R 0° - RR	R 0° - RR
Uncoated	Uncoated	Coated NFS	Coated NFS
N1.1-N1.6	N1.1-N1.6	P1.1-P4.1 M1.1-M3.1 N1.1 N1.5-N2.2 S1.1	P1.1-P4.1 M1.1-M3.1 N1.1 N1.5-N2.2 S1.1

HMIG620.MF6X0.75.NF	HMIG620.MF6X0.75.NG	HMIG620.MF6X0.75.F	HMIG620.MF6X0.75.TG
HMIG620.MF7X0.75.NF	HMIG620.MF7X0.75.NG	HMIG620.MF7X0.75.F	HMIG620.MF7X0.75.TG
HMIG620.MF8X0.75.NF	HMIG620.MF8X0.75.NG	HMIG620.MF8X0.75.F	HMIG620.MF8X0.75.TG
HMIG620.MF8X1.NF	HMIG620.MF8X1.NG	HMIG620.MF8X1.F	HMIG620.MF8X1.TG
HMIG620.MF9X0.75.NF	HMIG620.MF9X0.75.NG	HMIG620.MF9X0.75.F	HMIG620.MF9X0.75.TG
HMIG620.MF9X1.NF	HMIG620.MF9X1.NG	HMIG620.MF9X1.F	HMIG620.MF9X1.TG
HMIG620.MF10X0.75.NF	HMIG620.MF10X0.75.NG	HMIG620.MF10X0.75.F	HMIG620.MF10X0.75.TG
HMIG620.MF10X1.NF	HMIG620.MF10X1.NG	HMIG620.MF10X1.F	HMIG620.MF10X1.TG
HMIG620.MF10X1.25.NF	HMIG620.MF10X1.25.NG	HMIG620.MF10X1.25.F	HMIG620.MF10X1.25.TG

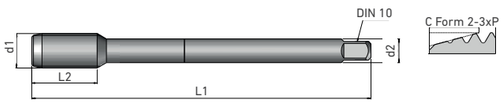
MF
DIN13



DIN 2174

VHM 6HX

ESECUZIONI SPECIALI A DISEGNO
CUSTOMIZED DESIGN ON REQUEST



DATI TECNICI
TECHNICAL DATA
page 5E • 13

	R 0° - RR	R 0° - RR
TRATTAMENTO SUPERFICIALE SURFACE TREATMENT	Uncoated	Coated NFS
MATERIALI LAVORABILI WORKING MATERIALS page 5E • 7	N1.1-N1.6	P1.1-P4.1 M1.1-M3.1 N1.1 N1.5-N2.2 S1.1

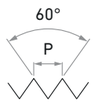
Filetto - Thread	Pitch mm	d1	d2	L1	L2	Z	Preforo		
MF11X0.75	0.75	11.0	8.0	90	20	5	10.7	HMIG625.MF11X0.75.N	HMIG625.MF11X0.75.T
MF11X1	1.00	11.0	8.0	90	20	5	10.5	HMIG625.MF11X1.N	HMIG625.MF11X1.T
MF12X0.75	0.75	12.0	9.0	100	22	5	11.7	HMIG625.MF12X0.75.N	HMIG625.MF12X0.75.T
MF12X1	1.00	12.0	9.0	100	22	5	11.5	HMIG625.MF12X1.N	HMIG625.MF12X1.T
MF12X1.25	1.25	12.0	9.0	100	22	5	11.4	HMIG625.MF12X1.25.N	HMIG625.MF12X1.25.T
MF12X1.5	1.50	12.0	9.0	100	22	5	11.3	HMIG625.MF12X1.5.N	HMIG625.MF12X1.5.T
MF14X1	1.00	14.0	11.0	100	22	6	13.5	HMIG625.MF14X1.N	HMIG625.MF14X1.T
MF14X1.25	1.25	14.0	11.0	100	22	6	13.4	HMIG625.MF14X1.25.N	HMIG625.MF14X1.25.T
MF14X1.5	1.50	14.0	11.0	100	22	6	13.3	HMIG625.MF14X1.5.N	HMIG625.MF14X1.5.T
MF15X1	1.00	15.0	12.0	100	22	6	14.5	HMIG625.MF15X1.N	HMIG625.MF15X1.T
MF15X1.5	1.50	15.0	12.0	100	22	6	14.3	HMIG625.MF15X1.5.N	HMIG625.MF15X1.5.T
MF16X1	1.00	16.0	12.0	100	22	6	15.5	HMIG625.MF16X1.N	HMIG625.MF16X1.T
MF16X1.5	1.50	16.0	12.0	100	22	6	15.3	HMIG625.MF16X1.5.N	HMIG625.MF16X1.5.T
MF18X1	1.00	18.0	14.0	110	25	6	17.5	HMIG625.MF18X1.N	HMIG625.MF18X1.T
MF18X1.5	1.50	18.0	14.0	110	25	6	17.3	HMIG625.MF18X1.5.N	HMIG625.MF18X1.5.T
MF18X2	2.00	18.0	14.0	125	34	6	17.0	HMIG625.MF18X2.N	HMIG625.MF18X2.T
MF20X1	1.00	20.0	16.0	125	25	6	19.5	HMIG625.MF20X1.N	HMIG625.MF20X1.T
MF20X1.5	1.50	20.0	16.0	125	25	6	19.3	HMIG625.MF20X1.5.N	HMIG625.MF20X1.5.T
MF20X2	2.00	20.0	16.0	140	34	6	19.0	HMIG625.MF20X2.N	HMIG625.MF20X2.T

R 0° - RR	R 0° - RR	R 0° - RR	R 0° - RR
Uncoated	Uncoated	Coated NFS	Coated NFS
N1.1-N1.6	N1.1-N1.6	P1.1-P4.1 M1.1-M3.1 N1.1 N1.5-N2.2 S1.1	P1.1-P4.1 M1.1-M3.1 N1.1 N1.5-N2.2 S1.1

HMIG625.MF11X0.75.NF	HMIG625.MF11X0.75.NG	HMIG625.MF11X0.75.F	HMIG625.MF11X0.75.TG
HMIG625.MF11X1.NF	HMIG625.MF11X1.NG	HMIG625.MF11X1.F	HMIG625.MF11X1.TG
HMIG625.MF12X0.75.NF	HMIG625.MF12X0.75.NG	HMIG625.MF12X0.75.F	HMIG625.MF12X0.75.TG
HMIG625.MF12X1.NF	HMIG625.MF12X1.NG	HMIG625.MF12X1.F	HMIG625.MF12X1.TG
HMIG625.MF12X1.25.NF	HMIG625.MF12X1.25.NG	HMIG625.MF12X1.25.F	HMIG625.MF12X1.25.TG
HMIG625.MF12X1.5.NF	HMIG625.MF12X1.5.NG	HMIG625.MF12X1.5.F	HMIG625.MF12X1.5.TG
HMIG625.MF14X1.NF	HMIG625.MF14X1.NG	HMIG625.MF14X1.F	HMIG625.MF14X1.TG
HMIG625.MF14X1.25.NF	HMIG625.MF14X1.25.NG	HMIG625.MF14X1.25.F	HMIG625.MF14X1.25.TG
HMIG625.MF14X1.5.NF	HMIG625.MF14X1.5.NG	HMIG625.MF14X1.5.F	HMIG625.MF14X1.5.TG
HMIG625.MF15X1.NF	HMIG625.MF15X1.NG	HMIG625.MF15X1.F	HMIG625.MF15X1.TG
HMIG625.MF15X1.5.NF	HMIG625.MF15X1.5.NG	HMIG625.MF15X1.5.F	HMIG625.MF15X1.5.TG
HMIG625.MF16X1.NF	HMIG625.MF16X1.NG	HMIG625.MF16X1.F	HMIG625.MF16X1.TG
HMIG625.MF16X1.5.NF	HMIG625.MF16X1.5.NG	HMIG625.MF16X1.5.F	HMIG625.MF16X1.5.TG
HMIG625.MF18X1.NF	HMIG625.MF18X1.NG	HMIG625.MF18X1.F	HMIG625.MF18X1.TG
HMIG625.MF18X1.5.NF	HMIG625.MF18X1.5.NG	HMIG625.MF18X1.5.F	HMIG625.MF18X1.5.TG
HMIG625.MF18X2.NF	HMIG625.MF18X2.NG	HMIG625.MF18X2.F	HMIG625.MF18X2.TG
HMIG625.MF20X1.NF	HMIG625.MF20X1.NG	HMIG625.MF20X1.F	HMIG625.MF20X1.TG
HMIG625.MF20X1.5.NF	HMIG625.MF20X1.5.NG	HMIG625.MF20X1.5.F	HMIG625.MF20X1.5.TG
HMIG625.MF20X2.NF	HMIG625.MF20X2.NG	HMIG625.MF20X2.F	HMIG625.MF20X2.TG

EG M

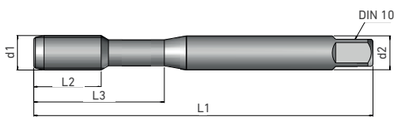
DIN 8140-2



DIN 40435

VHM | 5H

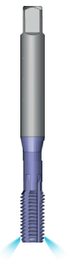
ESECUZIONI SPECIALI A DISEGNO
CUSTOMIZED DESIGN ON REQUEST



DATI TECNICI
TECHNICAL DATA
page 5E • 13

	R 0° - RR	R 0° - RR
TRATTAMENTO SUPERFICIALE SURFACE TREATMENT	Coated NFS	Coated NFS
MATERIALI LAVORABILI WORKING MATERIALS page 5E • 3	P3.1-P5.1 K1.1-K4.2 N1.5-N1.6 N2.6-N3.1 N4.3-N4.4 S2.5-S2.6	P3.1-P5.1 K1.1-K4.2 N1.5-N1.6 N2.6-N3.1 N4.3-N4.4 S2.5-S2.6

Filetto - Thread	Pitch mm	d1	d2	L1	L2	L3	Preforo		
M3X0.5	0.50	3.65	4.5	63	10	21	3.15	HMIG750.M3X0.5.T	
M4X0.7	0.70	4.91	6.0	70	12	25	4.2	HMIG750.M4X0.7.T	
M5X0.8	0.80	6.04	6.0	80	13	30	5.25	HMIG750.M5X0.8.T	
M6X1	1.00	7.30	8.0	90	17	35	6.3	HMIG750.M6X1.T	HMIG750.M6X1.F
M8X1.25	1.25	9.624	10.0	100	18	39	8.4	HMIG750.M8X1.25.T	HMIG750.M8X1.25.F

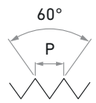


R 0° - RR
Coated NFS
P3.1-P5.1
K1.1-K4.2
N1.5-N1.6
N2.6-N3.1
N4.3-N4.4
S2.5-S2.6

HMIG750.M6X1.TG	
HMIG750.M8X1.25.TG	

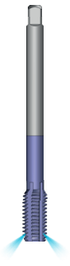
EG M

DIN 8140-2



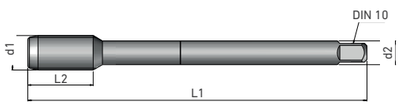
DIN 40435

VHM | 5H



R 0° - RR | R 0° - RR

ESECUZIONI SPECIALI A DISEGNO
CUSTOMIZED DESIGN ON REQUEST



TRATTAMENTO SUPERFICIALE
SURFACE TREATMENT

Coated NFS | Coated NFS

MATERIALI LAVORABILI
WORKING MATERIALS
page 5E • 3

P3.1-P5.1 | P3.1-P5.1
K1.1-K4.2 | K1.1-K4.2
N1.5-N1.6 | N1.5-N1.6
N2.6-N3.1 | N2.6-N3.1
N4.3-N4.4 | N4.3-N4.4
S2.5-S2.6 | S2.5-S2.6

DATI TECNICI
TECHNICAL DATA
page 5E • 13

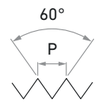
HMIG

Filetto - Thread	Pitch mm	d1	d2	L1	L2	Preforo		
M10X1.5	1.50	11.948	9.0	100	22	10.5	HMIG760.M10X1.5.F	HMIG760.M10X1.5.TG
M12X1.75	1.75	14.274	11.0	110	30	12.5	HMIG760.M12X1.75.F	HMIG760.M12X1.75.TG
M14X2	2.00	16.598	12.0	110	32	14.5	HMIG760.M14X2.F	HMIG760.M14X2.TG
M16X2	2.00	18.598	14.0	125	34	16.5	HMIG760.M16X2.F	HMIG760.M16X2.TG
M18X2.5	2.50	21.248	18.0	140	34	18.75	HMIG760.M18X2.5.F	HMIG760.M18X2.5.TG
M20X2.5	2.50	23.248	18.0	160	38	20.75	HMIG760.M20X2.5.F	HMIG760.M20X2.5.TG

HMIG

M

DIN13

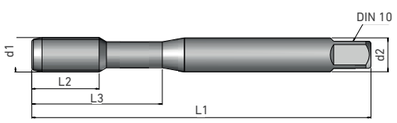


DIN 352

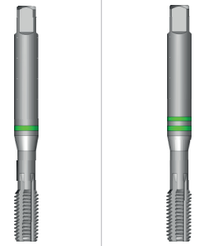
VHM 6HX

Set maschi a mano
Set of hand taps

ESECUZIONI SPECIALI A DISEGNO
CUSTOMIZED DESIGN ON REQUEST

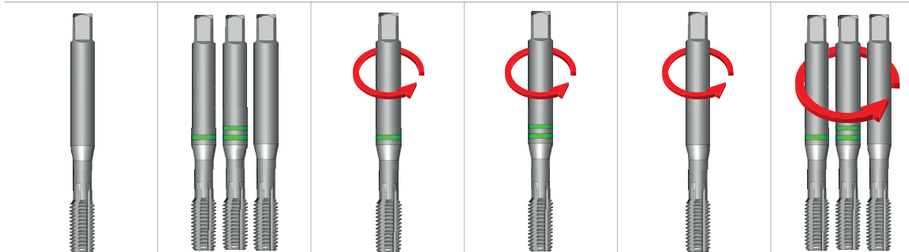


DATI TECNICI
TECHNICAL DATA
page 5E • 13



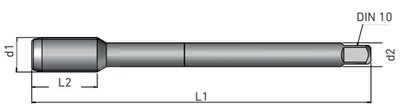
	R 0° - RR	R 0° - RR
TRATTAMENTO SUPERFICIALE SURFACE TREATMENT	Uncoated	Uncoated
MATERIALI LAVORABILI WORKING MATERIALS page 5E • 3	P1.1-P5.1 M1.1-M4.1 K1.1-K4.2 N1.1-N5.3 S1.1-S2.6 H1.1-H1.5	P1.1-P5.1 M1.1-M4.1 K1.1-K4.2 N1.1-N5.3 S1.1-S2.6 H1.1-H1.5

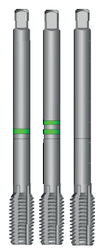
Filetto - Thread	Pitch mm	d1	d2	L1	L2	L3	Z	Preforo		
M3X0.5	0.50	3.0	3.5	40	11	18	3	2.5	HMIG130.M3X0.5.N1	HMIG130.M3X0.5.N2
M4X0.7	0.70	4.0	4.5	45	13	21	3	3.3	HMIG130.M4X0.7.N1	HMIG130.M4X0.7.N2
M5X0.8	0.80	5.0	6.0	50	16	24	4	4.2	HMIG130.M5X0.8.N1	HMIG130.M5X0.8.N2
M6X1	1.00	6.0	6.0	56	19	27	4	5.0	HMIG130.M6X1.N1	HMIG130.M6X1.N2

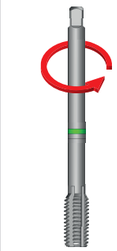


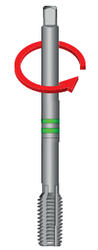
R 0° - RR	R 0° - RR	L 0° - LR	L 0° - LR	L 0° - LR	L 0° - LR
Uncoated	Uncoated	Uncoated	Uncoated	Uncoated	Uncoated
P1.1-P5.1	P1.1-P5.1	P1.1-P5.1	P1.1-P5.1	P1.1-P5.1	P1.1-P5.1
M1.1-M4.1	M1.1-M4.1	M1.1-M4.1	M1.1-M4.1	M1.1-M4.1	M1.1-M4.1
K1.1-K4.2	K1.1-K4.2	K1.1-K4.2	K1.1-K4.2	K1.1-K4.2	K1.1-K4.2
N1.1-N5.3	N1.1-N5.3	N1.1-N5.3	N1.1-N5.3	N1.1-N5.3	N1.1-N5.3
S1.1-S2.6	S1.1-S2.6	S1.1-S2.6	S1.1-S2.6	S1.1-S2.6	S1.1-S2.6
H1.1-H1.5	H1.1-H1.5	H1.1-H1.5	H1.1-H1.5	H1.1-H1.5	H1.1-H1.5

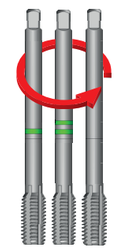
HMIG130.M3X0.5.N3	HMIG130.M3X0.5.SET	HMIG150.M3X0.5.N1	HMIG150.M3X0.5.N2	HMIG150.M3X0.5.N3	HMIG150.M3X0.5.SET
HMIG130.M4X0.7.N3	HMIG130.M4X0.7.SET	HMIG150.M4X0.7.N1	HMIG150.M4X0.7.N2	HMIG150.M4X0.7.N3	HMIG150.M4X0.7.SET
HMIG130.M5X0.8.N3	HMIG130.M5X0.8.SET	HMIG150.M5X0.8.N1	HMIG150.M5X0.8.N2	HMIG150.M5X0.8.N3	HMIG150.M5X0.8.SET
HMIG130.M6X1.N3	HMIG130.M6X1.SET	HMIG150.M6X1.N1	HMIG150.M6X1.N2	HMIG150.M6X1.N3	HMIG150.M6X1.SET











M

DIN13

DIN 352

VHM **6HX**

Set maschi a mano

Set of hand taps

ESECUZIONI SPECIALI A DISEGNO
CUSTOMIZED DESIGN ON REQUEST

DATI TECNICI
TECHNICAL DATA
page 5E • 13

R 0° - RR	R 0° - RR	R 0° - RR	R 0° - RR	L 0° - LR	L 0° - LR	L 0° - LR	L 0° - LR
Uncoated	Uncoated	Uncoated	Uncoated	Uncoated	Uncoated	Uncoated	Uncoated
P1.1-P5.1 M1.1-M4.1 K1.1-K4.2 N1.1-N5.3 S1.1-S2.6 H1.1-H1.5	P1.1-P5.1 M1.1-M4.1 K1.1-K4.2 N1.1-N5.3 S1.1-S2.6 H1.1-H1.5	P1.1-P5.1 M1.1-M4.1 K1.1-K4.2 N1.1-N5.3 S1.1-S2.6 H1.1-H1.5	P1.1-P5.1 M1.1-M4.1 K1.1-K4.2 N1.1-N5.3 S1.1-S2.6 H1.1-H1.5	P1.1-P5.1 M1.1-M4.1 K1.1-K4.2 N1.1-N5.3 S1.1-S2.6 H1.1-H1.5	P1.1-P5.1 M1.1-M4.1 K1.1-K4.2 N1.1-N5.3 S1.1-S2.6 H1.1-H1.5	P1.1-P5.1 M1.1-M4.1 K1.1-K4.2 N1.1-N5.3 S1.1-S2.6 H1.1-H1.5	P1.1-P5.1 M1.1-M4.1 K1.1-K4.2 N1.1-N5.3 S1.1-S2.6 H1.1-H1.5

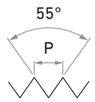
TRATTAMENTO SUPERFICIALE
SURFACE TREATMENT

MATERIALI LAVORABILI
WORKING MATERIALS
page 5E • 3

Filetto - Thread	Pitch mm	d1	d2	L1	L2	Z	Preforo								
M8X1.25	1.25	8.0	6.0	63	22	4	6.75	HMIG140.M8X1.25.N1	HMIG140.M8X1.25.N2	HMIG140.M8X1.25.N3	HMIG140.M8X1.25.SET	HMIG160.M8X1.25.N1	HMIG160.M8X1.25.N2	HMIG160.M8X1.25.N3	HMIG160.M8X1.25.SET
M10X1.5	1.50	10.0	7.0	70	24	4	8.5	HMIG140.M10X1.5.N1	HMIG140.M10X1.5.N2	HMIG140.M10X1.5.N3	HMIG140.M10X1.5.SET	HMIG160.M10X1.5.N1	HMIG160.M10X1.5.N2	HMIG160.M10X1.5.N3	HMIG160.M10X1.5.SET
M12X1.75	1.75	12.0	9.0	75	28	5	10.25	HMIG140.M12X1.75.N1	HMIG140.M12X1.75.N2	HMIG140.M12X1.75.N3	HMIG140.M12X1.75.SET	HMIG160.M12X1.75.N1	HMIG160.M12X1.75.N2	HMIG160.M12X1.75.N3	HMIG160.M12X1.75.SET
M14X2	2.00	14.0	11.0	80	30	5	12.0	HMIG140.M14X2.N1	HMIG140.M14X2.N2	HMIG140.M14X2.N3	HMIG140.M14X2.SET	HMIG160.M14X2.N1	HMIG160.M14X2.N2	HMIG160.M14X2.N3	HMIG160.M14X2.SET
M16X2	2.00	16.0	12.0	80	32	5	14.0	HMIG140.M16X2.N1	HMIG140.M16X2.N2	HMIG140.M16X2.N3	HMIG140.M16X2.SET	HMIG160.M16X2.N1	HMIG160.M16X2.N2	HMIG160.M16X2.N3	HMIG160.M16X2.SET
M20X2.5	2.50	20.0	16.0	95	34	5	18.5	HMIG140.M20X2.5.N1	HMIG140.M20X2.5.N2	HMIG140.M20X2.5.N3	HMIG140.M20X2.5.SET	HMIG160.M20X2.5.N1	HMIG160.M20X2.5.N2	HMIG160.M20X2.5.N3	HMIG160.M20X2.5.SET

G (BSP)

DIN EN ISO 228

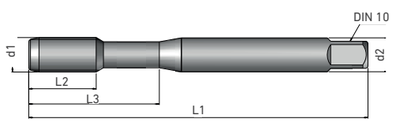


DIN 5157

VHM

Set maschi a mano
Set of hand taps

ESECUZIONI SPECIALI A DISEGNO
CUSTOMIZED DESIGN ON REQUEST



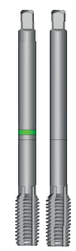
DATI TECNICI
TECHNICAL DATA
page 5E • 13

	R 0° - RR	R 0° - RR
TRATTAMENTO SUPERFICIALE SURFACE TREATMENT	Uncoated	Uncoated
MATERIALI LAVORABILI WORKING MATERIALS page 5E • 3	P1.1-P5.1 M1.1-M4.1 K1.1-K4.2 N1.1-N5.3 S1.1-S2.6 H1.1-H1.5	P1.1-P5.1 M1.1-M4.1 K1.1-K4.2 N1.1-N5.3 S1.1-S2.6 H1.1-H1.5

HMIG

Filetto - Thread	(TPI)	d1	d2	L1	L2	Z	Preforo		
1/8"	28	9.73	7.0	63	18	4	8.8	HMIG730.G1/8.N1	HMIG730.G1/8.N2
1/4"	19	13.16	11.0	70	20	5	11.8	HMIG730.G1/4.N1	HMIG730.G1/4.N2
3/8"	19	16.66	12.0	70	20	5	15.25	HMIG730.G3/8.N1	HMIG730.G3/8.N2
1/2"	14	20.96	16.0	80	22	5	19	HMIG730.G1/2.N1	HMIG730.G1/2.N2
5/8"	14	22.91	18.0	80	22	5	21	HMIG730.G5/8.N1	HMIG730.G5/8.N2
3/4"	14	26.44	20.0	90	22	5	24.5	HMIG730.G3/4.N1	HMIG730.G3/4.N2
7/8"	14	30.20	22.0	90	22	5	28.25	HMIG730.G7/8.N1	HMIG730.G7/8.N2
1"	11	33.25	25.0	100	25	5	30.75	HMIG730.G1.N1	HMIG730.G1.N2
1" 1/8	11	37.90	28.0	125	30	5	35.5	HMIG730.G1-1/8.N1	HMIG730.G1-1/8.N2
1" 1/4	11	41.91	32.0	125	30	5	39.5	HMIG730.G1-1/4.N1	HMIG730.G1-1/4.N2
1" 3/8	11	44.32	36.0	125	30	5	41.75	HMIG730.G1-3/8.N1	HMIG730.G1-3/8.N2
1" 1/2	11	47.80	36.0	140	30	5	45.25	HMIG730.G1-1/2.N1	HMIG730.G1-1/2.N2
1" 3/4	11	53.75	40.0	140	32	5	51	HMIG730.G1-3/4.N1	HMIG730.G1-3/4.N2
2"	11	59.61	45.0	160	36	5	57	HMIG730.G2.N1	HMIG730.G2.N2

IGUTENSILI



R 0° - RR
Uncoated
P1.1-P5.1
M1.1-M4.1
K1.1-K4.2
N1.1-N5.3
S1.1-S2.6
H1.1-H1.5

HMIG

HMIG730.G1/8.SET	
HMIG730.G1/4.SET	
HMIG730.G3/8.SET	
HMIG730.G1/2.SET	
HMIG730.G5/8.SET	
HMIG730.G3/4.SET	
HMIG730.G7/8.SET	
HMIG730.G1.SET	
HMIG730.G1-1/8.SET	
HMIG730.G1-1/4.SET	
HMIG730.G1-3/8.SET	
HMIG730.G1-1/2.SET	
HMIG730.G1-3/4.SET	
HMIG730.G2.SET	

PREFORI
PRE-HOLES

M

Filettatura metrica ISO a passo grosso
Coarse metric ISO thread

d1	Pitch	Preforo
M1	0,25	0,75
M1,1	0,25	0,85
M1,2	0,25	0,95
M1,4	0,3	1,1
M1,6	0,35	1,25
M(1,7)	0,35	1,3
M1,8	0,35	1,45
M2	0,4	1,9
M2,2	0,45	1,75
M(2,3)	0,4	1,9
M2,5	0,45	2,05
M(2,6)	0,45	2,1
M3	0,5	2,5
M3,5	0,6	2,9
M4	0,7	3,3
M4,5	0,75	3,7
M5	0,8	4,2
M6	1	5
M7	1	6
M8	1,25	6,8
M9	1,25	7,8
M10	1,5	8,5
M11	1,5	9,5
M12	1,75	10,2
M14	2	12
M16	2	14
M18	2,5	15,5
M20	2,5	17,5
M22	2,5	19,5
M24	3	21
M27	3	24
M30	3,5	26,5

MF

Filettatura metrica ISO a passo fine
Fine metric ISO thread

d1	Pitch	Preforo
M3	0,35	2,65
M3,5	0,35	3,15
M4	0,35	3,65
M4	0,5	3,5
M5	0,5	4,5
M6	0,5	5,5
M6	0,75	5,2
M7	0,75	6,2
M8	0,5	7,5
M8	1	7
M9	1	8
M10	0,5	9,5
M10	0,75	9,2
M10	1	9
M10	1,25	8,8
M11	1	10
M12	0,75	11,2
M12	1	11
M12	1,25	10,8
M12	1,5	10,5
M13	1	12
M13	1,5	11,5
M14	1	13
M14	1,25	12,8
M14	1,5	12,5
M15	1	14
M15	1,5	13,5
M16	1	15
M16	1,5	14,5
M18	1	17
M18	1,5	16,5
M18	2	16
M20	1	19
M20	1,5	18,5
M20	2	18

UNC

Filettatura americana a passo grosso
Coarse american thread

d1	Pitch	Preforo
No. 1	64"	1,5
No. 2	56"	1,8
No. 3	48"	2,1
No. 4	40"	2,25
No. 5	40"	2,6
No. 6	32"	2,75
No. 8	32"	3,5
No. 10	24"	3,9
No. 12	24"	4,5
1/4	20"	5,1
5/16	18"	6,6
3/8	16"	8
7/16	14"	9,4
1/2	13"	10,75
9/16	12"	12,2
5/8	11"	13,5
3/4	10"	16,5
7/8	9"	19,5
1	8"	22,25
1 1/8	7"	25
1 1/4	7"	28
1 3/8	6"	30,75
1 1/2	6"	34

UNF

Filettatura americana a passo fine
Fine american thread

d1	Pitch	Preforo
No. 0	80"	1,25
No. 1	72"	1,55
No. 2	64"	1,85
No. 3	56"	2,15
No. 4	48"	2,35
No. 5	44"	2,7
No. 6	40"	2,95
No. 8	36"	3,5
No. 10	32"	4,1
No. 12	28"	4,6
1/4	28"	5,5
5/16	24"	6,9
3/8	24"	8,5
7/16	20"	9,9
1/2	20"	11,5
9/16	18"	12,9
5/8	18"	14,5
3/4	16"	17,5
7/8	14"	20,4
1	12"	23,25
1 1/8	12"	26,5
1 1/4	12"	29,5
1 3/8	12"	32,75

UNEF

Filettatura americana a passo extra fine
Extra fine american thread

d1	Pitch	Preforo
1/4	32"	5,55
5/16	32"	7,15
3/8	32"	8,7
7/16	28"	10,2
1/2	28"	11,8
9/16	24"	13,2
5/8	24"	14,8
11/16	24"	16,4
3/4	20"	17,8
7/8	20"	20,95
1	20"	24,2

G (BSP)

Filettatura peR 0° - RR tubazione
British standard pipe

d1	Pitch	Preforo
G 1/16	28"	6,8
G 1/8	28"	8,8
G 1/4	19"	11,8
G 3/8	19"	15,25
G 1/2	14"	19
G 5/8	14"	21
G 3/4	14"	24,5
G 7/8	14"	28,25
G 1	11"	30,75

IGUTENSILI

HMIG

PREFORI
PRE-HOLES

W (BSW)

Filettatura whitworth BSW
BSW whitworth thread

d1	Pitch	Preforo
W 3/32	48"	1,8
W 1/8	40"	2,55
W 5/32	32"	3,1
W 3/16	24"	3,6
W 7/32	24"	4,4
W 1/4	202	5,1
W 5/16	182	6,5
W 3/8	16"	7,9
W 7/16	14"	9,25
W 1/2	12"	10,5
W 9/16	12"	12
W 5/8	11"	13,5
W 3/4	10"	16,5
W 7/8	9"	19,25
W 1	8"	21,75
W 1 1/8	7"	24,75
W 1 1/4	7"	27,75
W 1 3/8	6"	30,5

NTP

Filettatura gas conica americana
American conical gas thread

d1	Pitch	Preforo
1/16	27"	6,3
1/8	27"	8,5
1/4	18"	11
3/8	18"	14,5
1/2	14"	18
3/4	14"	23
1	11,5"	29
1 1/4	11,5"	38
1 1/2	11,5"	44
2	11,5"	56
2 1/2	8"	67
3	8"	83

EGM

Filettatura filetti riportati
Threading heli-coil thread

d1	Pitch	Preforo
EGM 2,5	0,45	2,6
EGM 3	0,5	3,2
EGM 3,5	0,6	3,7
EGM 4	0,7	4,2
EGM 5	0,8	5,2
EGM 6	1	6,3
EGM 8	1,25	8,4
EGM 10	1,5	10,5
EGM 12	1,75	12,5
EGM 14	2	14,5
EGM 16	2	16,5
EGM 18	2,5	18,75
EGM 20	2,5	20,75
EGM 22	2,5	22,75
EGM 24	3	24,75

IGUTENSILI

PG

Filettatura peR 0°tubi corazzati
Threading foR 0°armored pipes

d1	Pitch	Preforo
7	20"	11,45-11,4
9	18"	14,01-14
11	18"	17,41-17,25
13,5	18"	19,21-19
16	18"	21,31-21,25
21	16"	27,03-26,75
29	16"	35,73-33,5
36	16"	45,73-45,5
42	16"	52,73-52,5
48	16"	58,03-57,8

M RULLARE
M FORMING

Filettatura metrica ISO a passo grosso
Coarse metric ISO thread

M d1	Pitch	Preforo
M 1,8	0,35	1,67-1,63
M 2	0,4	1,82-1,78
M 2,2	0,45	2,02-1,98
M (2,3)	0,4	2,12-2,08
M 2,5	0,45	2,32-2,28
M (2,6)	0,45	2,42-2,38
M 3	0,5	2,83-2,77
M 3,5	0,6	3,28-3,22
M 4	0,7	3,73-3,67
M 4,5	0,75	4,18-4,12
M 5	0,8	4,68-4,62
M 6	1	5,6-5,5
M 7	1	6,6-6,5
M 8	1,25	7,45-7,35
M 9	1,25	8,45-8,35
M 10	1,5	9,32-9,25
M 11	1,5	10,35-10,25
M 12	1,75	11,25-11,15
M 14	2	13,15-13,05
M 16	2	15,15-15,05
M 18	2,5	16,95-16,85
M 20	2,5	18,95-18,85
M 22	2,5	20,95-20,85
M 24	3	22,7-22,6

MF RULLARE
MF FORMING

Filettatura metrica ISO a passo grosso
Fine metric ISO thread

M d1	Pitch	Preforo
M 3	0,35	2,87-2,83
M 4	0,5	3,78-3,72
M 5	0,5	4,78-4,72
M 6	0,5	5,78-5,72
M 6	0,75	5,68-5,62
M 7	0,75	6,68-6,62
M 8	0,5	7,78-7,72
M 8	0,75	7,68-7,62
M 8	1	7,6-7,5
M 9	1	8,6-8,5
M 10	0,75	9,68-9,62
M 10	1	9,6-9,5
M 10	1,25	9,45-9,35
M 11	1	10,6-10,5
M 12	0,75	11,68-11,62
M 12	1	11,6-11,5
M 12	1,25	11,45-11,35
M 12	1,5	11,35-11,25
M 14	1	13,6-13,5
M 14	1,5	13,35-13,25
M 16	1	15,6-15,5
M 16	1,5	15,35-15,25

IGUTENSILI

HMIG