

2017/2018

CATALOGO
CATALOGUE

MANDRINERIA
per MACCHINE TRADIZIONALI e CNC
per la LAVORAZIONE del METALLO

TOOL HOLDERS
for TRADITIONAL and CNC
METALWORKING MACHINES





LTF SpA SEDE PRINCIPALE | HEADQUARTERS | Antegnate - BG - Italy



Divisione STORM
Stabilimento di produzione
in Croazia,
Comunità Europea

STORM Department
Production Plant
in Croatia,
European Community

Divisione CUTER
Stabilimento di produzione
in Croazia,
Comunità Europea

CUTER Department
Production Plant
in Croatia,
European Community





CENTRO DI TARATURA ACCREDIA



LAT N° 067

Membro degli Accordi di Mutuo Riconoscimento EA, IAF e ILAC

Le attività riportate nel presente documento non sono coperte dall'accreditamento se non espressamente indicato

Le Officine meccaniche LTF SpA operano da anni nel settore della fabbricazione, verifica e messa a punto di strumentazione, apparecchiature e macchine per le lavorazioni meccaniche di precisione. Ha il suo insediamento principale su un'area di 55.000 m² con più di 20.000 m² coperti. Dopo aver iniziato l'attività nel 1965 con la produzione e commercializzazione di utensileria e apparecchiature magnetiche speciali, l'azienda ha incrementato di pari passo la propria azione commerciale e tecnico-produttiva, ottenendo la certificazione ISO 9001/2008, ed inserendosi con ruolo sempre più importante, in attività di alto contenuto tecnologico, nel campo della Metrologia di misura e di controllo, senza abbandonare i propri settori produttivi più tradizionali.

Assume così progressivamente nel tempo, le attività:

- **BORLETTI** - Strumenti di misura e controllo
- **MICROTECNICA** - Proiettori di profili
- **GALILEO** - Durometria

ed assieme a quella relativa al Centro di Taratura ACCREDIA LAT n° 067, realizzato nel 1993 e costituito da 2 sale Metrologiche accreditate per Tarature ACCREDIA, le raggruppa nella Divisione METROLOGIA, con tecnici di esperienza nel settore, che supportano costantemente una qualificata ed ampia rete di vendita nazionale ed internazionale protesa ad offrire alla clientela un servizio completo ed aggiornato.

Rappresenta in esclusiva per l'Italia importanti case tedesche di utensili ed elettro utensili, collabora con qualificati partners internazionali nello sviluppo e ricerca di nuovi prodotti e tecnologie.

DIVISIONI AZIENDALI

	APPARECCHIATURE MAGNETICHE	
	AEROGRAFI E SISTEMI DI VERNICIATURA UTENSILI PNEUMATICI - RACCORDERIA	
	STRUMENTI DI MISURA E CONTROLLO DI PRECISIONE	
	MISURATORI DI DUREZZA E MICRODUREZZA	
	PROIETTORI DI PROFILI SISTEMI OTTICI DI MISURA	
	TRAPANI SENSITIVI E MASCHIATRICI DI ALTA PRECISIONE	
	TRAPANI SENSITIVI E MASCHIATRICI DI ALTA PRECISIONE	
	AFFILATRICI UNIVERSALI E RETTIFICATRICI IDRAULICHE	
	TRAPANI RADIALI	
	SMERIGLIATRICI PULITRICI LEVIGATRICI	
	MORSE DI PRECISIONE	
	STRUMENTI DI MISURA E CONTROLLO	
	PROTEZIONI E ANTINFORTUNISTICA	
	UTENSILI, CHIAVI A MANO PROFESSIONALI	
	MANDRINERIA PER MACCHINE TRADIZIONALI E CNC PER LAVORAZIONE METALLI E LEGNO	
	UTENSILI DA TAGLIO, STRUMENTI, ELETTROUTENSILI	
	STRUMENTI DI MISURA, ATTREZZATURE PER FERRAMENTA ED EDILIZIA	

RAPPRESENTANZE ESCLUSIVE PER L'ITALIA

	ELETTROUTENSILI
	PUNTE ELICOIDALI UTENSILI DA TAGLIO
	PUNTE ELICOIDALI UTENSILI DA TAGLIO
	SISTEMI DI ANCORAGGIO E SOLLEVAMENTO
	MACCHINE UTENSILI ED ATTREZZATURE
UTENSILI PNEUMATICI ED ACCESSORI	
MACCHINE PER LA PULIZIA INDUSTRIALE	
MACCHINE PER LA LAVORAZIONE DEL LEGNO	
MACCHINE PER LA LAVORAZIONE DEL LEGNO	
MACCHINE PER LA LAVORAZIONE DELLA LAMIERA	
SISTEMI DI SOLLEVAMENTO	



ACCREDIA CALIBRATION CENTER



LAT N° 067

Signatory of EA, IAF and ILAC Mutual Recognition Agreements

The activities mentioned in this catalogue are not covered by accreditation unless explicitly specified

LTF SpA boasts a long experience in the field of manufacturing, testing and setting of measuring instruments, equipments and machine tools for high precision machining. LTF main factory covers a surface of 55.000 m², 20.000 m² of which are warehouses and offices. The company was started successfully in 1965 with the production and sale of tools and special magnetic equipment. Ever since the further steps taken towards constant specialisation in the technical and productive sector as well as marketing development have brought to the acquisition of ISO 9001/2008 standards. Thanks to the progressive work done in this direction and to the remarkable results achieved in the high technology production range, in the Testing and Measuring Metrology field along with their more traditional lines, LTF activities now include:

- **BORLETTI** - Precision instruments for measuring and testing
- **MICROTECNICA** - Profile Projectors
- **GALILEO** - Hardness and Microhardness testers

which, together with the ACCREDIA Calibration Center LAT n° 067, built in 1993 and provided with two Metrological rooms and accredited by ACCREDIA (according to the chart shown on the web site www.accredia.it), belong to the company's METROLOGY Division. A team of skilled technical engineers offers its solid experience to support a wide and qualified national and international network granting a quality and a constantly updated customer service. LTF is also the sole agent for Italy of important German producers of tools and power tools. Besides, LTF cooperate with qualified international partners to develop and research new products and technologies.

BUSINESS DIVISION

	MAGNETIC EQUIPMENT	
	SPRAY GUNS AND PAINTING SYSTEMS PNEUMATIC TOOLS - FITTINGS	
BORLETTI	PRECISION MEASURING AND CONTROL INSTRUMENTS	
GALILEO durometria	HARDNESS AND MICROHARDNESS TESTERS	
MICROTECNICA Proiettori di profili	PROFILE PROJECTORS MEASURING OPTICAL SYSTEMS	
	HIGH PRECISION DRILLING AND TAPPING MACHINES	
	HIGH PRECISION DRILLING AND TAPPING MACHINES	
	UNIVERSAL GRINDERS AND HYDRAULIC SURFACE GRINDERS	
	BREDA RADIAL DRILLS	
	ELETTROMECCANICA Tommasi & Bonetti BENCH GRINDERS POLISHERS SANDERS	
	PRECISION VICES	
	MEASURING AND CONTROL INSTRUMENTS	
	SAFETY DEVICES	
	PROFESSIONAL HAND TOOLS	
	TOOL HOLDERS FOR TRADITIONAL AND CNC METALWORKING AND WOODWORKING MACHINES	
	CUTTING TOOLS, INSTRUMENTS, POWER TOOLS	
	MEASURING TOOLS HARDWARE AND CONSTRUCTION TOOLS	

EXCLUSIVE REPRESENTATIVE FOR ITALY

	POWERTOOLS	
	TWIST DRILL BITS CUTTING TOOLS	
	TWIST DRILL BITS CUTTING TOOLS	
	ANCHORING AND LIFTING SYSTEMS	
	MACHINE TOOLS AND EQUIPMENT	
COMPRESSED AIR TOOLS AND ACCESSORIES		
INDUSTRIAL CLEANING MACHINES		
WOODWORKING MACHINES		
WOODWORKING MACHINES		
SHEET METAL MACHINES		
LIFTING EQUIPMENTS		

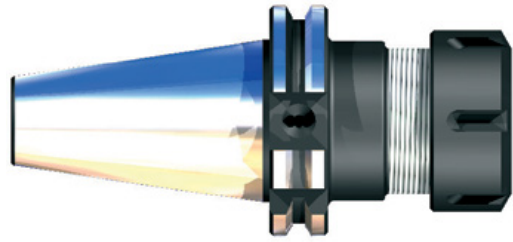
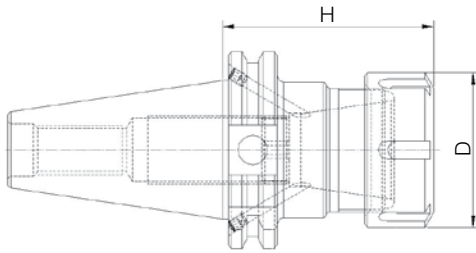


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MANDRINI DIN 69871 CHUCKS DIN 69871

MANDRINI PORTA PINZE ER DIN 6499/B - ATTACCO DIN 69871 AD/B
COLLET CHUCKS ER DIN 6499/B - SHANK DIN 69871 AD/B

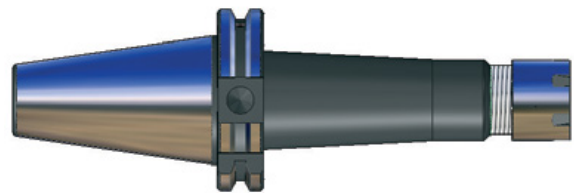
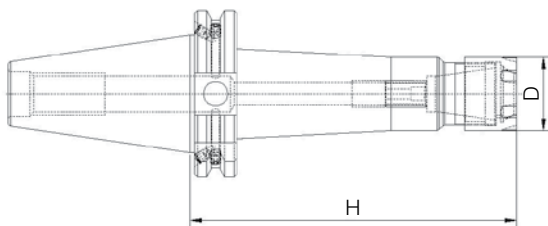


ART.	ISO	Pinza Collet	D mm	H mm
9994016	40	ER16	32	70
9994016L	40	ER16	32	100
9994016L130	40	ER16	32	130
9994020	40	ER20	35	70
9994020L	40	ER20	35	100
9994020L130	40	ER20	35	130
9994025	40	ER25	42	70
9994025L	40	ER25	42	100
9994025L130	40	ER25	42	130
9994025L160	40	ER25	42	160
9994025L200	40	ER25	42	200
9994032	40	ER32	50	70
9994032L	40	ER32	50	100
9994032L130	40	ER32	50	130
9994032L160	40	ER32	50	160
9994032L200	40	ER32	50	200
9994040	40	ER40	63	70
9994040L	40	ER40	63	100
9994040L130	40	ER40	63	130
9994040L160	40	ER40	63	160
9994040L200	40	ER40	63	200

ART.	ISO	Pinza Collet	D mm	H mm
9995020	50	ER20	35	80
9995020L	50	ER20	35	100
9995025	50	ER25	42	80
9995025L	50	ER25	42	100
9995025L130	50	ER25	42	130
9995025L160	50	ER25	42	160
9995025L200	50	ER25	42	200
9995032	50	ER32	50	80
9995032L	50	ER32	50	100
9995032L130	50	ER32	50	130
9995032L160	50	ER32	50	160
9995032L200	50	ER32	50	200
9995040	50	ER40	63	80
9995040L	50	ER40	63	100
9995040L130	50	ER40	63	130
9995040L160	50	ER40	63	160
9995040L200	50	ER40	63	200

Bilanciati G.6,3 a 12.000 R.P.M
A richiesta sono fornibili mandrini cono ISO 30
Balanced to 12,000 R.P.M at G.6,3
On request ISO 30 chucks are available

MANDRINI PORTA PINZE ER DIN 6499/B GHIERA MINI - ATTACCO DIN 69871 AD/B
SHRINK FIT COLLET CHUCKS ER DIN 6499/B - SHANK DIN 69871 AD/B



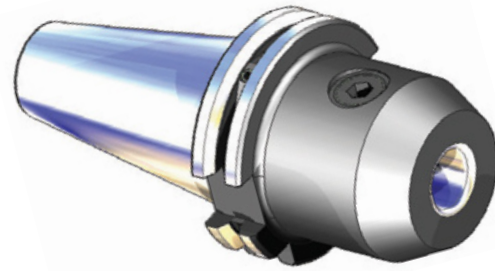
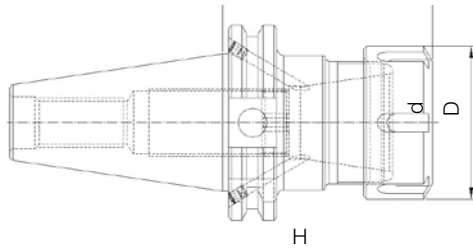
ART.	ISO	Pinza Collet	D mm	H mm
9994011ML	40	ER11	16	100
9994011ML130	40	ER11	16	130
9994016ML	40	ER16	22	100
9994016ML130	40	ER16	22	130
9994016ML160	40	ER16	22	160
9994016ML200	40	ER16	22	200
9994020ML	40	ER20	28	100
9994020ML130	40	ER20	28	130
9994020ML160	40	ER20	28	160
9994020ML200	40	ER20	28	200
9994025ML	40	ER25	35	100
9994025ML130	40	ER25	35	130
9994025ML160	40	ER25	35	160
9994025ML200	40	ER25	35	200

ART.	ISO	Pinza Collet	D mm	H mm
9995016ML	50	ER16	22	100
9995016ML130	50	ER16	22	130
9995016ML160	50	ER16	22	160
9995016ML200	50	ER16	22	200
9995020ML	50	ER20	28	100
9995020ML130	50	ER20	28	130
9995020ML160	50	ER20	28	160
9995020ML200	50	ER20	28	200
9995025ML	50	ER25	35	100
9995025ML130	50	ER25	35	130
9995025ML160	50	ER25	35	160
9995025ML200	50	ER25	35	200

Bilanciati G.6,3 a 12.000 R.P.M - A richiesta sono fornibili mandrini cono ISO 30 / Balanced to 12,000 R.P.M at G.6,3 - On request ISO 30 chucks are available

MANDRINI DIN 69871 CHUCKS DIN 69871

MANDRINI PORTA FRESE TIPO WELDON - ATTACCO DIN 69871 AD/B
WELDON MILLING CHUCKS - SHANK DIN 69871 AD/B



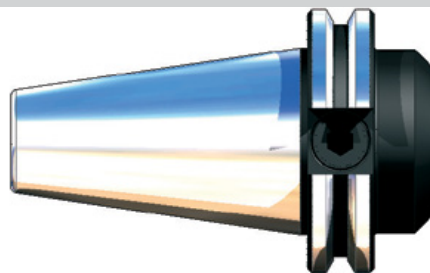
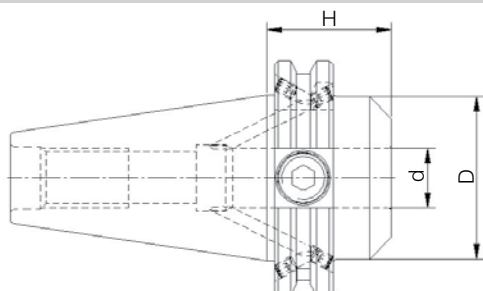
ART.	ISO	d mm	D mm	H mm
99940W06	40	6	25	50
99940W06L	40	6	25	100
99940W06L130	40	6	25	130
99940W06L160	40	6	25	160
99940W08	40	8	28	50
99940W08L	40	8	28	100
99940W08L130	40	8	28	130
99940W08L160	40	8	28	160
99940W10	40	10	35	50
99940W10L	40	10	35	100
99940W10L130	40	10	35	130
99940W10L160	40	10	35	160
99940W12	40	12	42	50
99940W12L	40	12	42	100
99940W12L130	40	12	42	130
99940W12L160	40	12	42	160
99940W14	40	14	44	50
99940W14L	40	14	44	100
99940W14L130	40	14	44	130
99940W14L160	40	14	44	160
99940W16	40	16	48	63
99940W16L	40	16	48	100
99940W16L130	40	16	48	130
99940W16L160	40	16	48	160
99940W18	40	18	50	63
99940W18L	40	18	50	100
99940W18L130	40	18	50	130
99940W18L160	40	18	50	160
99940W20	40	20	52	63
99940W20L	40	20	52	100
99940W20L130	40	20	52	130
99940W20L160	40	20	52	160
99940W25L	40	25	65	100
99940W25L130	40	25	65	130
99940W25L160	40	25	65	160
99940W32L	40	32	72	100
99940W32L160	40	32	72	160
99940W40	40	40	80	115

ART.	ISO	d mm	D mm	H mm
99950W06	50	6	25	63
99950W06L	50	6	25	100
99950W06L130	50	6	25	130
99950W06L160	50	6	25	160
99950W06L200	50	6	25	200
99950W08	50	8	28	63
99950W08L	50	8	28	100
99950W08L130	50	8	28	130
99950W08L160	50	8	28	160
99950W08L200	50	8	28	200
99950W10	50	10	35	63
99950W10L	50	10	35	100
99950W10L130	50	10	35	130
99950W10L160	50	10	35	160
99950W10L200	50	10	35	200
99950W12	50	12	42	63
99950W12L	50	12	42	100
99950W12L130	50	12	42	130
99950W12L160	50	12	42	160
99950W12L200	50	12	42	200
99950W14	50	14	44	63
99950W14L	50	14	44	100
99950W14L130	50	14	44	130
99950W14L160	50	14	44	160
99950W14L200	50	14	44	200
99950W16	50	16	48	63
99950W16L	50	16	48	100
99950W16L130	50	16	48	130
99950W16L160	50	16	48	160
99950W16L200	50	16	48	200
99950W18	50	18	50	63
99950W18L	50	18	50	100
99950W18L130	50	18	50	130
99950W18L160	50	18	50	160
99950W18L200	50	18	50	200
99950W20	50	20	52	63
99950W20L	50	20	52	100
99950W20L130	50	20	52	130
99950W20L160	50	20	52	160
99950W20L200	50	20	52	200
99950W25	50	25	65	80
99950W25L	50	25	65	100
99950W25L130	50	25	65	130
99950W25L160	50	25	65	160
99950W25L200	50	25	65	200
99950W32L	50	32	72	100
99950W32L130	50	32	72	130
99950W32L160	50	32	72	160
99950W40	50	40	80	120
99950W40L160	50	40	80	160
99950W50	50	50	90	130

Bilanciati G.6,3 a 12.000 R.P.M
A richiesta sono fornibili mandrini cono ISO 30
Balanced to 12,000 R.P.M at G.6,3
On request ISO 30 chucks are available

MANDRINI DIN 69871 CHUCKS DIN 69871

MANDRINI PORTA FRESE TIPO WELDON CORTO - ATTACCO DIN 69871 AD/B SHORT WELDON MILLING CHUCKS - SHANK DIN 69871 AD/B

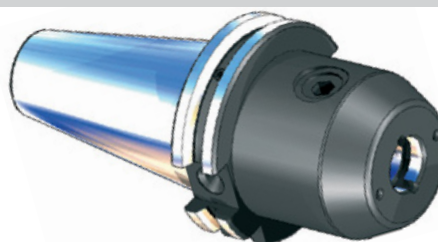
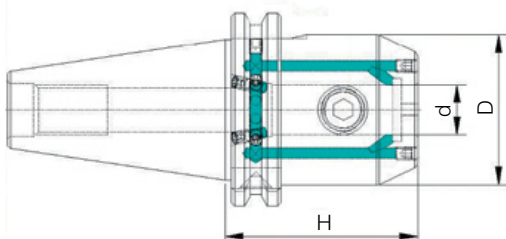


ART.	ISO	d mm	D mm	H mm
99940W16C	40	16	44	35
99940W20C	40	20	44	35
99940W25C	40	25	50	35
99940W32C	40	32	72	70

ART.	ISO	d mm	D mm	H mm
99950W16C	50	16	70	35
99950W20C	50	20	70	35
99950W25C	50	25	70	35
99950W32C	50	32	80	35
99950W40C	50	40	80	35

Bilanciati G.6,3 a 12.000 R.P.M – A richiesta sono fornibili mandrini cono ISO 30 / Balanced to 12,000 R.P.M at G.6,3 – On request ISO 30 chucks are available

MANDRINI PORTA FRESE TIPO WELDON CON CANALINI DI LUBRIFICAZIONE ATTACCO DIN 69871 AD/B WELDON MILLING CHUCKS WITH COOLANT-THROUGH HOLES- SHANK DIN 69871 AD/B

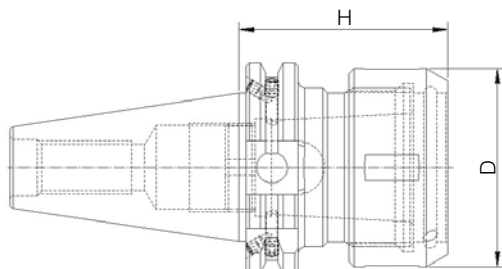


ART.	ISO	d mm	D mm	H mm
99940W06CL	40	6	25	50
99940W08CL	40	8	28	50
99940W10CL	40	10	35	50
99940W12CL	40	12	42	50
99940W14CL	40	14	44	50
99940W16CL	40	16	48	63
99940W18CL	40	18	50	63
99940W20CL	40	20	52	63
99940W25CL	40	25	65	100
99940W32CL	40	32	72	100

ART.	ISO	d mm	D mm	H mm
99950W06CL	50	6	25	63
99950W08CL	50	8	28	63
99950W10CL	50	10	35	63
99950W12CL	50	12	42	63
99950W14CL	50	14	44	63
99950W16CL	50	16	48	63
99950W18CL	50	18	50	63
99950W20CL	50	20	52	63
99950W25CL	50	25	65	80
99950W32CL	50	32	72	100

Bilanciati G.6,3 a 12.000 R.P.M – A richiesta sono fornibili mandrini cono ISO 30 / Balanced to 12,000 R.P.M at G.6,3 – On request ISO 30 chucks are available

MANDRINI PORTA PINZE EOP DIN 6388/B - ATTACCO DIN 69871 AD/B COLLET CHUCKS EOP DIN 6388/B - SHANK DIN 69871 AD/B D



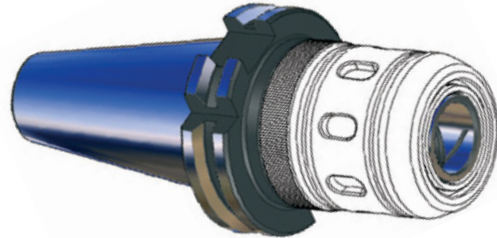
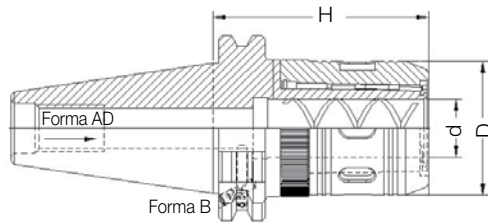
ART.	ISO	Pinza Collet	D mm	H mm
99940EOP16	40	EOP16	43	70
99940EOP25	40	EOP25	60	70
99940EOP32	40	EOP32	72	80

ART.	ISO	Pinza Collet	D mm	H mm
99950EOP16	50	EOP16	43	70
99950EOP25	50	EOP25	60	70
99950EOP32	50	EOP32	72	80

Bilanciati G.6,3 a 12.000 R.P.M – A richiesta sono fornibili mandrini cono ISO 30 / Balanced to 12,000 R.P.M at G.6,3 – On request ISO 30 chucks are available

MANDRINI DIN 69871 CHUCKS DIN 69871

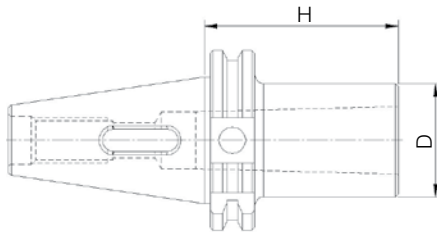
MANDRINI A FORTE SERRAGGIO - ATTACCO DIN 69871 A POWER MILLING CHUCKS - SHANK DIN 69871 A



ART.	ISO	d mm	D mm	H mm
3334020FS	40	20	46	75
3334032FS	40	32	62	95
3335032FS	50	32	62	85

Bilanciati G.6,3 a 12.000 R.P.M – A richiesta sono fornibili mandrini con ISO 30 / Balanced to 12,000 R.P.M at G.6,3 – On request ISO 30 chucks are available

MANDRINI RIDUZIONE CONO MORSE PER PUNTE - ATTACCO DIN 69871 A MORSE TAPER ADAPTERS FOR DRILL BITS - SHANK DIN 69871 A

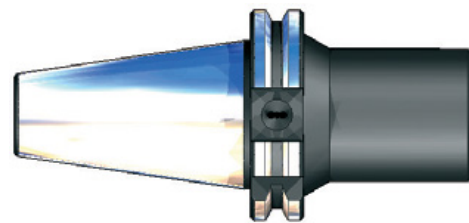
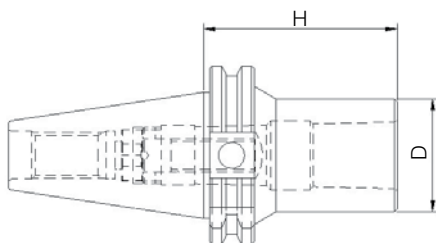


ART.	ISO	Tipo Type	CM MT	D mm	H mm
33340CM1P	40	AD/B	1	25	50
33340CM1PL	40		1	25	120
33340CM2P	40	AD/B	2	32	50
33340CM2PL	40		2	32	120
33340CM3P	40	AD/B	3	40	76
33340CM3PL	40		3	40	135
33340CM4P	40	AD/B	4	48	95
33340CM4PL	40		4	48	165

Bilanciati G.6,3 a 12.000 R.P.M – A richiesta sono fornibili mandrini con ISO 30
Balanced to 12,000 R.P.M at G.6,3 – On request ISO 30 chucks are available

ART.	ISO	Tipo Type	CM MT	D mm	H mm
33350CM1P	50	AD/B	1	25	45
33350CM1PL	50		1	25	120
33350CM2P	50	AD/B	2	32	60
33350CM2PL	50		2	32	140
33350CM3P	50	AD/B	3	40	65
33350CM3PL	50		3	40	150
33350CM4P	50	AD/B	4	48	95
33350CM4PL	50		4	48	180
33350CM5P	50	AD/B	5	63	105
33350CM5PL	50		5	63	220

MANDRINI RIDUZIONE CONO MORSE PER FRESE COMPLETI DI VITE - ATTACCO DIN 69871 A MORSE TAPER ADAPTERS FOR END MILLS WITH SCREW - SHANK DIN 69871 A



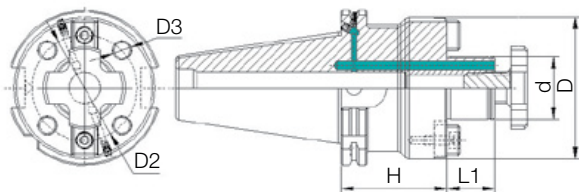
ART.	ISO	Tipo Type	CM MT	D mm	H mm
33340CM1F	40	AD/B	1	25	50
33340CM1FL	40		1	25	120
33340CM2F	40	AD/B	2	32	50
33340CM2FL	40		2	32	120
33340CM3F	40	AD/B	3	40	70
33340CM3FL	40		3	40	135
33340CM4F	40	AD/B	4	48	95
33340CM4FL	40		4	48	165

ART.	ISO	Tipo Type	CM MT	D mm	H mm
33350CM1F	50	AD/B	1	25	50
33350CM2F	50	AD/B	2	32	50
33350CM2FL	50		2	32	170
33350CM3F	50	AD/B	3	40	65
33350CM3FL	50		3	40	170
33350CM4F	50	AD/B	4	48	95
33350CM4FL	50		4	48	170
33350CM5F	50	AD/B	5	63	120
33350CM5FL	50		5	63	220

Bilanciati G.6,3 a 12.000 R.P.M – A richiesta sono fornibili mandrini con ISO 30 / Balanced to 12,000 R.P.M at G.6,3 – On request ISO 30 chucks are available

MANDRINI DIN 69871 CHUCKS DIN 69871

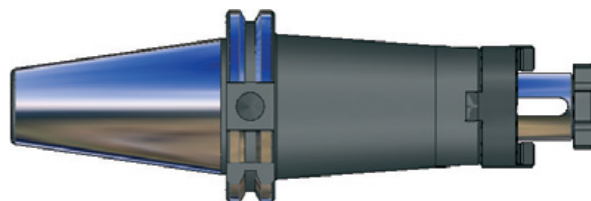
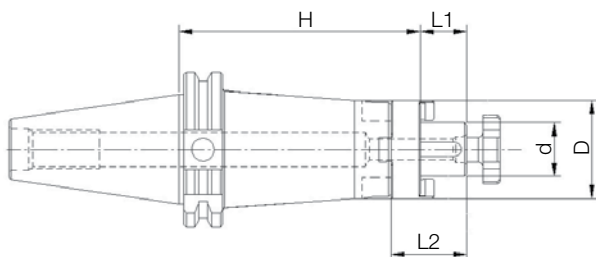
MANDRINI PORTA FRESE AD INSERTI - ATTACCO DIN 69871 A FACE MILL HOLDERS - SHANK DIN 69871 A



ART.	ISO	d mm	D mm	H mm	L1 mm	D2 mm	D3
3334040FI	40	40	89	60	30	66,7	M12
3335040FI	50	40	89	70	30	66,7	M12
3335060FI	50	60	129	70	40	101,6	M16

Bilanciati G.6,3 a 12.000 R.P.M – A richiesta sono fornibili mandrini cono ISO 30
Balanced to 12,000 R.P.M at G.6,3 – On request ISO 30 chucks are available

MANDRINI PORTA FRESE CON TRASCINAMENTO FRONTALE E LINGUETTA ATTACCO DIN 69871 A END MILL HOLDERS WITH DRIVE RING AND TANG - SHANK DIN 69871 A



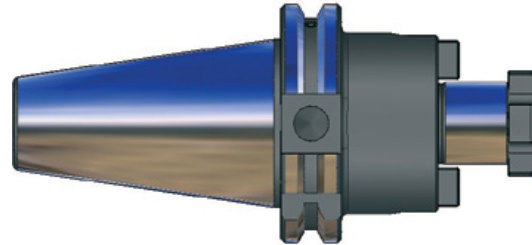
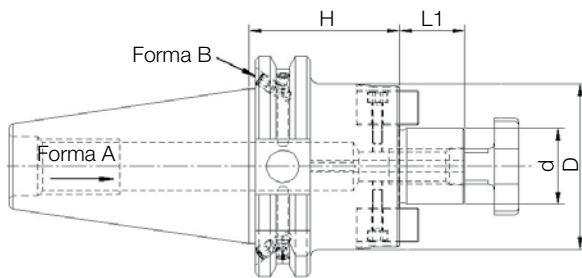
ART.	ISO	d mm	D mm	H mm	L1 mm	L2 mm
3334016U	40	16	32	55	17	27
3334016UL	40	16	32	100	17	27
3334016UL130	40	16	32	130	17	27
3334022U	40	22	40	55	19	31
3334022UL	40	22	40	100	19	31
3334022UL130	40	22	40	130	19	31
3334027U	40	27	48	55	21	33
3334027UL	40	27	48	100	21	33
3334027UL130	40	27	48	130	21	33
3334032U	40	32	58	60	24	38
3334032UL	40	32	58	100	24	38
3334032UL130	40	32	58	130	24	38
3334040U	40	40	70	60	27	41
3334040UL	40	40	70	100	27	41
3334040UL130	40	40	70	130	27	41

ART.	ISO	d mm	D mm	H mm	L1 mm	L2 mm
3335016U	50	16	32	55	17	27
3335016UL	50	16	32	100	17	27
3335016UL130	50	16	32	130	17	27
3335016UL160	50	16	32	160	17	27
3335022U	50	22	40	55	19	31
3335022UL	50	22	40	100	19	31
3335022UL130	50	22	40	130	19	31
3335022UL160	50	22	40	160	19	31
3335027U	50	27	48	55	21	33
3335027UL	50	27	48	100	21	33
3335027UL130	50	27	48	130	21	33
3335027UL160	50	27	48	160	21	33
3335032U	50	32	58	55	24	38
3335032UL	50	32	58	100	24	38
3335032UL130	50	32	58	130	24	38
3335032UL160	50	32	58	160	24	38
3335040U	50	40	70	55	27	41
3335040UL	50	40	70	100	27	41
3335040UL130	50	40	70	130	27	41
3335040UL160	50	40	70	160	27	41

Bilanciati G.6,3 a 12.000 R.P.M – A richiesta sono fornibili mandrini cono ISO 30
Balanced to 12,000 R.P.M at G.6,3 – On request ISO 30 chucks are available

MANDRINI DIN 69871 CHUCKS DIN 69871

MANDRINI PORTA FRESE CON TRASCINAMENTO FISSO - ATTACCO DIN 69871 AD
END MILL HOLDERS WITH DRIVE RING - SHANK DIN 69871 AD

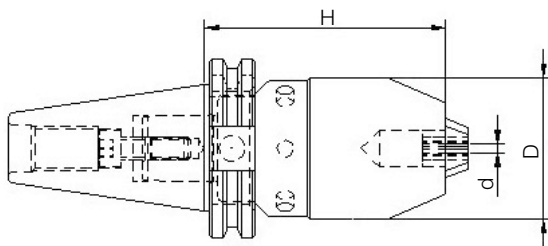


ART.	ISO	d mm	D mm	H mm	L1 mm
9994016TF	40	16	38	45	17
9994016TFL	40	16	39	100	17
9994016TFL130	40	16	39	130	17
9994016TFL160	40	16	39	160	17
9994016TFL200	40	16	39	200	17
9994022TF	40	22	46	45	19
9994022TFL	40	22	46	100	19
9994022TFL130	40	22	46	130	19
9994022TFL160	40	22	46	160	19
9994022TFL200	40	22	46	200	19
9994027TF	40	27	58	50	21
9994027TFL	40	27	58	100	21
9994027TFL130	40	27	58	130	21
9994027TFL160	40	27	58	160	21
9994027TFL200	40	27	58	200	21
9994032TF	40	32	78	55	24
9994032TFL	40	32	78	100	24
9994032TFL130	40	32	78	130	24
9994032TFL160	40	32	78	160	24
9994032TFL200	40	32	78	200	24
9994040TF	40	40	88	55	27
9994040TFL	40	40	88	100	27
9994040TFL130	40	40	88	130	27
9994040TFL160	40	40	88	160	27

ART.	ISO	d mm	D mm	H mm	L1 mm
9995016TF	50	16	38	45	17
9995016TFL	50	16	39	100	17
9995016TFL130	50	16	39	130	17
9995016TFL160	50	16	39	160	17
9995016TFL200	50	16	39	200	17
9995022TF	50	22	50	45	19
9995022TFL	50	22	50	100	19
9995022TFL130	50	22	50	130	19
9995022TFL160	50	22	50	160	19
9995022TFL200	50	22	50	200	19
9995027TF	50	27	55	45	21
9995027TFL	50	27	55	100	21
9995027TFL130	50	27	55	130	21
9995027TFL160	50	27	55	160	21
9995027TFL200	50	27	55	200	21
9995032TF	50	32	66	55	24
9995032TFL	50	32	66	100	24
9995032TFL130	50	32	66	130	24
9995032TFL160	50	32	66	160	24
9995032TFL200	50	32	66	200	24
9995040TF	50	40	88	55	27
9995040TFL	50	40	70	100	27
9995040TFL130	50	40	70	130	27
9995040TFL160	50	40	70	160	27

Bilanciati G.6,3 a 12.000 R.P.M – A richiesta sono fornibili mandrini cono ISO 30 / **Balanced to 12,000 R.P.M at G.6,3 – On request ISO 30 chucks are available**

MANDRINI PORTA PUNTE INTEGRALI - ATTACCO DIN 69871 A
INTEGRAL KEYLESS DRILL CHUCKS - SHANK DIN 69871 A



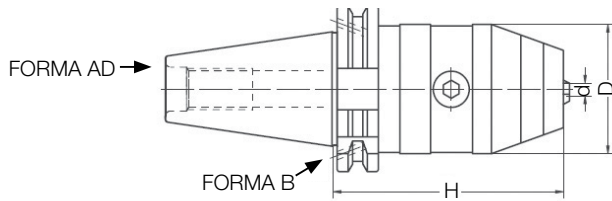
ART.	ISO	d mm	D mm	H mm
33340PC13	40	1-13	50	85
33340PC16	40	3-16	57	106

ART.	ISO	d mm	D mm	H mm
33350PC13	50	1-13	50	87
33350PC16	50	3-16	57	106

Bilanciati G.6,3 a 12.000 R.P.M – A richiesta sono fornibili mandrini cono ISO 30 / **Balanced to 12,000 R.P.M at G.6,3 – On request ISO 30 chucks are available**

MANDRINI DIN 69871 CHUCKS DIN 69871

MANDRINI PORTA PUNTE INTEGRALI CON CHIAVE ESAGONALE - ATTACCO DIN 69871 AD/B INTEGRAL DRILL CHUCKS WITH HEX KEY- SHANK DIN 69871 AD/B

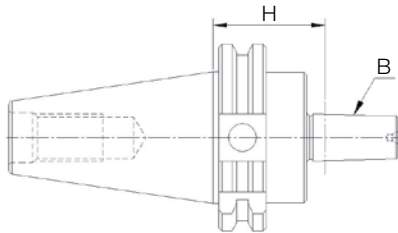


ART.	ISO	d mm	D mm	H mm
33340PC13I	40	1-13	50	88
33340PC16I	40	3-16	57	93

ART.	ISO	d mm	D mm	H mm
33350PC13I	50	1-13	50	88
33350PC16I	50	3-16	57	97

A richiesta sono fornibili mandrini con ISO 30 / On request ISO 30 chucks are available

ATTACCHI PER MANDRINI PORTA PUNTE CILINDRICHE - ATTACCO DIN 69871 A DRILL CHUCK ADAPTERS - SHANK DIN 69871 A

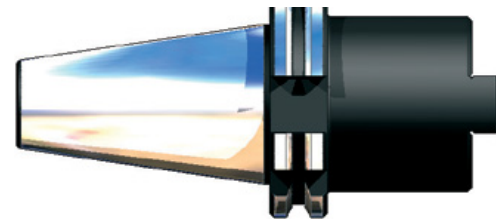
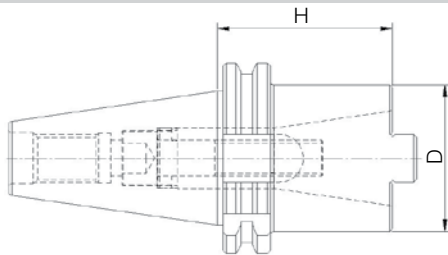


ART.	ISO	B	H mm
33340B12	40	B12	40
33340B16	40	B16	40
33340B18	40	B18	40

ART.	ISO	B	H mm
33350B12	50	B12	40
33350B16	50	B16	40
33350B18	50	B18	40

Bilanciati G.6,3 a 12.000 R.P.M - A richiesta sono fornibili mandrini con ISO 30 / Balanced to 12,000 R.P.M at G.6,3 - On request ISO 30 chucks are available

MANDRINI RIDUZIONE - ATTACCO DIN 69871 CHUCK ADAPTERS - SHANK DIN 69871

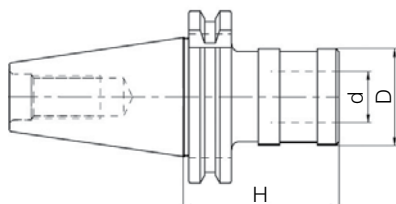


ART.	ISO	ISO interno	D mm	H mm
33340300	40	30	49	60

ART.	ISO	ISO interno	D mm	H mm
33350400	50	40	68	70

A richiesta sono fornibili mandrini con ISO 30 / On request ISO 30 chucks are available

MANDRINI PORTA MASCHI A CAMBIO RAPIDO CON DOPPIA COMPENSAZIONE QUICK-CHANGE TAP HOLDERS WITH DOUBLE COMPENSATION - SHANK DIN 69871



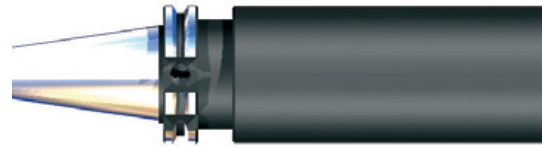
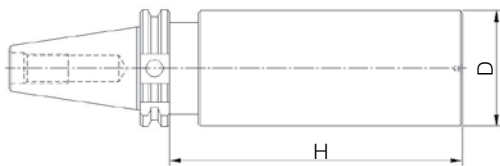
ART.	ISO	Tipo Type	d mm	D mm	H mm
33340M312	40	gr.1	19	38	60
33340M820	40	gr.2	31	54	92

ART.	ISO	Tipo Type	d mm	D mm	H mm
33350M312	50	gr.1	19	38	62
33350M820	50	gr.2	31	54	83

A richiesta sono fornibili mandrini con ISO 30 / On request ISO 30 chucks are available

MANDRINI DIN 69871 CHUCKS DIN 69871

MANDRINI CON STELO TENERO LAVORABILE - ATTACCO DIN 69871 A BORING BAR BLANKS WITH SOFT BODY - SHANK DIN 69871 A

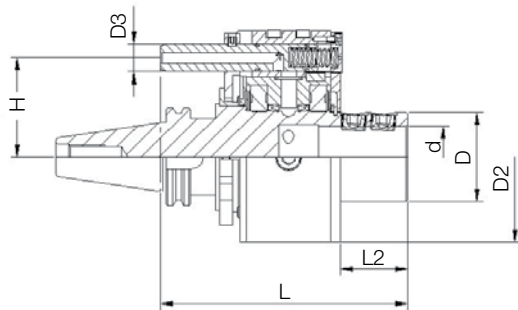


ART.	ISO	D mm	H mm
3334063STL	40	63	250

ART.	ISO	D mm	H mm
3335095STL	50	97	315

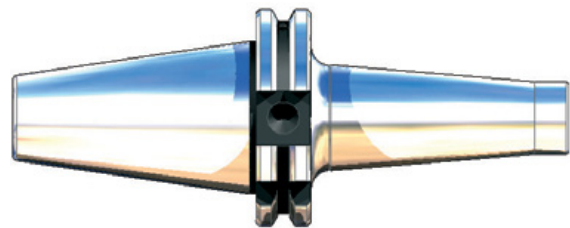
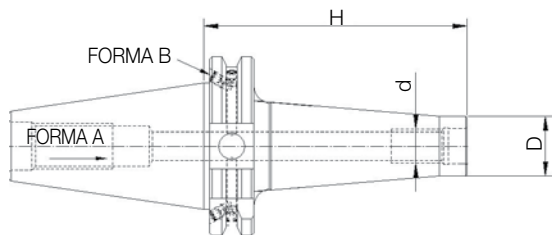
A richiesta sono fornibili mandrini con ISO 30 / On request ISO 30 chucks are available

DISTRIBUTORI ROTANTI DI REFRIGERANTE - ATTACCO DIN 69871 COOLANT INDUCERS - SHANK DIN 69871



ART.	ISO	d mm	D mm	D2 mm	D3 mm	H mm	L mm	L2 mm
33340W32DRA	40	32	48	95	18	65	150	33,8
33350W40DRA	50	40	58	110	18	80	165	49

MANDRINI PER FRESE CON ATTACCO FILETTATO - ATTACCO DIN 69871 A CHUCKS FOR END MILLS WITH THREADED SHANK - SHANK DIN 69871 A



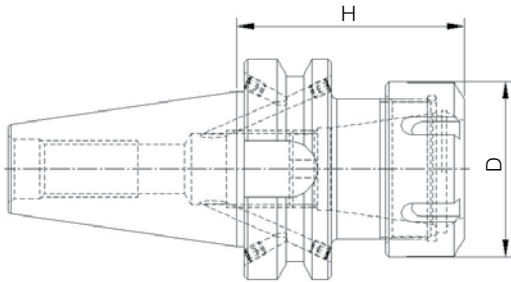
ART.	ISO	d	D mm	H mm
99940M08L55	40	M8	13	55
99940M08L75	40	M8	13	75
99940M08L95	40	M8	13	95
99940M08L115	40	M8	13	115
99940M10L55	40	M10	18	55
99940M10L75	40	M10	18	75
99940M10L95	40	M10	18	95
99940M10L115	40	M10	18	115
99940M10L145	40	M10	18	145
99940M12L55	40	M12	21	55
99940M12L75	40	M12	21	75
99940M12L95	40	M12	21	95
99940M12L115	40	M12	21	115
99940M12L145	40	M12	21	145
99940M16L55	40	M16	29	55
99940M16L75	40	M16	29	75
99940M16L95	40	M16	29	95
99940M16L115	40	M16	29	115
99940M16L145	40	M16	29	145

ART.	ISO	d	D mm	H mm
99950M10L85	50	M10	18	85
99950M10L135	50	M10	18	135
99950M10L185	50	M10	18	185
99950M12L85	50	M12	21	85
99950M12L135	50	M12	21	135
99950M12L185	50	M12	21	185
99950M12L235	50	M12	21	235
99950M16L85	50	M16	29	85
99950M16L135	50	M16	29	135
99950M16L185	50	M16	29	185
99950M16L235	50	M16	29	235

Bilanciati G.2,5 a 20.000 R.P.M - A richiesta sono fornibili mandrini con ISO 30
Balanced to 20,000 R.P.M at G.2,5 - On request ISO 30 chucks are available

MANDRINI MAS 403 BT CHUCKS MAS 403 BT

MANDRINI PORTA PINZE ER DIN 6499/B - ATTACCO MAS BT AD/B
COLLET CHUCKS ER DIN 6499/B - SHANK MAS BT AD/B

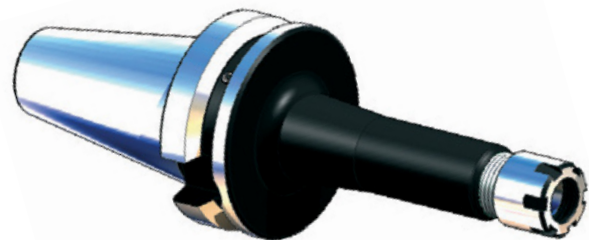
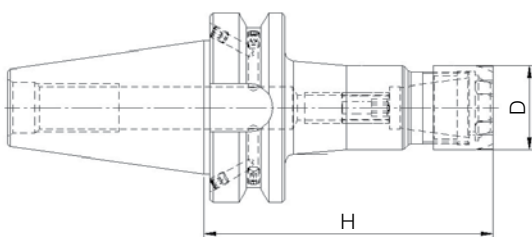


ART.	ISO	Pinza Collet	D mm	H mm
6664016	40	ER16	32	70
6664016L	40	ER16	32	100
6664016L130	40	ER16	32	130
6664020	40	ER20	35	70
6664020L	40	ER20	35	100
6664020L130	40	ER20	35	130
6664025	40	ER25	42	70
6664025L	40	ER25	42	100
6664025L130	40	ER25	42	130
6664025L160	40	ER25	42	160
6664025L200	40	ER25	42	200
6664032	40	ER32	50	70
6664032L	40	ER32	50	100
6664032L130	40	ER32	50	130
6664032L160	40	ER32	50	160
6664032L200	40	ER32	50	200
6664040	40	ER40	63	70
6664040L	40	ER40	63	100
6664040L130	40	ER40	63	130
6664040L160	40	ER40	63	160
6664040L200	40	ER40	63	200

ART.	ISO	Pinza Collet	D mm	H mm
6665016	50	ER16	32	80
6665020	50	ER20	35	80
6665025	50	ER25	42	80
6665025L	50	ER25	42	100
6665025L130	50	ER25	42	130
6665025L160	50	ER25	42	160
6665025L200	50	ER25	42	200
6665032	50	ER32	50	80
6665032L	50	ER32	50	100
6665032L130	50	ER32	50	130
6665032L160	50	ER32	50	160
6665032L200	50	ER32	50	200
6665040	50	ER40	63	80
6665040L	50	ER40	63	100
6665040L130	50	ER40	63	130
6665040L160	50	ER40	63	160
6665040L200	50	ER40	63	200

Bilanciati G.6,3 a 12.000 R.P.M – A richiesta sono fornibili mandrini cono ISO 30
Balanced to 12,000 R.P.M at G.6,3 – On request ISO 30 chucks are available

MANDRINI PORTA PINZE ER DIN 6499/B GHIERA MINI - ATTACCO MAS BT AD/B
SHRINK FIT COLLET CHUCKS ER DIN 6499/B - SHANK MAS BT AD/B



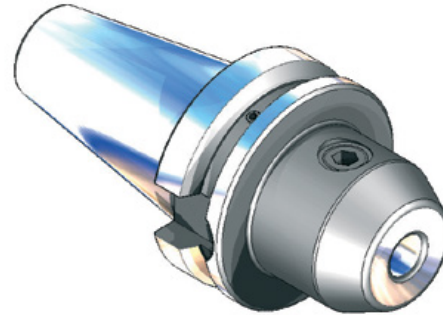
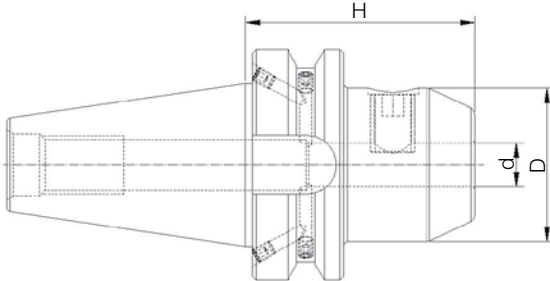
ART.	ISO	Pinza Collet	D mm	H mm
6664011ML	40	ER11	16	100
6664011ML130	40	ER11	16	130
6664016ML	40	ER16	22	100
6664016ML130	40	ER16	22	130
6664016ML160	40	ER16	22	160
6664016ML200	40	ER16	22	200
6664020ML	40	ER20	28	100
6664020ML130	40	ER20	28	130
6664020ML160	40	ER20	28	160
6664020ML200	40	ER20	28	200
6664025ML	40	ER25	35	100
6664025ML130	40	ER25	35	130
6664025ML160	40	ER25	35	160
6664025ML200	40	ER25	35	200

ART.	ISO	Pinza Collet	D mm	H mm
6665016ML	50	ER16	22	100
6665016ML130	50	ER16	22	130
6665016ML160	50	ER16	22	160
6665016ML200	50	ER16	22	200
6665020ML	50	ER20	28	100
6665020ML130	50	ER20	28	130
6665020ML160	50	ER20	28	160
6665020ML200	50	ER20	28	200
6665025ML	50	ER25	35	100
6665025ML130	50	ER25	35	130
6665025ML160	50	ER25	35	160
6665025ML200	50	ER25	35	200

Bilanciati G.6,3 a 12.000 R.P.M – A richiesta sono fornibili mandrini cono ISO 30
Balanced to 12,000 R.P.M at G.6,3 – On request ISO 30 chucks are available

MANDRINI MAS 403 BT CHUCKS MAS 403 BT

MANDRINI PORTA FRESE TIPO WELDON - ATTACCO MAS BT AD/B
SHRINK FIT COLLET CHUCKS ER DIN 6499/B - SHANK MAS BT AD/B



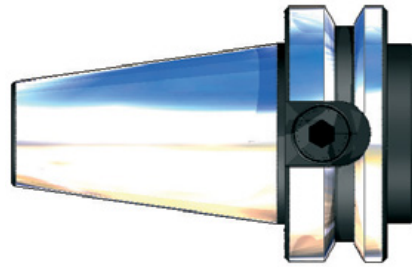
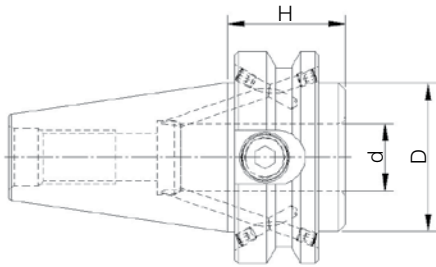
ART.	ISO	d mm	D mm	H mm
66640W06	40	6	25	50
66640W06L	40	6	25	100
66640W06L130	40	6	25	130
66640W06L160	40	6	25	160
66640W08	40	8	28	50
66640W08L	40	8	28	100
66640W08L130	40	8	28	130
66640W08L160	40	8	28	160
66640W10	40	10	35	63
66640W10L	40	10	35	100
66640W10L130	40	10	35	130
66640W10L160	40	10	35	160
66640W12	40	12	42	63
66640W12L	40	12	42	100
66640W12L130	40	12	42	130
66640W12L160	40	12	42	160
66640W14	40	14	44	63
66640W14L	40	14	44	100
66640W14L130	40	14	44	130
66640W14L160	40	14	44	160
66640W16	40	16	48	63
66640W16L	40	16	48	100
66640W16L130	40	16	48	130
66640W16L160	40	16	48	160
66640W18	40	18	50	63
66640W18L	40	18	50	100
66640W18L130	40	18	50	130
66640W18L160	40	18	50	160
66640W20	40	20	52	63
66640W20L	40	20	52	100
66640W20L130	40	20	52	130
66640W20L160	40	20	52	160
66640W25	40	25	65	90
66640W25L160	40	25	65	160
66640W32L	40	32	72	100
66640W32L160	40	32	72	160
66640W40	40	40	80	105
66650W06	50	6	25	63
66650W06L	50	6	25	100
66650W06L130	50	6	25	130
66650W06L160	50	6	25	160
66650W06L200	50	6	25	200
66650W08	50	8	28	63
66650W08L	50	8	28	100
66650W08L130	50	8	28	130
66650W08L160	50	8	28	160

ART.	ISO	d mm	D mm	H mm
66650W08L200	50	8	28	200
66650W10	50	10	35	70
66650W10L	50	10	35	100
66650W10L130	50	10	35	130
66650W10L160	50	10	35	160
66650W10L200	50	10	35	200
66650W12	50	12	42	80
66650W12L	50	12	42	100
66650W12L130	50	12	42	130
66650W12L160	50	12	42	160
66650W12L200	50	12	42	200
66650W14	50	14	44	80
66650W14L	50	14	44	100
66650W14L130	50	14	44	130
66650W14L160	50	14	44	160
66650W14L200	50	14	44	200
66650W16	50	16	48	80
66650W16L	50	16	48	100
66650W16L130	50	16	48	130
66650W16L160	50	16	48	160
66650W16L200	50	16	48	200
66650W18	50	18	50	80
66650W18L	50	18	50	100
66650W18L130	50	18	50	130
66650W18L160	50	18	50	160
66650W18L200	50	18	50	200
66650W20	50	20	52	80
66650W20L	50	20	52	100
66650W20L130	50	20	52	130
66650W20L160	50	20	52	160
66650W20L200	50	20	52	200
66650W25L	50	25	65	100
66650W25L130	50	25	65	130
66650W25L160	50	25	65	160
66650W25L200	50	25	65	200
66650W32	50	32	72	105
66650W32L130	50	32	72	130
66650W32L160	50	32	72	160
66650W40	50	40	80	120
66650W40L130	50	40	80	130
66650W40L160	50	40	80	160
66650W50	50	50	90	125

Bilanciati G.6,3 a 12.000 R.P.M – A richiesta sono fornibili mandrini cono ISO 30
Balanced to 12,000 R.P.M at G.6,3 – On request ISO 30 chucks are available

MANDRINI MAS 403 BT CHUCKS MAS 403 BT

MANDRINI PORTA FRESE TIPO WELDON CORTO - ATTACCO MAS BT AD/B SHORT WELDON MILLING CHUCKS - SHANK MAS BT AD/B

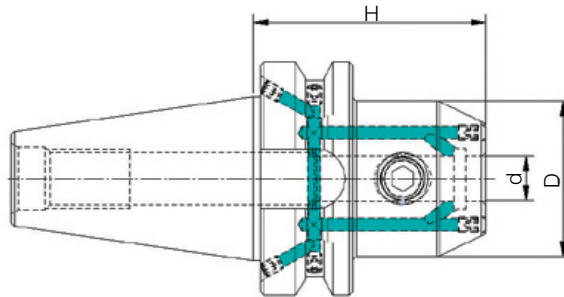


ART.	ISO	d mm	D mm	H mm
66640W16C	40	16	44	35
66640W20C	40	20	44	35
66640W25C	40	25	44	35
66640W32C	40	32	72	70

ART.	ISO	d mm	D mm	H mm
66650W16C	50	16	70	44
66650W20C	50	20	70	44
66650W25C	50	25	70	44
66650W32C	50	32	80	44
66650W40C	50	40	80	44

Bilanciati G.6,3 a 12.000 R.P.M – A richiesta sono fornibili mandrini cono ISO 30
Balanced to 12,000 R.P.M at G.6,3 – On request ISO 30 chucks are available

MANDRINI PORTA FRESE TIPO WELDON CON CANALINI DI LUBRIFICAZIONE ATTACCO MAS BT AD/B WELDON MILLING CHUCKS WITH COOLANT-THROUGH HOLES - SHANK MAS BT AD/B

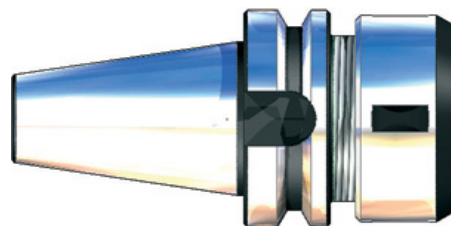
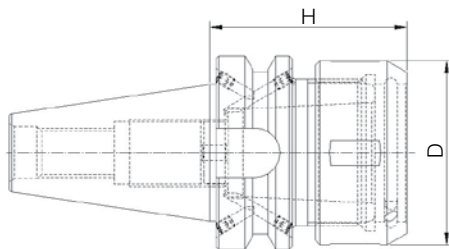


ART.	ISO	d mm	D mm	H mm
66640W06CL	40	6	25	50
66640W08CL	40	8	28	50
66640W10CL	40	10	35	63
66640W12CL	40	12	42	63
66640W14CL	40	14	44	63
66640W16CL	40	16	48	63
66640W18CL	40	18	50	63
66640W20CL	40	20	52	63
66640W25CL	40	25	65	90
66640W32CL	40	32	72	100

ART.	ISO	d mm	D mm	H mm
66650W06CL	50	6	25	63
66650W08CL	50	8	28	63
66650W10CL	50	10	35	63
66650W12CL	50	12	42	80
66650W14CL	50	14	44	80
66650W16CL	50	16	48	80
66650W18CL	50	18	50	80
66650W20CL	50	20	52	80
66650W25CL	50	25	65	100
66650W32CL	50	32	72	105

Bilanciati G.6,3 a 12.000 R.P.M – A richiesta sono fornibili mandrini cono ISO 30 / Balanced to 12,000 R.P.M at G.6,3 – On request ISO 30 chucks are available

MANDRINI PORTA PINZE EOP DIN 6388/B - ATTACCO MAS BT AD/B COLLET CHUCKS EOP DIN 6499/B - SHANK MAS BT AD/B



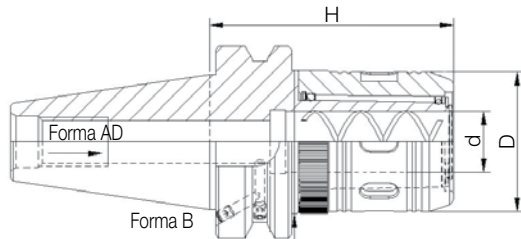
ART.	ISO	Pinza Collet	D mm	H mm
66640EOP16	40	EOP16	43	70
66640EOP25	40	EOP25	60	70
66640EOP32	40	EOP32	72	80

ART.	ISO	Pinza Collet	D mm	H mm
66650EOP16	50	EOP16	43	70
66650EOP25	50	EOP25	60	85
66650EOP32	50	EOP32	72	90

Bilanciati G.6,3 a 12.000 R.P.M – A richiesta sono fornibili mandrini cono ISO 30 / Balanced to 12,000 R.P.M at G.6,3 – On request ISO 30 chucks are available

MANDRINI MAS 403 BT CHUCKS MAS 403 BT

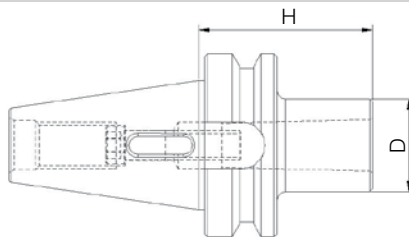
MANDRINI A FORTE SERRAGGIO - ATTACCO MAS BT AD/B POWER MILLING CHUCKS - SHANK MAS BT AD/B



ART.	ISO	d mm	D mm	H mm
1114020FS	40	20	46	80
1114032FS	40	32	62	85
1115032FS	50	32	62	100

Bilanciati G.6,3 a 12.000 R.P.M – A richiesta sono fornibili mandrini cono ISO 30
Balanced to 12,000 R.P.M at G.6,3 – On request ISO 30 chucks are available

MANDRINI RIDUZIONE CONO MORSE PER PUNTE - ATTACCO MAS BT A MORSE TAPER ADAPTERS FOR DRILL BITS - SHANK MAS BT A

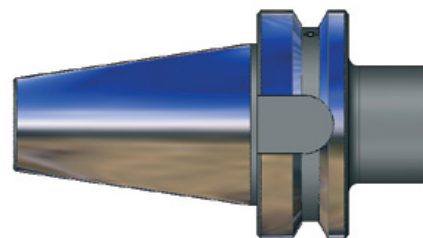
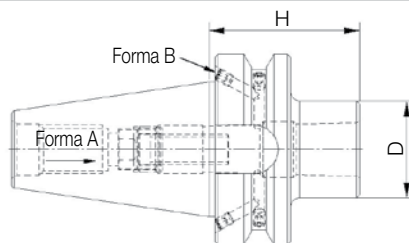


ART.	ISO	Tipo Type	CM MT	D mm	H mm
11140CM1P	40	AD/B	1	25	50
11140CM1PL	40		1	25	115
11140CM2P	40	AD/B	2	32	60
11140CM2PL	40		2	32	120
11140CM3P	40	AD/B	3	40	76
11140CM3PL	40		3	40	140
11140CM4P	40	AD/B	4	48	94,5
11140CM4PL	40		4	48	165

Bilanciati G.6,3 a 12.000 R.P.M – A richiesta sono fornibili mandrini cono ISO 30
Balanced to 12,000 R.P.M at G.6,3 – On request ISO 30 chucks are available

ART.	ISO	Tipo Type	CM MT	D mm	H mm
11150CM1P	50	AD/B	1	25	45
11150CM1PL	50		1	25	120
11150CM2P	50	AD/B	2	32	60
11150CM2PL	50		2	32	140
11150CM3P	50	AD/B	3	40	65
11150CM3PL	50		3	40	150
11150CM4P	50	AD/B	4	48	95
11150CM4PL	50		4	48	180
11150CM5P	50	AD/B	5	63	105
11150CM5PL	50		5	63	220

MANDRINI RIDUZIONE CONO MORSE PER FRESE COMPLETI DI VITE - ATTACCO MAS BT A MORSE TAPER ADAPTERS FOR END MILLS WITH SCREW - SHANK MAS BT A



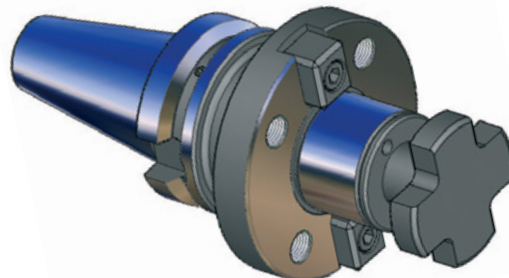
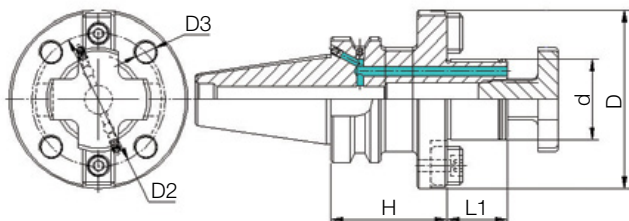
ART.	ISO	Tipo Type	CM MT	D mm	H mm
11140CM1F	40	AD/B	1	25	50
11140CM1FL	40		1	25	120
11140CM2F	40	AD/B	2	32	50
11140CM2FL	40		2	32	120
11140CM3F	40	AD/B	3	40	75
11140CM3FL	40		3	40	135
11140CM4F	40	AD/B	4	48	95
11140CM4FL	40		4	48	165

Bilanciati G.6,3 a 12.000 R.P.M – A richiesta sono fornibili mandrini cono ISO 30
Balanced to 12,000 R.P.M at G.6,3 – On request ISO 30 chucks are available

ART.	ISO	Tipo Type	CM MT	D mm	H mm
11150CM1F	50	AD/B	1	25	50
11150CM1FL	50		1	25	185
11150CM2F	50	AD/B	2	32	50
11150CM2FL	50		2	32	185
11150CM3F	50	AD/B	3	40	65
11150CM3FL	50		3	40	185
11150CM4F	50	AD/B	4	48	95
11150CM4FL	50		4	48	185
11150CM5F	50	AD/B	5	63	120

MANDRINI MAS 403 BT CHUCKS MAS 403 BT

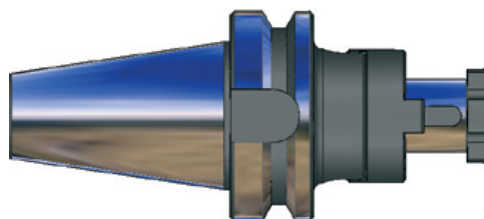
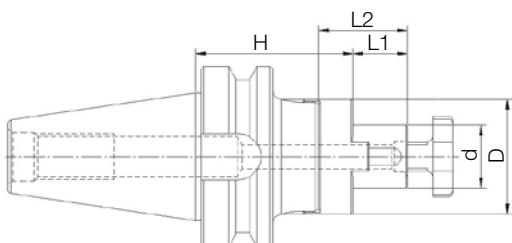
MANDRINI PORTA FRESE AD INSERTI - ATTACCO MAS BT A
FACE MILL HOLDERS - SHANK MAS BT A



ART.	ISO	d mm	D mm	H mm	L1 mm	D2 mm	D3
1114040FI	40	40	89	60	30	66,7	M12
1115040FI	50	40	89	70	30	66,7	M12
1115060FI	50	60	129	80	40	101,6	M12

Bilanciati G.6,3 a 12.000 R.P.M – A richiesta sono fornibili mandrini con ISO 30
Balanced to 12,000 R.P.M at G.6,3 – On request ISO 30 chucks are available

MANDRINI PORTA FRESE CON TRASCINAMENTO FRONTALE E LINGUETTA
ATTACCO MAS BT A
SHELL END MILL HOLDERS WITH DRIVE RING AND TANG - SHANK MAS BT A



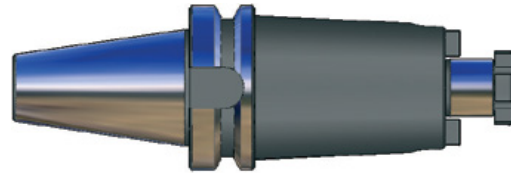
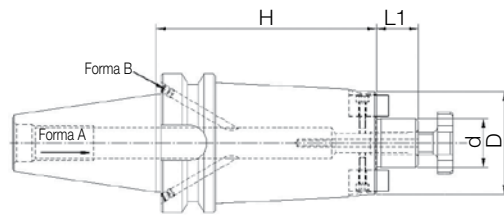
ART.	ISO	d mm	D mm	H mm	L1 mm	L2 mm
1114016U	40	16	32	55	17	27
1114016UL	40	16	32	100	17	27
1114016UL130	40	16	32	130	17	27
1114022U	40	22	40	55	19	31
1114022UL	40	22	40	100	19	31
1114022UL130	40	22	40	130	19	31
1114027U	40	27	48	55	21	33
1114027UL	40	27	48	100	21	33
1114027UL130	40	27	48	130	21	33
1114032U	40	32	58	60	24	38
1114032UL	40	32	58	100	24	38
1114032UL130	40	32	58	130	24	38
1114040U	40	40	70	60	27	41
1114040UL	40	40	70	100	27	41
1114040UL130	40	40	70	130	27	41

ART.	ISO	d mm	D mm	H mm	L1 mm	L2 mm
1115016U	50	16	32	70	17	27
1115016UL	50	16	32	100	17	27
1115016UL130	50	16	32	130	17	27
1115016UL160	50	16	32	160	17	27
1115022U	50	22	40	70	19	31
1115022UL	50	22	40	100	19	31
1115022UL130	50	22	40	130	19	31
1115022UL160	50	22	40	160	19	31
1115027U	50	27	48	70	21	33
1115027UL	50	27	48	100	21	33
1115027UL130	50	27	48	130	21	33
1115027UL160	50	27	48	160	21	33
1115032U	50	32	58	70	24	38
1115032UL	50	32	58	100	24	38
1115032UL130	50	32	58	130	24	38
1115032UL160	50	32	58	160	24	38
1115040U	50	40	70	70	27	41
1115040UL	50	40	70	100	27	41
1115040UL130	50	40	70	130	27	41
1115040UL160	50	40	70	160	27	41

Bilanciati G.6,3 a 12.000 R.P.M – A richiesta sono fornibili mandrini con ISO 30
Balanced to 12,000 R.P.M at G.6,3 – On request ISO 30 chucks are available

MANDRINI MAS 403 BT CHUCKS MAS 403 BT

MANDRINI PORTA FRESE CON TRASCINAMENTO FISSO - ATTACCO MAS BT AD/B
END MILL HOLDERS WITH DRIVE RING - SHANK MAS BT AD/B

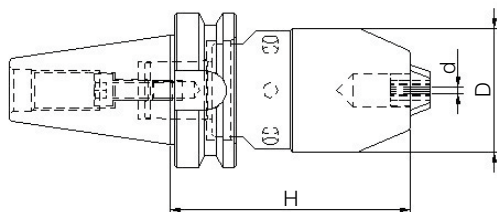


ART.	ISO	d mm	D mm	H mm	L1 mm
6664016TF	40	16	38	45	17
6664016TFL	40	16	39	100	17
6664016TFL130	40	16	39	130	17
6664016TFL160	40	16	39	160	17
6664016TFL200	40	16	39	200	17
6664022TF	40	22	50	45	19
6664022TFL	40	22	50	100	19
6664022TFL130	40	22	50	130	19
6664022TFL160	40	22	50	160	19
6664022TFL200	40	22	50	200	19
6664027TF	40	27	58	45	21
6664027TFL	40	27	55	100	21
6664027TFL130	40	27	55	130	21
6664027TFL160	40	27	55	160	21
6664027TFL200	40	27	55	200	21
6664032TF	40	32	78	50	24
6664032TFL	40	32	66	100	24
6664032TFL130	40	32	66	130	24
6664032TFL160	40	32	66	160	24
6664032TFL200	40	32	66	200	24
6664040TF	40	40	88	55	27
6664040TFL	40	40	70	100	27
6664040TFL130	40	40	70	130	27
6664040TFL160	40	40	70	160	27
6664040TFL200	40	40	70	200	27

ART.	ISO	d mm	D mm	H mm	L1 mm
6665016TF	50	16	38	50	17
6665016TFL	50	16	39	100	17
6665016TFL130	50	16	39	130	17
6665016TFL160	50	16	39	160	17
6665016TFL200	50	16	39	200	17
6665022TF	50	22	39	50	19
6665022TFL	50	22	50	100	19
6665022TFL130	50	22	50	130	19
6665022TFL160	50	22	50	160	19
6665022TFL200	50	22	50	200	19
6665027TF	50	27	58	50	21
6665027TFL	50	27	55	100	21
6665027TFL130	50	27	55	130	21
6665027TFL160	50	27	55	160	21
6665027TFL200	50	27	55	200	21
6665032TF	50	32	78	50	24
6665032TFL	50	32	66	100	24
6665032TFL130	50	32	66	130	24
6665032TFL160	50	32	66	160	24
6665032TFL200	50	32	66	200	24
6665040TF	50	40	88	50	27
6665040TFL	50	40	70	100	27
6665040TFL130	50	40	70	130	27
6665040TFL160	50	40	70	160	27
6665040TFL200	50	40	70	200	27

Bilanciati G.6,3 a 12.000 R.P.M – A richiesta sono fornibili mandrini cono ISO 30 / Balanced to 12,000 R.P.M at G.6,3 – On request ISO 30 chucks are available

MANDRINI PORTA PUNTE INTEGRALI - ATTACCO MAS BT AD/B INTEGRAL KEYLESS DRILL CHUCKS - SHANK MAS BT AD/B



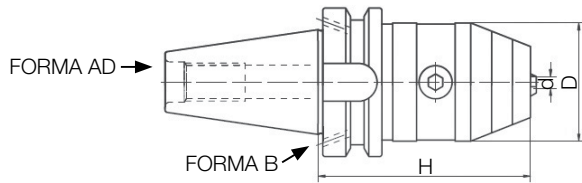
ART.	ISO	d mm	D mm	H mm
11140PC13	40	1-13	50	98
11140PC16	40	1-16	57	98

ART.	ISO	d mm	D mm	H mm
11150PC13	50	1-13	50	109
11150PC16	50	1-16	57	109

Bilanciati G.6,3 a 12.000 R.P.M – A richiesta sono fornibili mandrini cono ISO 30
Balanced to 12,000 R.P.M at G.6,3 – On request ISO 30 chucks are available

MANDRINI MAS 403 BT CHUCKS MAS 403 BT

MANDRINI PORTA PUNTE INTEGRALI CON CHIAVE ESAGONALE - ATTACCO MAS BT AD/B
INTEGRAL DRILL CHUCKS WITH HEX KEY - SHANK MAS BT AD/B

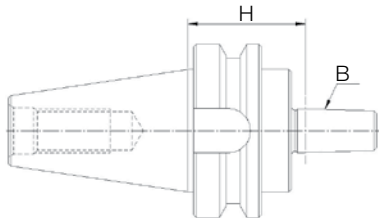


ART.	ISO	d mm	D mm	H mm
66640PC13I	40	1-13	50	98
66640PC16I	40	3-16	57	104

ART.	ISO	d mm	D mm	H mm
66650PC13I	50	1-13	50	90
66650PC16I	50	3-16	57	95

A richiesta sono fornibili mandrini con ISO 30 / On request ISO 30 chucks are available

ATTACCHI PER MANDRINI PORTA PUNTE CILINDRICHE - ATTACCO MAS BT AD/B
DRILL CHUCK ADAPTERS - SHANK MAS BT AD/B

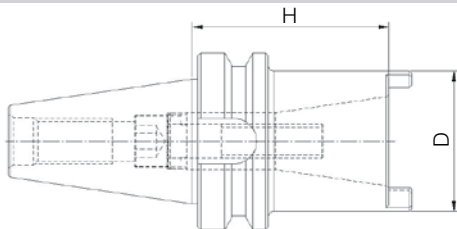


ART.	ISO	B	H mm
11140B12	40	B12	45
11140B16	40	B16	45
11140B18	40	B18	45

ART.	ISO	B	H mm
11150B12	50	B12	45
11150B16	50	B16	45
11150B18	50	B18	45

Bilanciati G.6,3 a 12.000 R.P.M – A richiesta sono fornibili mandrini con ISO 30 / Balanced to 12,000 R.P.M at G.6,3 – On request ISO 30 chucks are available

MANDRINI RIDUZIONE - ATTACCO MAS BT A
CHUCK ADAPTERS - SHANK MAS BT A

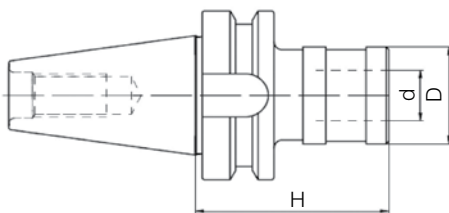


ART.	ISO	ISO interno	D mm	H mm
11140300	40	30	50	70

ART.	ISO	ISO interno	D mm	H mm
11150400	50	40	78	70

A richiesta sono fornibili mandrini con ISO 30 / On request ISO 30 chucks are available

MANDRINI PORTA MASCHI A CAMBIO RAPIDO CON DOPPIA COMPENSAZIONE
ATTACCO MAS BT AD/B
QUICK-CHANGE TAP HOLDERS WITH DOUBLE COMPENSATION - SHANK MAS BT AD/B



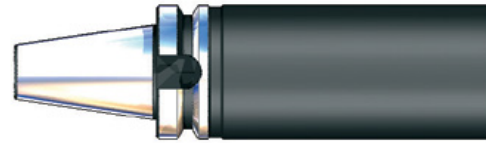
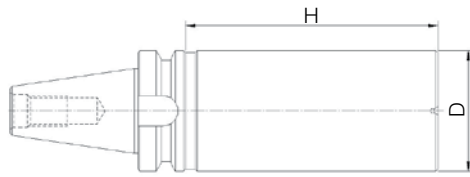
ART.	ISO	Tipo	d mm	D mm	H mm
11140M312	40	gr.1	19	38	67
11140M820	40	gr.2	31	54	93

ART.	ISO	Tipo	d mm	D mm	H mm
11150M312	50	gr.1	19	38	80
11150M820	50	gr.2	31	54	102

A richiesta sono fornibili mandrini con ISO 30 / On request ISO 30 chucks are available

MANDRINI MAS 403 BT CHUCKS MAS 403 BT

MANDRINI CON STELO TENERO LAVORABILE - ATTACCO MAS BT AD
BORING BAR BLANKS WITH SOFT BODY - SHANK MAS BT AD



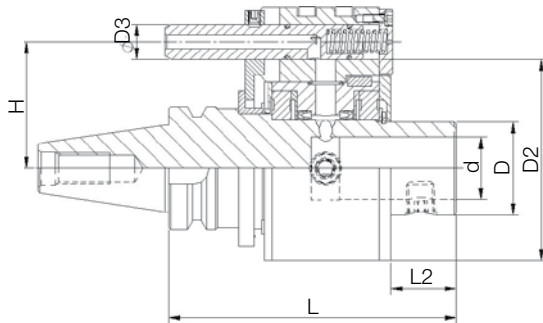
ART.	ISO	D mm
1114063STL	40	63

ART.	ISO	D mm
1115095STL	50	97

A richiesta sono fornibili mandrini con ISO 30 / On request ISO 30 chucks are available

DISTRIBUTORI ROTANTI DI REFRIGERANTE - ATTACCO MAS BT

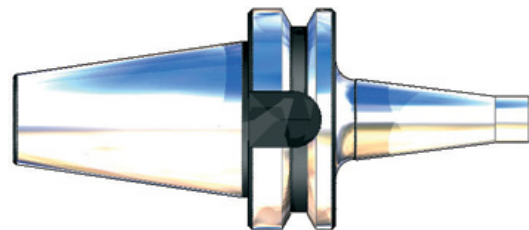
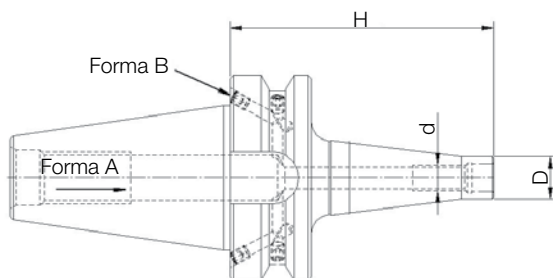
COOLANT INDUCERS - SHANK MAS BT



ART.	ISO	d mm	D mm	D2 mm	D3 mm	L mm	L2 mm	H mm
11140W32DRA	40	32	48	95	18	150	34	65
11140W40DRA	40	40	58	110	18	160	44	65
11150W40DRA	50	40	58	110	18	165	49	80

MANDRINI PER FRESE CON ATTACCO FILETTATO - ATTACCO MAS BT AD/B

CHUCKS FOR END MILLS WITH THREADED SHANK - SHANK MAS BT AD/B



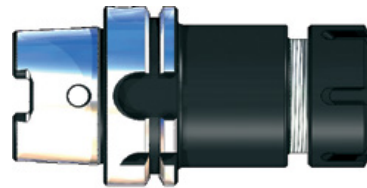
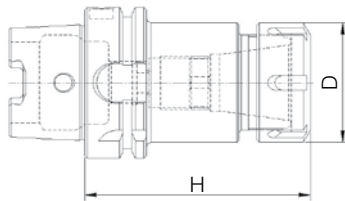
ART.	ISO	d	D mm	H mm
66640M06L63	40	M6	9,7	63
66640M06L83	40	M6	9,7	83
66640M08L63	40	M8	13	63
66640M08L83	40	M8	13	83
66640M08L103	40	M8	13	103
66640M10L63	40	M10	18	63
66640M10L83	40	M10	18	83
66640M10L103	40	M10	18	103
66640M10L123	40	M10	18	123
66640M12L63	40	M12	21	63
66640M12L83	40	M12	21	83
66640M12L103	40	M12	21	103
66640M12L123	40	M12	21	123
66640M16L63	40	M16	29	63
66640M16L83	40	M16	29	83

ART.	ISO	d	D mm	H mm
66640M16L103	40	M16	29	103
66640M16L123	40	M16	29	123
66640M16L153	40	M16	29	153
66650M12L104	50	M12	21	104
66650M12L154	50	M12	21	154
66650M12L204	50	M12	21	204
66650M12L254	50	M12	21	254
66650M16L104	50	M16	29	104
66650M16L154	50	M16	29	154
66650M16L204	50	M16	29	204
66650M16L254	50	M16	29	254

Bilanciati G.2,5 a 20.000 R.P.M - A richiesta sono fornibili mandrini con ISO 30
Balanced to 20,000 R.P.M at G.2,5 - On request ISO 30 chucks are available

MANDRINI HSK DIN 69893 CHUCKS HSK DIN 69893

MANDRINI PORTA PINZE ER DIN 6499/B - ATTACCO DIN 69893 COLLET CHUCK ER DIN 6499/B - SHANK DIN 69893

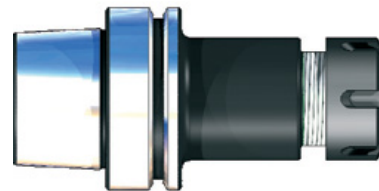
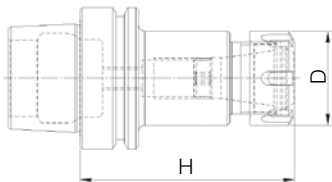


ART.	HSK/A	Pinza Collet	D mm	H mm
44450A16	50	ER16	32	70
44450A16L	50	ER16	32	100
44450A25	50	ER25	42	70
44450A25L	50	ER25	42	100
44450A32	50	ER32	50	70
44450A32L	50	ER32	50	100
44463A16	63	ER16	32	75
44463A16L	63	ER16	32	100
44463A16L160	63	ER16	32	160
44463A20	63	ER20	35	75
44463A20L	63	ER20	35	100
44463A20L160	63	ER20	35	160
44463A25	63	ER25	42	75
44463A25L	63	ER25	42	100
44463A25L160	63	ER25	42	160
44463A32	63	ER32	50	75
44463A32L	63	ER32	50	100
44463A32L160	63	ER32	50	160
44463A40	63	ER40	63	80
44463A40L	63	ER40	63	120
44463A40L160	63	ER40	63	160

ART.	HSK/A	Pinza Collet	D mm	H mm
444100A16L	100	ER16	32	100
444100A16L160	100	ER16	32	160
444100A20	100	ER20	35	70
444100A20L	100	ER20	35	100
444100A20L160	100	ER20	35	160
444100A25	100	ER25	42	75
444100A25L	100	ER25	42	100
444100A25L160	100	ER25	42	160
444100A32	100	ER32	50	80
444100A32L	100	ER32	50	100
444100A32L160	100	ER32	50	160
444100A40	100	ER40	63	90
444100A40L160	100	ER40	63	160

Bilanciati G.6,3 a 20.000 R.P.M
Balanced to 20,000 R.P.M at G.6,3
Bilanciati a G.2,5 a 20.000 R.P.M a richiesta
Balanced to 20,000 R.P.M at G.2,5 on request

MANDRINI PORTA PINZE ER DIN 6499/B - ATTACCO DIN 69893 COLLET CHUCKS ER DIN 6499/B - SHANK DIN 69893



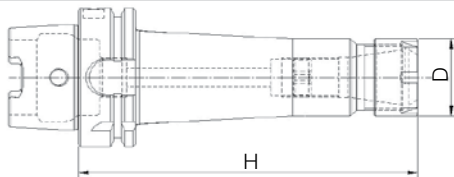
ART.	HSK/E	Pinza Collet	D mm	H mm
44463E16L	63	ER16	32	100
44463E25L	63	ER25	42	100

Bilanciati G.6,3 a 20.000 R.P.M
Balanced to 20,000 R.P.M at G.6,3

ART.	HSK/E	Pinza Collet	D mm	H mm
44463E32L	63	ER32	50	100
44463E40L	63	ER40	63	100

Bilanciati G.2,5 a 20.000 R.P.M a richiesta
Balanced to 20,000 R.P.M at G.2,5 on request

MANDRINI PORTA PINZE ER DIN 6499/B GHIERA MINI - ATTACCO DIN 69893 SHRINK FIT COLLET CHUCKS ER DIN 6499/B - SHANK DIN 69893



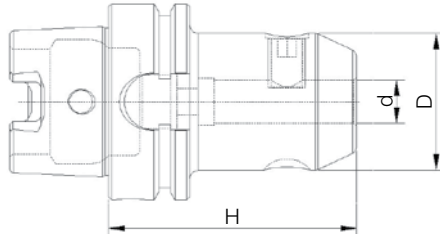
ART.	HSK/A	Pinza Collet	D mm	H mm
44463A11ML	63	ER11	16	100
44463A16ML	63	ER16	22	100
44463A20ML	63	ER20	28	100
44463A25ML	63	ER25	35	100

Bilanciati G.6,3 a 20.000 R.P.M
Balanced to 20,000 R.P.M at G.6,3
Bilanciati G.2,5 a 20.000 R.P.M a richiesta
Balanced to 20,000 R.P.M at G.2,5 on request

ART.	HSK/A	Pinza Collet	D mm	H mm
444100A16ML	100	ER16	22	100
444100A16ML160	100	ER16	22	160
444100A20ML	100	ER20	28	100
444100A20ML160	100	ER20	28	160
444100A25ML	100	ER25	35	100
444100A25ML160	100	ER25	35	160

MANDRINI HSK DIN 69893 CHUCKS HSK DIN 69893

MANDRINI PORTA FRESE TIPO WELDON - ATTACCO DIN 69893
WELDON MILLING CHUCKS - SHANK DIN 69893

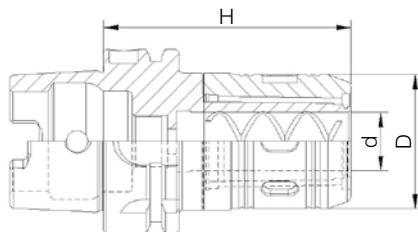


ART.	HSK/A	d mm	D mm	H mm
44450AW06	50	6	25	65
44450AW08	50	8	28	65
44450AW10	50	10	35	65
44450AW12	50	12	42	80
44450AW14	50	14	44	80
44450AW16	50	16	48	80
44450AW18	50	18	50	80
44450AW20	50	20	52	80
44450AW25	50	25	65	105
44450AW32	50	32	72	120
44463AW06	63	6	25	65
44463AW06L160	63	6	25	160
44463AW08	63	8	28	65
44463AW08L160	63	8	28	160
44463AW10	63	10	35	65
44463AW10L160	63	10	35	160
44463AW12	63	12	42	80
44463AW12L160	63	12	42	160
44463AW14	63	14	44	80
44463AW14L160	63	14	44	160
44463AW16	63	16	48	80
44463AW16L160	63	16	48	160
44463AW18	63	18	50	80
44463AW18L160	63	18	50	160
44463AW20	63	20	52	80
44463AW20L160	63	20	52	160
44463AW25	63	25	65	110
44463AW25L160	63	25	65	160
44463AW32	63	32	72	110
44463AW32L160	63	32	72	160

ART.	HSK/A	d mm	D mm	H mm
444100AW06	100	6	25	80
444100AW06L160	100	6	25	160
444100AW08	100	8	28	80
444100AW08L160	100	8	28	160
444100AW10	100	10	35	80
444100AW10L160	100	10	35	160
444100AW12	100	12	42	80
444100AW12L160	100	12	42	160
444100AW14	100	14	44	80
444100AW14L160	100	14	44	160
444100AW16	100	16	48	100
444100AW16L160	100	16	48	160
444100AW18	100	18	50	100
444100AW18L160	100	18	50	160
444100AW20	100	20	52	100
444100AW20L160	100	20	52	160
444100AW25	100	25	65	100
444100AW25L160	100	25	65	160
444100AW32	100	32	72	100
444100AW32L160	100	32	72	160
444100AW40	100	40	80	105
444100AW40L160	100	40	80	160

Bilanciati G.6,3 a 20.000 R.P.M
Balanced to 20,000 R.P.M at G.6,3
Bilanciati G.2,5 a 20.000 R.P.M a richiesta
Balanced to 20,000 R.P.M at G.2,5 on request

MANDRINI A FORTE SERRAGGIO - ATTACCO DIN 69893
POWER MILLING CHUCKS - SHANK DIN 69893

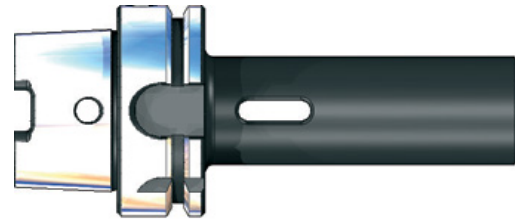
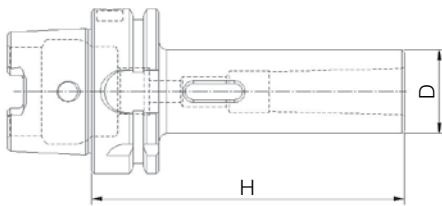


ART.	HSK/A	d mm	D mm	H mm
44463A20FS	63	20	46	85
44463A32FS	63	32	62	110
444100A32FS	100	32	62	115

Bilanciati G.6,3 a 12.000 R.P.M - Balanced to 12,000 R.P.M at G.6,3

MANDRINI HSK DIN 69893 CHUCKS HSK DIN 69893

MANDRINI RIDUZIONE CONO MORSE PER PUNTE - ATTACCO DIN 69893 MORSE TAPER ADAPTERS FOR DRILL BITS - SHANK DIN 69893

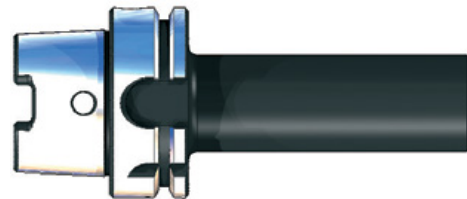
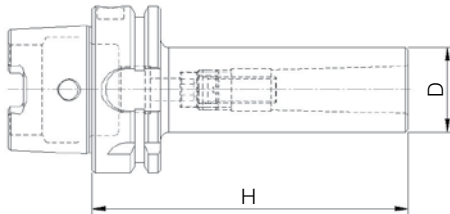


ART.	HSK/A	CM MT	D mm	H mm
44450ACM1P	50	1	25	100
44450ACM2P	50	2	32	120
44450ACM3P	50	3	40	140
44463ACM1P	63	1	25	100
44463ACM2P	63	2	32	120
44463ACM3P	63	3	40	140
44463ACM4P	63	4	48	160

ART.	HSK/A	CM MT	D mm	H mm
444100ACM2P	100	2	32	120
444100ACM3P	100	3	40	150
444100ACM4P	100	4	48	170
444100ACM5P	100	5	63	200

Bilanciati G.6,3 a 20.000 R.P.M – Bilanciati G.2,5 a 20.000 R.P.M a richiesta
Balanced to 20,000 R.P.M at G.6,3 – Balanced to 20,000 R.P.M at G.2,5 on request

MANDRINI RIDUZIONE CONO MORSE PER FRESE COMPLETI DI VITE - ATTACCO DIN 69893 MORSE TAPER ADAPTERS FOR END MILLS WITH SCREW - SHANK DIN 69893

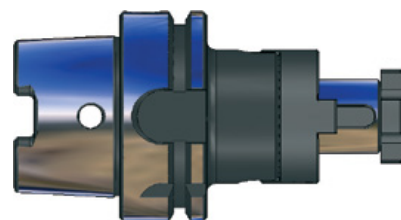
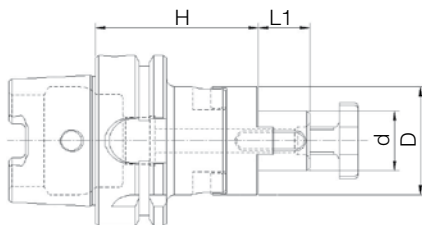


ART.	HSK/A	CM MT	D mm	H mm
44450ACM1F	50	1	25	100
44450ACM2F	50	2	32	120
44450ACM3F	50	3	40	140
44463ACM1F	63	1	25	100
44463ACM2F	63	2	32	120
44463ACM3F	63	3	40	140
44463ACM4F	63	4	48	160

ART.	HSK/A	CM MT	D mm	H mm
444100ACM2F	100	2	32	120
444100ACM3F	100	3	40	150
444100ACM4F	100	4	48	170
444100ACM5F	100	5	63	200

Bilanciati G.6,3 a 20.000 R.P.M – Bilanciati G.2,5 a 20.000 R.P.M a richiesta
Balanced to 20,000 R.P.M at G.6,3 – Balanced to 20,000 R.P.M at G.2,5 on request

MANDRINI PORTA FRESE CON TRASCINAMENTO FRONTALE E LINGUETTA ATTACCO DIN 69893 SHELL END MILL HOLDERS WITH DRIVE RING AND TANG - SHANK DIN 69893



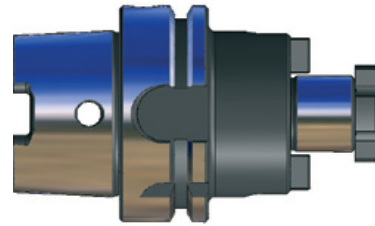
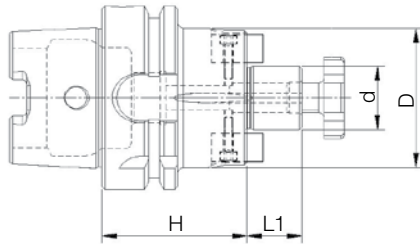
ART.	HSK/A	d mm	D mm	H mm	L1 mm
44450A16U	50	16	32	50	17
44450A22U	50	22	40	50	19
44450A27U	50	27	48	65	21
44463A16U	63	16	32	60	17
44463A22U	63	22	40	60	19
44463A27U	63	27	48	60	21
44463A32U	63	32	58	60	24

ART.	HSK/A	d mm	D mm	H mm	L1 mm
444100A16U	100	16	32	60	17
444100A22U	100	22	40	60	19
444100A27U	100	27	48	60	21
444100A32U	100	32	58	60	24

Bilanciati G.6,3 a 20.000 R.P.M – Bilanciati G.2,5 a 20.000 R.P.M a richiesta
Balanced to 20,000 R.P.M at G.6,3 – Balanced to 20,000 R.P.M at G.2,5 on request

MANDRINI HSK DIN 69893 CHUCKS HSK DIN 69893

MANDRINI PORTA FRESE CON TRASCINAMENTO FISSO - ATTACCO DIN 69893
END MILL HOLDERS WITH DRIVE RING - SHANK DIN 69893

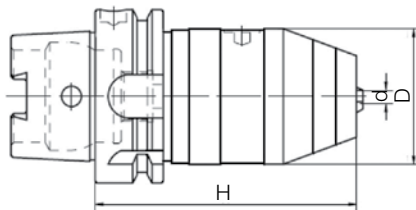


ART.	HSK/A	d mm	D mm	H mm	L1 mm
44450A16TF	50	16	38	50	17
44450A22TF	50	22	48	60	19
44450A27TF	50	27	58	60	21
44463A16TF	63	16	38	50	17
44463A16TFL	63	16	38	100	17
44463A22TF	63	22	48	50	19
44463A22TFL	63	22	48	100	19
44463A27TF	63	27	58	60	21
44463A27TFL	63	27	58	100	21
44463A32TF	63	32	66	60	24
44463A32TFL	63	32	66	100	24
44463A40TF	63	40	80	60	27
44463A40TFL	63	40	80	100	27

ART.	HSK/A	d mm	D mm	H mm	L1 mm
444100A16TF	100	16	38	50	17
444100A16TFL	100	16	38	100	17
444100A22TF	100	22	48	50	19
444100A22TFL	100	22	48	100	19
444100A27TF	100	27	58	50	21
444100A27TFL	100	27	58	100	21
444100A32TF	100	32	66	50	24
444100A32TFL	100	32	66	100	24
444100A40TF	100	40	80	60	27
444100A40TFL	100	40	80	100	27

Bilanciati G.6,3 a 20.000 R.P.M – Bilanciati G.2,5 a 20.000 R.P.M a richiesta
Balanced to 20,000 R.P.M at G.6,3 – Balanced to 20,000 R.P.M at G.2,5 on request

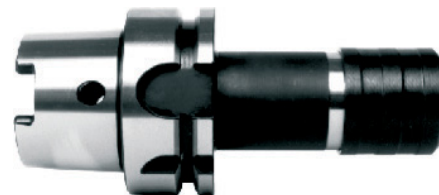
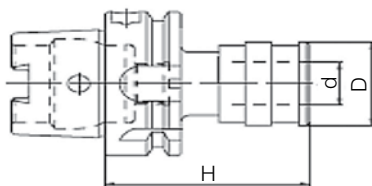
MANDRINI PORTA PUNTE INTEGRALI CON CHIAVE ESAGONALE - ATTACCO DIN 69893
INTEGRAL DRILL CHUCKS WITH HEX KEY - SHANK DIN 69893



ART.	HSK/A	d mm	D mm	H mm
44463APC13I	63	1-13	50	111
44463APC16I	63	3-16	57	111

ART.	HSK/A	d mm	D mm	H mm
444100APC13I	100	1-13	50	111
444100APC16I	100	3-16	57	111

MANDRINI PORTA MASCHI A CAMBIO RAPIDO CON DOPPIA COMPENSAZIONE
ATTACCO DIN 69893
QUICK-CHANGE TAP HOLDERS WITH DOUBLE COMPENSATION - SHANK DIN 69893

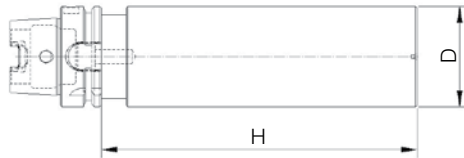


ART.	HSK/A	Tipo Type	d mm	D mm	H mm
44450AM312	50	gr.1	19	38	72
44450AM820	50	gr.2	31	54	110
44463AM312	63	gr.1	19	38	72
44463AM820	63	gr.2	31	54	110

ART.	HSK/A	Tipo Type	d mm	D mm	H mm
444100AM820	100	gr.2	31	48	80
444100AM1433	100	gr.3	31	60	100

MANDRINI HSK DIN 69893 CHUCKS HSK DIN 69893

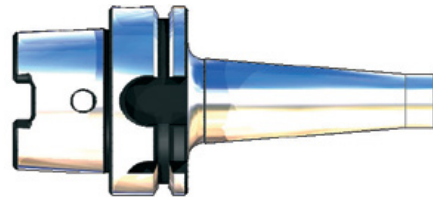
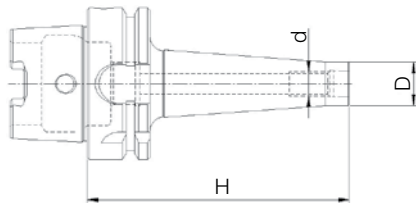
MANDRINI CON STELO TENERO LAVORABILE - ATTACCO DIN 69893
BORING BAR BLANKS WITH SOFT BODY - SHANK DIN 69893



ART.	HSK/A	D mm	H mm
44463A63STL	63	63	250

ART.	HSK/A	D mm	H mm
444100A90STL	100	97	315

MANDRINI PER FRESE CON ATTACCO FILETTATO - ATTACCO DIN 69893
MILLING CHUCKS WITH THREADED SHANK - SHANK DIN 69893



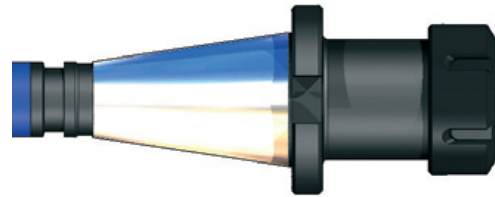
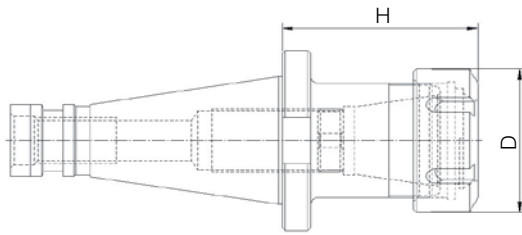
ART.	HSK/A	d	D mm	H mm
44450AM08L59	50	M8	13	59
44450AM08L84	50	M8	13	84
44450AM08L109	50	M8	13	109
44450AM08L134	50	M8	13	134
44450AM10L59	50	M10	18	59
44450AM10L84	50	M10	18	84
44450AM10L109	50	M10	18	109
44450AM10L134	50	M10	18	134
44450AM12L59	50	M12	21	59
44450AM12L84	50	M12	21	84
44450AM12L109	50	M12	21	109
44450AM12L134	50	M12	21	134

ART.	HSK/A	d	D mm	H mm
44463AM08L59	63	M8	13	59
44463AM08L84	63	M8	13	84
44463AM08L109	63	M8	13	109
44463AM08L134	63	M8	13	134
44463AM10L59	63	M10	18	59
44463AM10L84	63	M10	18	84
44463AM10L109	63	M10	18	109
44463AM10L134	63	M10	18	134
44463AM10L159	63	M10	18	159
44463AM12L59	63	M12	21	59
44463AM12L84	63	M12	21	84
44463AM12L109	63	M12	21	109
44463AM12L134	63	M12	21	134
44463AM12L159	63	M12	21	159
44463AM12L184	63	M12	21	184
44463AM12L209	63	M12	21	209
44463AM16L59	63	M16	29	59
44463AM16L84	63	M16	29	84
44463AM16L109	63	M16	29	109
44463AM16L134	63	M16	29	134
44463AM16L159	63	M16	29	159
44463AM16L184	63	M16	29	184
44463AM16L209	63	M16	29	209
444100AM12L87	100	M12	21	87
444100AM12L137	100	M12	21	137
444100AM12L187	100	M12	21	187
444100AM16L87	100	M16	29	87
444100AM16L137	100	M16	29	137
444100AM16L187	100	M16	29	187
444100AM16L237	100	M16	29	237

Bilanciati G.2,5 a 20.000 R.P.M / Balanced to 20,000 R.P.M at G.2,5

MANDRINI DIN 2080 CHUCKS DIN 2080

MANDRINI PORTA PINZE ER DIN 6499/B - ATTACCO DIN 2080 COLLET CHUCKS ER DIN 6499/B - SHANK DIN 2080

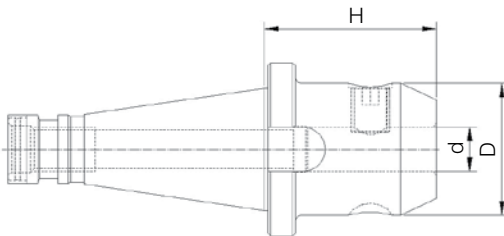


ART.	ISO	Pinza Collet	D mm	H mm
0004016	40	ER16	32	70
0004016L	40	ER16	32	100
0004016L130	40	ER16	32	130
0004020	40	ER20	35	70
0004020L	40	ER20	35	100
0004020L130	40	ER20	35	130
0004025	40	ER25	42	70
0004025L	40	ER25	42	100
0004025L130	40	ER25	42	130
0004032	40	ER32	50	70
0004032L	40	ER32	50	100
0004032L130	40	ER32	50	130
0004040	40	ER40	63	80
0004040L130	40	ER40	63	130

ART.	ISO	Pinza Collet	D mm	H mm
0005016	50	ER16	32	80
0005016L	50	ER16	32	100
0005020	50	ER20	35	80
0005020L	50	ER20	35	100
0005025	50	ER25	42	80
0005025L	50	ER25	42	100
0005025L130	50	ER25	42	130
0005032	50	ER32	50	80
0005032L	50	ER32	50	100
0005032L130	50	ER32	50	130
0005040	50	ER40	63	80
0005040L130	50	ER40	63	130

A richiesta sono fornibili mandrini con ISO 30
On request ISO 30 taper chucks are available

MANDRINI PORTA FRESE TIPO WELDON - ATTACCO DIN 2080 WELDON MILLING CHUCKS - SHANK DIN 2080



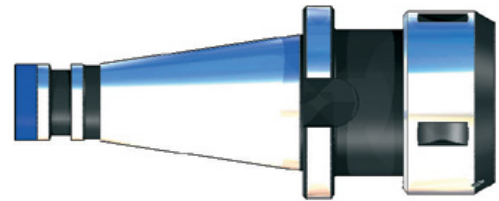
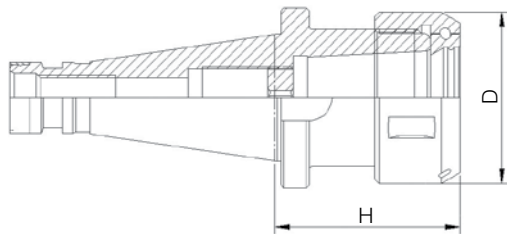
ART.	ISO	d mm	D mm	H mm
00040W06	40	6	25	50
00040W06L	40	6	25	100
00040W08	40	8	28	50
00040W08L	40	8	28	100
00040W10	40	10	35	50
00040W10L	40	10	35	100
00040W12	40	12	42	50
00040W12L	40	12	42	100
00040W14	40	14	44	50
00040W14L	40	14	44	100
00040W16	40	16	48	63
00040W16L	40	16	48	100
00040W18	40	18	50	63
00040W18L	40	18	50	100
00040W20	40	20	52	63
00040W20L	40	20	52	100
00040W25	40	25	65	90
00040W25L	40	25	65	100
00040W32	40	32	72	90
00040W32L	40	32	72	100
00040W40	40	40	78	90

ART.	ISO	d mm	D mm	H mm
00050W06	50	6	25	50
00050W06L	50	6	25	100
00050W08	50	8	28	50
00050W08L	50	8	28	100
00050W10	50	10	35	63
00050W10L	50	10	35	100
00050W12	50	12	42	63
00050W12L	50	12	42	100
00050W14	50	14	44	63
00050W14L	50	14	44	100
00050W16	50	16	48	63
00050W16L	50	16	48	100
00050W18	50	18	50	63
00050W18L	50	18	50	100
00050W20	50	20	52	63
00050W20L	50	20	52	100
00050W25	50	25	65	80
00050W25L	50	25	65	100
00050W32	50	32	72	85
00050W32L	50	32	72	100
00050W40	50	40	78	95

A richiesta sono fornibili mandrini con ISO 30 / On request ISO 30 taper chucks are available

MANDRINI DIN 2080 CHUCKS DIN 2080

MANDRINI PORTA PINZE EOP DIN 6388/B - ATTACCO DIN 2080 COLLET CHUCKS EOP DIN 6388/B - SHANK DIN 2080

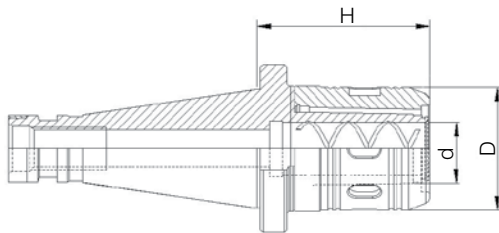


ART.	ISO	Pinza Collet	D mm	H mm
00040EOP16	40	EOP16	43	70
00040EOP25	40	EOP25	60	70
00040EOP32	40	EOP32	72	85

ART.	ISO	Pinza Collet	D mm	H mm
00050EOP16	50	EOP16	43	70
00050EOP25	50	EOP25	60	70
00050EOP32	50	EOP32	72	85

A richiesta sono fornibili mandrini cono ISO 30 / On request ISO 30 taper chucks are available

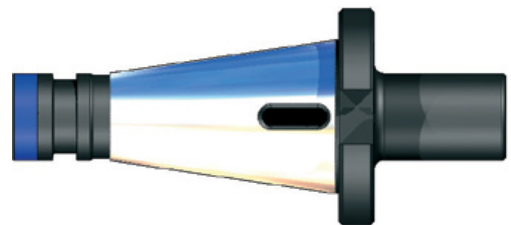
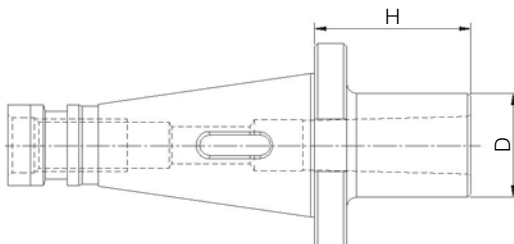
MANDRINI A FORTE SERRAGGIO - ATTACCO DIN 2080 POWER MILLING CHUCKS - SHANK DIN 2080



ART.	ISO	d mm	D mm	H mm
0004020FS	40	20	46	60
0004032FS	40	32	62	80
0005032FS	50	32	62	80

A richiesta sono fornibili mandrini cono ISO 30 / On request ISO 30 taper chucks are available

MANDRINI RIDUZIONE CONO MORSE PER PUNTE - ATTACCO DIN 2080 MORSE TAPER ADAPTERS FOR DRILL BITS - SHANK DIN 2080



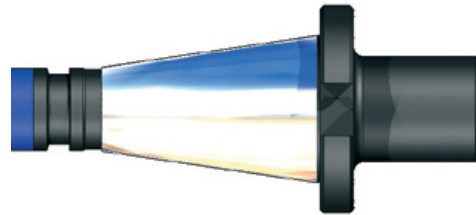
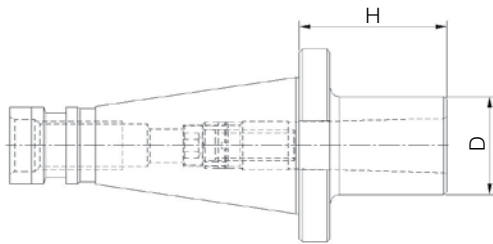
ART.	ISO	CM MT	D mm	H mm
00040CM1P	40	1	25	50
00040CM1PL	40	1	25	92
00040CM2P	40	2	32	50
00040CM2PL	40	2	32	109
00040CM3P	40	3	40	65
00040CM3PL	40	3	40	129
00040CM4P	40	4	48	95
00040CM4PL	40	4	48	152

ART.	ISO	CM MT	D mm	H mm
00050CM1P	50	1	25	45
00050CM1PL	50	1	25	96
00050CM2P	50	2	32	60
00050CM2PL	50	2	32	113
00050CM3P	50	3	40	65
00050CM3PL	50	3	40	133
00050CM4P	50	4	48	70
00050CM4PL	50	4	48	163
00050CM5P	50	5	63	100
00050CM5PL	50	5	63	193

A richiesta sono fornibili mandrini cono ISO 30
On request ISO 30 taper chucks are available

MANDRINI DIN 2080 CHUCKS DIN 2080

MANDRINI RIDUZIONE CONO MORSE PER FRESE COMPLETI DI VITE - ATTACCO DIN 2080
MORSE TAPER ADAPTERS FOR END MILLS WITH SCREW - SHANK DIN 2080



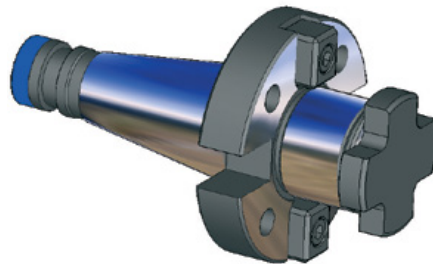
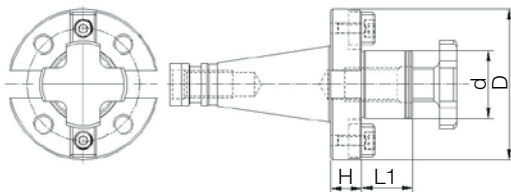
ART.	ISO	CM MT	D mm	H mm
00040CM1F	40	1	25	50
00040CM1FL	40	1	25	115
00040CM2F	40	2	32	50
00040CM2FL	40	2	32	115
00040CM3F	40	3	40	65
00040CM3FL	40	3	40	115
00040CM4F	40	4	48	95
00040CM4FL	40	4	48	165

ART.	ISO	CM MT	D mm	H mm
00050CM1F	50	1	25	45
00050CM1FL	50	1	25	115
00050CM2F	50	2	32	60
00050CM2FL	50	2	32	115
00050CM3F	50	3	40	65
00050CM3FL	50	3	40	115
00050CM4F	50	4	48	65
00050CM4FL	50	4	48	165
00050CM5F	50	5	63	120

A richiesta sono fornibili mandrini cono ISO 30 / On request ISO 30 taper chucks are available

MANDRINI PORTA FRESE AD INSERTI - ATTACCO DIN 2080

FACE MILL HOLDERS- SHANK DIN 2080



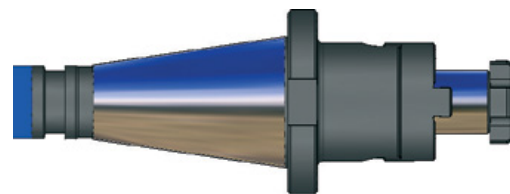
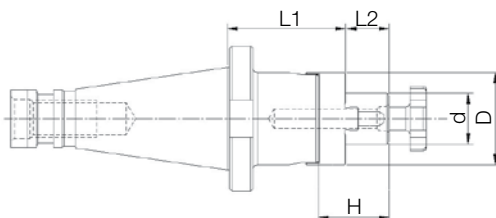
ART.	ISO	d mm	D mm	H mm	L1 mm
0004040FI	40	40	89	20	30

ART.	ISO	d mm	D mm	H mm	L1 mm
0005040FI	50	40	89	30	30
0005060FI	50	60	129	30	40

A richiesta sono fornibili mandrini cono ISO 30 / On request ISO 30 taper chucks are available

MANDRINI PORTAFRESE CON TRASCINAMENTO FRONTALE E LINGUETTA ATTACCO DIN 2080

SHELL END MILL HOLDERS WITH DRIVE RING AND TANG - SHANK DIN 2080



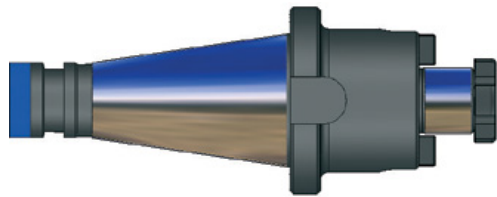
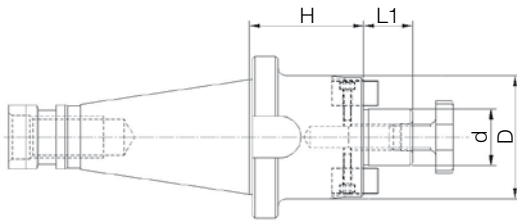
ART.	ISO	d mm	D mm	H mm	L1 mm	L2 mm
0004016U	40	16	32	27	52	17
0004016UL	40	16	32	27	100	17
0004022U	40	22	40	31	52	19
0004022UL	40	22	40	31	100	19
0004027U	40	27	48	33	52	21
0004027UL	40	27	48	33	100	21
0004032U	40	32	58	38	52	24
0004032UL	40	32	58	38	100	24
0004040U	40	40	70	41	52	27
0004040UL	40	40	70	41	100	27

ART.	ISO	d mm	D mm	H mm	L1 mm	L2 mm
0005016U	50	16	32	27	55	17
0005016UL	50	16	32	27	100	17
0005022U	50	22	40	31	55	19
0005022UL	50	22	40	31	100	19
0005027U	50	27	48	33	55	21
0005027UL	50	27	48	33	100	21
0005032U	50	32	58	38	55	24
0005032UL	50	32	58	38	100	24
0005040U	50	40	70	41	55	27
0005040UL	50	40	70	41	100	27

A richiesta sono fornibili mandrini cono ISO 30 / On request ISO 30 taper chucks are available

MANDRINI DIN 2080 CHUCKS DIN 2080

MANDRINI PORTA FRESE CON TRASCINAMENTO FISSO - ATTACCO DIN 2080
END MILL HOLDERS WITH DRIVE RING - SHANK DIN 2080

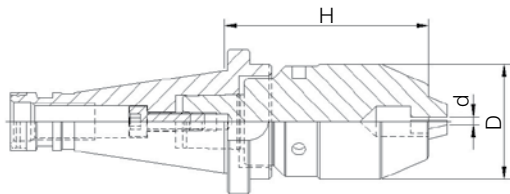


ART.	ISO	d mm	D mm	H mm	L1 mm
0004016TF	40	16	38	45	17
0004016TFL	40	16	38	100	17
0004022TF	40	22	48	45	19
0004022TFL	40	22	48	100	19
0004027TF	40	27	58	45	21
0004027TFL	40	27	58	100	21
0004032TF	40	32	78	50	24
0004032TFL	40	32	66	100	24
0004040TF	40	40	88	55	27
0004040TFL	40	40	80	100	27

ART.	ISO	d mm	D mm	H mm	L1 mm
0005016TF	50	16	38	45	17
0005016TFL	50	16	38	100	17
0005022TF	50	22	48	45	19
0005022TFL	50	22	48	100	19
0005027TF	50	27	58	45	21
0005027TFL	50	27	58	100	21
0005032TF	50	32	78	50	24
0005032TFL	50	32	66	100	24
0005040TF	50	40	88	50	27
0005040TFL	50	40	80	100	27

A richiesta sono fornibili mandrini cono ISO 30 / On request ISO 30 taper chucks are available

MANDRINI PORTA PUNTE INTEGRALI - ATTACCO DIN 2080
INTEGRAL KEYLESS DRILL CHUCKS - SHANK DIN 2080

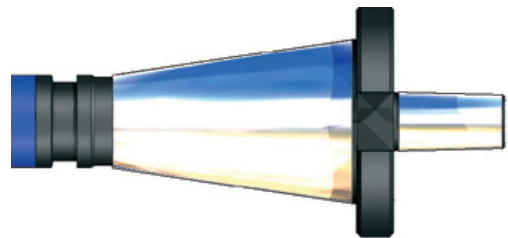
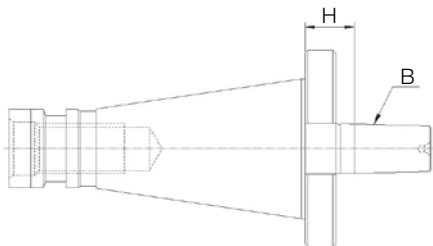


ART.	ISO	d mm	D mm	H mm
00040PC13	40	1-13	50	88
00040PC16	40	3-16	57	100

ART.	ISO	d mm	D mm	H mm
00050PC13	50	1-13	50	85
00050PC16	50	3-16	57	90

A richiesta sono fornibili mandrini cono ISO 30 / On request ISO 30 taper chucks are available

ATTACCHI PER MANDRINI PORTA PUNTE CILINDRICHE - ATTACCO DIN 2080
DRILL CHUCK ADAPTERS - SHANK DIN 2080



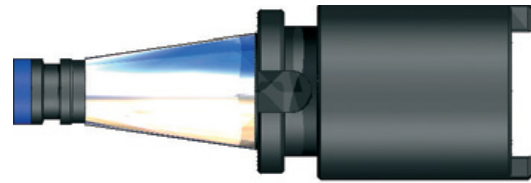
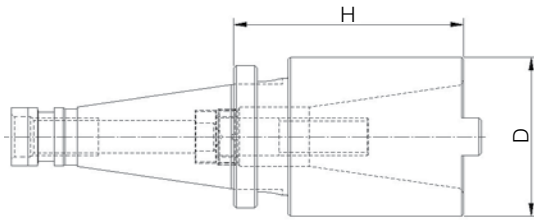
ART.	ISO	B mm	H mm
00040B12	40	B12	18
00040B16	40	B16	18
00040B18	40	B18	18

ART.	ISO	B mm	H mm
00050B12	50	B12	20
00050B16	50	B16	20
00050B18	50	B18	20

A richiesta sono fornibili mandrini cono ISO 30 / On request ISO 30 taper chucks are available

MANDRINI DIN 2080 CHUCKS DIN 2080

MANDRINI RIDUZIONE - ATTACCO DIN 2080 CHUCK ADAPTERS - SHANK DIN 2080

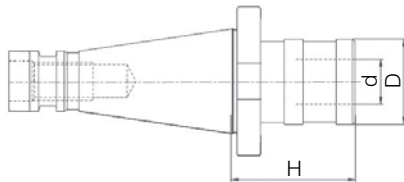


ART.	ISO	ISO interno Internal	D mm	H mm
00040300	40	30	50	50

ART.	ISO	ISO interno Internal	D mm	H mm
00050400	50	40	78	63

A richiesta sono fornibili mandrini con ISO 30 / On request ISO 30 taper chucks are available

MANDRINI PORTA MASCHI A CAMBIO RAPIDO CON DOPPIA COMPENSAZIONE ATTACCO DIN 2080 QUICK-CHANGE TAP HOLDERS WITH DOUBLE COMPENSATION - SHANK DIN 2080

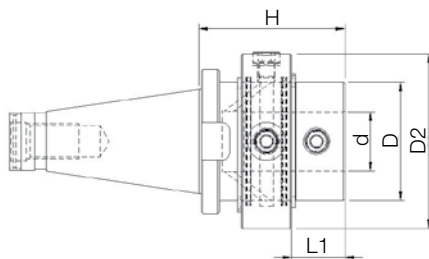


ART.	ISO	Tipo Type	d mm	D mm	H mm
00040M312	40	gr.1	19	36	52
00040M820	40	gr.2	31	53	77

ART.	ISO	Tipo Type	d mm	D mm	H mm
00050M820	50	gr.2	31	53	79

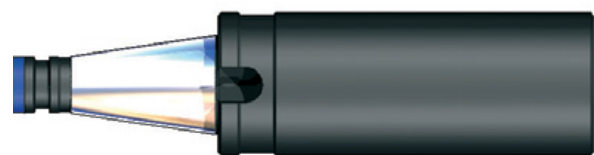
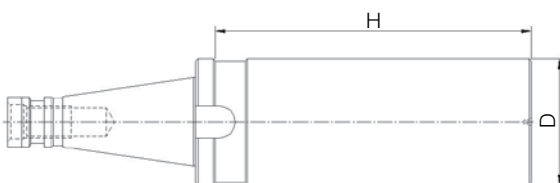
A richiesta sono fornibili mandrini con ISO 30 / On request ISO 30 taper chucks are available

DISTRIBUTORI ROTANTI DI REFRIGERANTE - ATTACCO DIN 2080 COOLANT INDUCERS - SHANK DIN 2080



ART.	ISO	d mm	D mm	D2 mm	H mm	L2 mm
00040W40DRAM	40	40	80	118	100	35
00050W40DRAM	50	40	80	118	100	36

MANDRINI CON STELO TENERO LAVORABILE - ATTACCO DIN 2080 BORING BAR BLANKS WITH SOFT BODY - SHANK DIN 2080



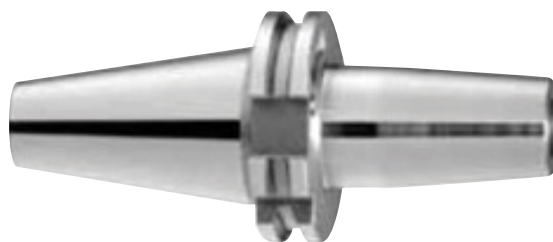
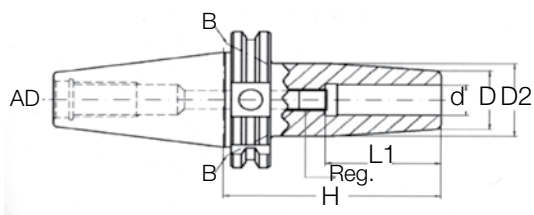
ART.	ISO	D mm	H mm
0004063STL	40	63	250

ART.	ISO	D mm	H mm
0005095STL	50	97	315

A richiesta sono fornibili mandrini con ISO 30 / On request ISO 30 taper chucks are available

MANDRINI A CALETTAMENTO A CALDO SHRINK FIT CHUCKS

MANDRINI A CALETTAMENTO A CALDO - ATTACCO DIN 69871 AD/B SHRINK FIT CHUCKS - DIN 69871 AD/B

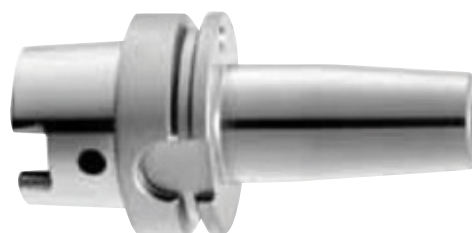
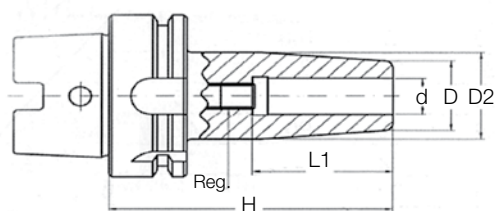


ART.	Cono esterno	d mm	D mm	D2 mm	H mm	L1 mm
9994006MC	40	6	21	27	80	36
9994006MCL120	40	6	21	27	120	36
9994006MCL160	40	6	21	27	160	36
9994008MC	40	8	21	27	80	36
9994008MCL120	40	8	21	27	120	36
9994008MCL160	40	8	21	27	160	36
9994010MC	40	10	24	32	80	42
9994010MCL120	40	10	24	32	120	42
9994010MCL160	40	10	24	32	160	42
9994012MC	40	12	24	32	80	47
9994012MCL120	40	12	24	32	120	47
9994012MCL160	40	12	24	32	160	47
9994016MC	40	16	27	35	80	50
9994016MCL120	40	16	27	35	120	50
9994016MCL160	40	16	27	35	160	50
9994020MC	40	20	33	42	80	52
9994020MCL120	40	20	33	42	120	52
9994020MCL160	40	20	33	42	160	52

ART.	Cono esterno	d mm	D mm	D2 mm	H mm	L1 mm
9995006MC	50	6	21	27	80	36
9995006MCL120	50	6	21	27	120	36
9995006MCL160	50	6	21	27	160	36
9995008MC	50	8	21	27	80	36
9995008MCL120	50	8	21	27	120	36
9995008MCL160	50	8	21	27	160	36
9995010MC	50	10	24	32	80	42
9995010MCL160	50	10	24	32	160	42
9995012MC	50	12	24	32	80	42
9995012MCL160	50	12	24	32	160	42
9995016MC	50	16	27	34	80	50
9995016MCL160	50	16	27	34	160	50
9995020MC	50	20	33	42	80	52
9995020MCL160	50	20	33	42	160	52
9995025MC	50	25	44	53	100	58
9995025MCL160	50	25	44	53	160	58
9995032MC	50	32	44	53	100	62
9995032MCL160	50	32	44	53	160	62

Bilanciati G.2,5 a 20.000 R.P.M
Balanced to 20,000 R.P.M at G.2,5

MANDRINI A CALETTAMENTO A CALDO - ATTACCO HSK63/A DIN 69893 SHRINK FIT CHUCKS - SHANK HSK63/A DIN 69893



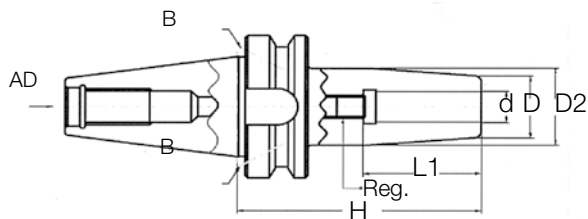
ART.	HSK/A	d mm	D mm	D2 mm	H mm	L1 mm
44463A06MC	63	6	21	27	80	36
44463A06MCL120	63	6	21	27	120	36
44463A06MCL160	63	6	21	27	160	36
44463A08MC	63	8	21	27	80	36
44463A08MCL120	63	8	21	27	120	36
44463A08MCL160	63	8	21	27	160	36
44463A10MC	63	10	24	32	85	42
44463A10MCL120	63	10	24	32	130	42
44463A10MCL160	63	10	24	32	160	42

ART.	HSK/A	d mm	D mm	D2 mm	H mm	L1 mm
44463A12MC	63	12	24	32	90	47
44463A12MCL120	63	12	24	32	120	47
44463A12MCL160	63	12	24	32	160	47
44463A16MC	63	16	27	35	95	50
44463A16MCL120	63	16	27	35	120	50
44463A16MCL160	63	16	27	35	160	50
44463A20MC	63	20	33	42	100	52
44463A20MCL120	63	20	33	42	120	52
44463A20MCL160	63	20	33	42	160	52

Bilanciati G.2,5 a 20.000 R.P.M
Balanced to 20,000 R.P.M at G.2,5

MANDRINI A CALETTAMENTO A CALDO SHRINK FIT CHUCKS

MANDRINI A CALETTAMENTO A CALDO - ATTACCO MAS BT/B
SHRINK FIT CHUCKS - SHANK MAS BT/B



ART.	Cono esterno	d mm	D mm	D2 mm	H mm	L1 mm
6664006MC	40	6	21	27	90	36
6664006MCL120	40	6	21	27	120	36
6664006MCL160	40	6	21	27	160	36
6664008MC	40	8	21	27	90	36
6664008MCL120	40	8	21	27	120	36
6664008MCL160	40	8	21	27	160	36
6664010MC	40	10	24	32	90	42
6664010MCL120	40	10	24	32	120	42
6664010MCL160	40	10	24	32	160	42
6664012MC	40	12	24	32	90	47
6664012MCL120	40	12	24	32	120	47
6664012MCL160	40	12	24	32	160	47
6664016MC	40	16	27	35	90	50
6664016MCL120	40	16	27	35	120	50
6664016MCL160	40	16	27	35	160	50
6664020MC	40	20	33	42	90	52
6664020MCL120	40	20	33	42	120	52
6664020MCL160	40	20	33	42	160	52
6665006MC	50	6	21	27	100	36
6665006MCL120	50	6	21	27	120	36
6665006MCL160	50	6	21	27	160	36
6665008MC	50	8	21	27	100	36
6665008MCL120	50	8	21	27	120	36
6665008MCL160	50	8	21	27	160	36
6665010MC	50	10	24	32	100	42
6665010MCL160	50	10	24	32	160	42
6665012MC	50	12	24	32	100	42
6665012MCL160	50	12	24	32	160	42
6665016MC	50	16	27	35	100	50
6665016MCL160	50	16	27	35	160	50
6665020MC	50	20	33	42	100	52
6665020MCL160	50	20	33	42	160	52
6665025MC	50	25	44	53	100	58
6665025MCL160	50	25	44	53	160	58
6665032MC	50	32	44	53	100	62
6665032MCL160	50	32	44	53	160	62

Bilanciati G.2,5 a 20.000 R.P.M / Balanced to 20,000 R.P.M at G.2,5

UNITÀ DI CALETTAMENTO SHRINK UNIT

UNITÀ MOBILE DI CALETTAMENTO A INDUZIONE COMPACT STARTER SHRINK UNIT

Processo di calettamento ad induzione brevettato.

Il calettamento avviene semplicemente premendo un pulsante ed il processo si arresta rilasciando il medesimo pulsante.

Ottima protezione tra la bobina ed il gambo dell'utensile tramite dischetti in ferrite a cambio rapido.

Massima lunghezza dalla linea flangia 290 mm.

Adatta a tutti gli attacchi standard tramite un semplice cambio di supporto del portautensile.

Sistemi di raffreddamento ad acqua o aria sono disponibili come optional per raffreddare i mandrini velocemente.

ACCESSORI IN DOTAZIONE:

- supporto porta mandrino
- dischetto per utensili da Ø 3-16 mm
- 1 paio di guanti termici

Patented induction shrinking process.

The shrinking process is possible by switching on and switching off the button.

The TSF discs provide optimal shielding of the magnetic field between coil and tool shank. This guarantees safe and reliable shrinking of the TSF adaptors.

It is suitable for all major tool spindles with a maximum tool length of 290 mm from taper gauge line.

The ThermoGrip® measuring adaptor works on all standard length presetting units.

The liquid cooler is a separate unit for cooling chucks which have been heated up during the shrinking process.

SUPPLIED ACCESSORIES

- chuck holder
- clamping range Ø: 3 mm - 16 mm
- 1 pair of thermic gloves

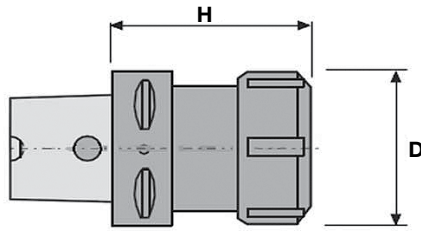


ART.	ESM100065	
Campo di serraggio HM Clamping range HM	mm	Ø 3-16
Campo di serraggio HSS Clamping range HSS	mm	Ø 12-16
Bobina		Fissa Fixed
Max lunghezza utensile Max length	mm	290 (HSK-A63)
Accessori per il raffreddamento Cooling accessories		opzionali optional
Tempo di raffreddamento Cooling time	s	300
Massima interfaccia macchina Maximum machine interface		HSK-A 100, SK50
Potenza motore Power input	kW	6,5
Alimentazione Mains voltage		400V 16A 50Hz
Temperatura di utilizzo Using temperature		~ 450°
Dimensioni Dimensions	mm	390x310x640
Peso Weight	kg	17

ART.	Accessori
ESM1000HSK32	Supporto porta mandrino HSK32 Chuck holder HSK32
ESM1000HSK40	Supporto porta mandrino HSK40 Chuck holder HSK40
ESM1000HSK50	Supporto porta mandrino HSK50 Chuck holder HSK50
ESM1000HSK63	Supporto porta mandrino HSK63 Chuck holder HSK63
ESM1000HSK80	Supporto porta mandrino HSK80 Chuck holder HSK80
ESM1000HSK100	Supporto porta mandrino HSK100 Chuck holder HSK100
ESM1000SK30	Supporto porta mandrino SK30 Chuck holder SK30
ESM1000SK40	Supporto porta mandrino SK40 Chuck holder SK40
ESM1000SK50	Supporto porta mandrino SK50 Chuck holder HSK50
ESM1000316	Dischetto per utensili da Ø 3 a 16 mm Clamping range from Ø 3 to 16 mm

MANDRINI POLIGONALI POLYGONAL CHUCKS

MANDRINI PORTA PINZE PSC ISO 26623-1 COLLECT CHUCK PSC ISO 26623-1

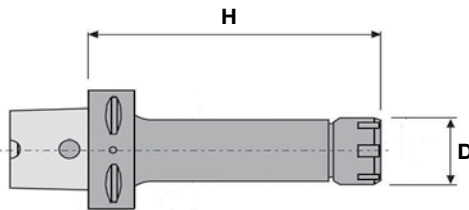


ART.	PSC	Pinza	D mm	H mm
PSC6316L60	63	ER16	28	60
PSC6325L60	63	ER25	42	60
PSC6332L60	63	ER32	50	60
PSC6340L70	63	ER40	63	70
PSC6316L100	63	ER16	28	100
PSC6325L100	63	ER25	42	100

ART.	PSC	Pinza	D mm	H mm
PSC6332L100	63	ER32	50	100
PSC6340L100	63	ER40	63	100
PSC6316L160	63	ER16	28	160
PSC6325L160	63	ER25	42	160
PSC6332L160	63	ER32	50	160

Altre misure a richiesta/ Other sizes are available on request

MANDRINI PORTA PINZE PSC ISO 26623-1 GHIERA MINI COLLECT CHUCK PSC ISO 26623-1 MINI RING

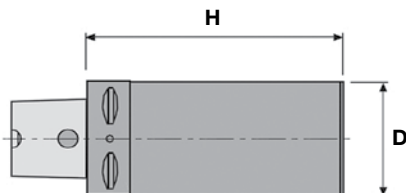


ART.	PSC	Pinza	D mm	H mm
PSC6316ML60	63	ER16	22	60
PSC6320ML60	63	ER20	28	60

ART.	PSC	Pinza	D mm	H mm
PSC6316ML100	63	ER16	22	100
PSC6320ML100	63	ER20	28	100

Altre misure a richiesta/ Other sizes are available on request

MANDRINI POLIGONALI CON STELO TENERO PSC ISO 26623-1 BORING BAR BLANKS WITH SOFT BODY PSC ISO 26623-1



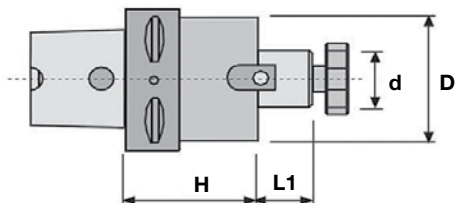
ART.	PSC	D mm	H mm
PSC63110STL85	63	110	85
PSC63130STL95	63	130	95
PSC6363STL180	63	63	180

ART.	PSC	D mm	H mm
PSC63120STL180	63	120	180
PSC6375STL195	63	75	95

Altre misure a richiesta/ Other sizes are available on request

MANDRINI POLIGONALI POLYGONAL CHUCKS

MANDRINI PORTA FRESE TRASCINAMENTO FISSO PSC ISO 26623-1 END MILL HOLDERS WITH DRIVE RING PSC-ISO 26623-1

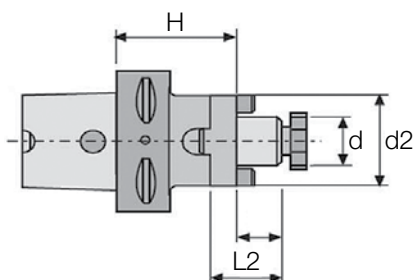


ART.	PSC	d mm	D mm	H mm	L1 mm
PSC6316TFL35	63	16	32	35	17
PSC6316TFL63	63	16	37	63	17
PSC6322TFL35	63	22	55	35	19

ART.	PSC	d mm	D mm	H mm	L1 mm
PSC6327TFL40	63	27	63	40	21
PSC6332TFL40	63	32	63	40	24
PSC6340TFL45	63	40	89	45	27

Altre misure a richiesta/ Other sizes are available on request

MANDRINI PORTA FRESE CON TRASCINAMENTO FRONTALE E LINGUETTA PSC ISO 26623-1 END MILL HOLDERS WITH DRIVE RING AND TANK PSC-ISO 26623-1

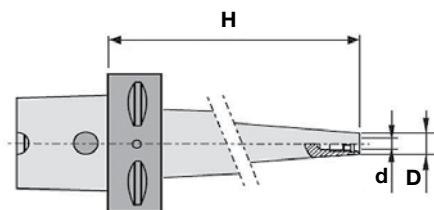


ART.	PSC	d mm	D mm	H mm	L1 mm	L2 mm
PSC6316UL90	63	16	32	90	17	27
PSC6322UL90	63	22	40	90	19	31
PSC6327UL90	63	27	48	90	21	33

ART.	PSC	d mm	D mm	H mm	L1 mm	L2 mm
PSC6332UL90	63	32	58	90	24	38
PSC6340UL90	63	40	70	90	27	41

Altre misure a richiesta/ Other sizes are available on request

MANDRINI PORTA FRESE CON ATTACCO FILETTATO PSC ISO 26623-1 CHUCKS FOR END MILLS WITH THREADED SHANK PSC-ISO 26623-1



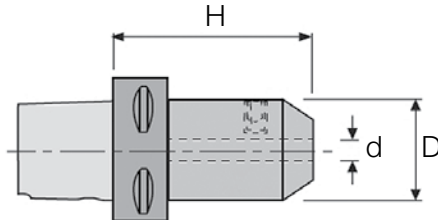
ART.	PSC	d	D mm	H mm
PSC63M08L70	63	M8	13	70
PSC63M10L90	63	M10	18	90

ART.	PSC	d	D mm	H mm
PSC63M12L100	63	M12	21	100
PSC63M16L100	63	M16	29	100

Altre misure a richiesta/ Other sizes are available on request

MANDRINI POLIGONALI POLYGONAL CHUCKS

MANDRINI PORTA FRESE TIPO WELDON PSC ISO 26623-1 WELDON MILLING CHUCKS PSC-ISO 26623-1

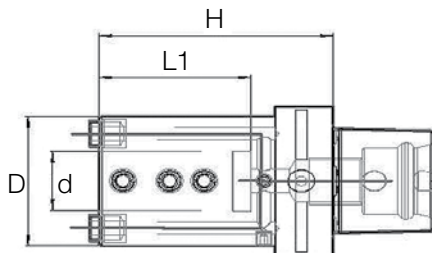


ART.	PSC	d mm	D mm	H mm
PSC63W06L55	63	6	25	55
PSC63W08L55	63	8	28	55
PSC63W10L60	63	10	35	60
PSC63W12L60	63	12	42	60
PSC63W14L65	63	14	42	60
PSC63W16L65	63	16	48	65

ART.	PSC	d mm	D mm	H mm
PSC63W18L65	63	18	48	65
PSC63W20L65	63	20	52	65
PSC63W25L80	63	25	65	80
PSC63W32L90	63	32	72	90
PSC63W40L100	63	40	80	100

Altre misure a richiesta/ Other sizes are available on request

MANDRINI PORTA BARENI ASSIALI PSC ISO 26623-1 AXIAL BORING BAR HOLDER CHUCKS PSC-ISO 26623-1

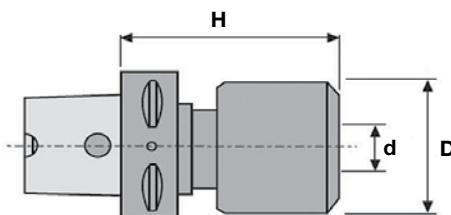


ART.	PSC	d mm	D mm	H mm	L1 mm
PSC63BR16L80	63	16	45	80	50
PSC63BR20L80	63	20	50	80	50
PSC63BR25L85	63	25	55	85	57

ART.	PSC	d mm	D mm	H mm	L1 mm
PSC63BR32L95	63	32	72	95	59
PSC63BR40L105	63	40	80	105	72

Altre misure a richiesta/ Other sizes are available on request

MANDRINI POLIGONALI A FORTE SERRAGGIO PSC ISO 26623-1 POWER MILLING CHUCKS PSC-ISO 26623-1

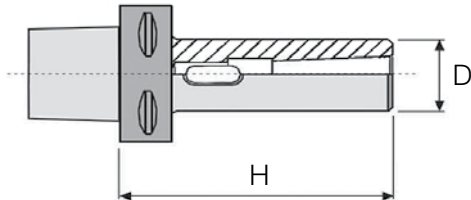


ART.	PSC	d mm	D mm	H mm
PSC6320FSL80	63	20	50	80
PSC6332FSL100	63	32	63	100

Altre misure a richiesta/ Other sizes are available on request

MANDRINI POLIGONALI POLYGONAL CHUCKS

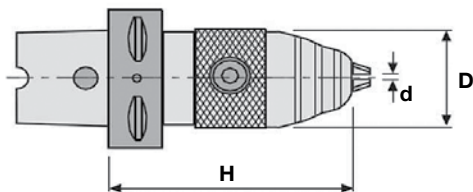
MANDRINI RIDUZIONE CONO MORSE PER PUNTE PSC ISO 26623-1 MORSE TAPER ADAPTER FOR DRILL BITS PSC-ISO 26623-1



ART.	PSC	CM	D mm	H mm
PSC63CM2PL110	63	2	32	110
PSC63CM3PL130	63	3	40	130
PSC63CM4PL155	63	4	52	155

Altre misure a richiesta/ Other sizes are available on request

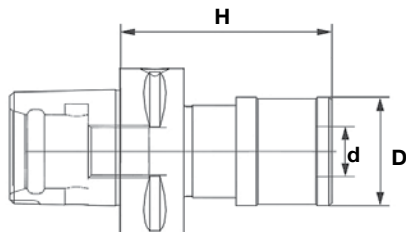
MANDRINI PORTA PUNTE INTEGRALI PSC ISO 26623-1 INTEGRAL DRILL CHUCKS PSC-ISO 26623-1



ART.	PSC	d mm	D mm	H mm
PSC63PC13IL112	63	0,5-13	50	112
PSC63PC16IL112	63	3-16	57	112

Altre misure a richiesta/ Other sizes are available on request

MANDRINI PORTA MASCHI A CAMBIO RAPIDO PSC ISO 26623-1 QUICK- CHANGE TAP HOLDERS PSC-ISO 26623-1



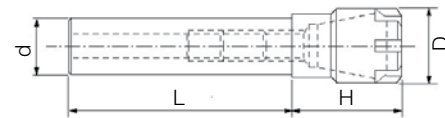
ART.	PSC	Tipo	d mm	D mm	H mm
PSC63M312L73	63	Gr.1	19	38	73
PSC63M820L97	63	Gr.2	31	55	97

Altre misure a richiesta/ Other sizes are available on request

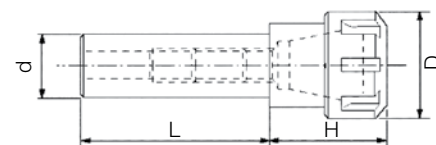
MANDRINI CILINDRICI E CONO MORSE STRAIGHT SHANK AND MORSE TAPER CHUCKS

MANDRINI CILINDRICI PORTA PINZE DIN 6499/B STRAIGHT SHANK COLLET CHUCKS DIN 6499/B

ART.	d mm	Pinza Collet	L mm	H mm	D mm	Immagine Image	
7771008ML	10	ER8	100	25	12	1	
7771208ML130	12	ER8	130	19	12		
7771011ML	10	ER11	100	26	16		
7771211ML130	12	ER11	130	26	16		
7771611ML	16	ER11	100	19	16		
7771611ML130	16	ER11	130	19	16		
7771616M	16	ER16	80	38	22		
7771616ML130	16	ER16	130	38	22		
7771620ML	16	ER20	100	42	28		
7772016M	20	ER16	100	31	22		
7772016ML130	20	ER16	130	31	22		
7772016ML160	20	ER16	160	31	22		
7772025L	20	ER25	100	47	42		2
7772032L	20	ER32	100	50	50		
7772525L	25	ER25	100	33	42		
7772532L	25	ER32	100	53	50		
7773232L	32	ER32	100	53	50		
7773240L	32	ER40	100	60	63		
7774040L	40	ER40	100	60	63		

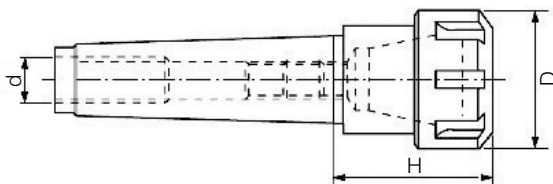


Img 1



Img 2

MANDRINI PORTA PINZE DIN 6499/B CONO MORSE DIN 228/A COLLET CHUCKS DIN 6499/B MORSE TAPER DIN 228/A



ART.	CM MT	Pinza Collet	d	D mm	H mm
5550216	2	ER16	M10	28	42
5550220	2	ER20	M10	34	50
5550225	2	ER25	M10	42	54
5550232	2	ER32	M10	50	70
5550325	3	ER25	M12	42	53
5550332	3	ER32	M12	50	70

ART.	CM MT	Pinza Collet	d	D mm	H mm
5550340	3	ER40	M12	63	80
5550425	4	ER25	M16	42	56
5550432	4	ER32	M16	50	60
5550440	4	ER40	M16	63	96
5550532	5	ER32	M20	50	50
5550540	5	ER40	M20	82	63

ASSORTIMENTI MANDRINI PORTA PINZE DIN 6499/B CONO MORSE DIN 228/A COLLET CHUCK SET DIN 6499/B MORSE TAPER DIN 228/A

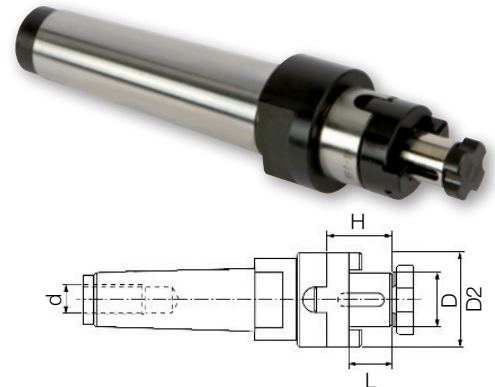
ART.	CM MT	Pinza Collet	N° Pinze Collet	Misura pinze Size collet mm
MS2ER2510	2	ER25	10	3÷16
MS3ER3212	3	ER32	12	3÷20
MS4ER3212	4	ER32	12	3÷20



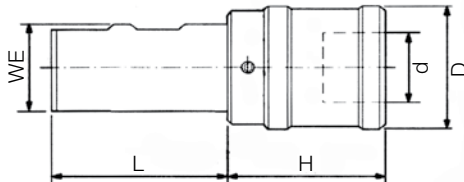
MANDRINI CILINDRICI E CONO MORSE STRAIGHT SHANK AND MORSE TAPER CHUCKS

MANDRINI CONO MORSE DIN 228/A PORTA FRESE UNIVERSALE UNIVERSAL MORSE TAPER MILLING CHUCKS DIN 228/A

ART.	CM MT	d	D mm	D2 mm	H mm	L mm
5550216U	2	M10	16	36	27	17
5550222U	2	M10	22	34	31	19
5550316U	3	M12	16	38	27	17
5550322U	3	M12	22	36	31	19
5550327U	3	M12	27	36	33	21
5550416U	4	M16	16	44,5	27	17
5550422U	4	M16	22	42,5	31	19
5550427U	4	M16	27	42,5	33	21
5550432U	4	M16	32	40,5	38	24



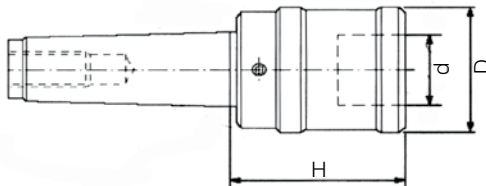
MASCHIATORI GAMBO CILINDRICO ATTACCO WELDON E WHISTLE NOTCH WELDON AND WHISTLE NOTCH STRAIGHT SHANK TAPPING CHUCK



ART.	Campo filettatura Threading range	d mm	D mm	H mm	WE mm	L mm
8032001WE	M3-M12	19	36	46	20	50
8032501WE	M3-M12	19	36	46	25	56
8032502WE	M8-M20	31	53	70	25	56
8033202WE	M8-M20	31	53	70	32	61



MASCHIATORI CONO MORSE DIN 228/A CON DOPPIA COMPENSAZIONE MORSE TAPER TAPPING CHUCKS 228/A WITH DOUBLE COMPENSATION



ART.	Campo filettatura Threading range	Cono esterno External taper	d mm	D mm	H mm
8030201	M3-M12	CM/MT 2	19	36	46
8030301	M3-M12	CM/MT 3	19	36	46
8030302	M8-M20	CM/MT 3	31	53	70
8030402	M8-M20	CM/MT 4	31	53	44



ATTACCHI CONICI PER MANDRINI / MORSE TAPER CHUCK ADAPTERS

ART.	Cono esterno External taper	Attacco/ Shank DIN
02.0301001	1	B10
02.0301201	1	B12
02.0301601	1	B16
02.0301002	2	B10
02.0301202	2	B12
02.0301602	2	B16
02.0301802	2	B18
02.0301603	3	B16
02.0301803	3	B18
02.0301604	4	B16
02.0301804	4	B18



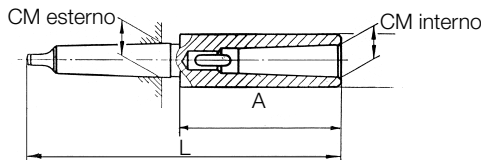
MANDRINI CILINDRICI E CONO MORSE STRAIGHT SHANK AND MORSE TAPER CHUCKS

BUSSOLE DI RIDUZIONE CONO MORSE / MORSE TAPER REDUCTION SLEEVES

ART.	Cono esterno External taper	Cono interno Internal taper
02.0400201	2	1
02.0400301	3	1
02.0400302	3	2
02.0400401	4	1
02.0400402	4	2
02.0400403	4	3
02.0400502	5	2
02.0400503	5	3
02.0400504	5	4



BUSSOLE DI RIDUZIONE TIPO LUNGO / LONG SHANK REDUCTION SLEEVES



ART.	Cono esterno External taper	Cono interno Internal taper	L mm	A mm
02.0500201	2	1	160	85
02.0500202	2	2	175	100
02.0500203	2	3	196	121
02.0500301	3	1	175	81
02.0500302	3	2	194	100
02.0500303	3	3	215	121
02.0500304	3	4	240	146

ART.	Cono esterno External taper	Cono interno Internal taper	L mm	A mm
02.0500402	4	2	215	97,5
02.0500403	4	3	240	122,5
02.0500404	4	4	265	148
02.0500405	4	5	300	182
02.0500503	5	3	268	119
02.0500504	5	4	300	151
02.0500505	5	5	335	186

BUSSOLE DI RIDUZIONE PER DISTRIBUTORI ROTANTI REDUCTION SLEEVES FOR COOLANT INDUCERS

ART.	Ø mm	Foro Hole mm	d mm	D mm	L mm
BUS3216DRA	32	16	16	32	55
BUS3220DRA	32	20	20	32	55
BUS3225DRA	32	25	25	32	55
BUS4016DRA	40	16	16	40	55
BUS4020DRA	40	20	20	40	55
BUS4025DRA	40	25	25	40	60
BUS4032DRA	40	32	32	40	65

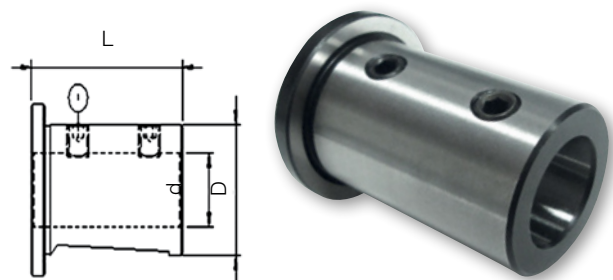
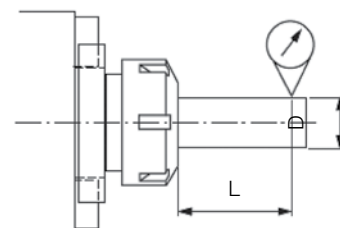


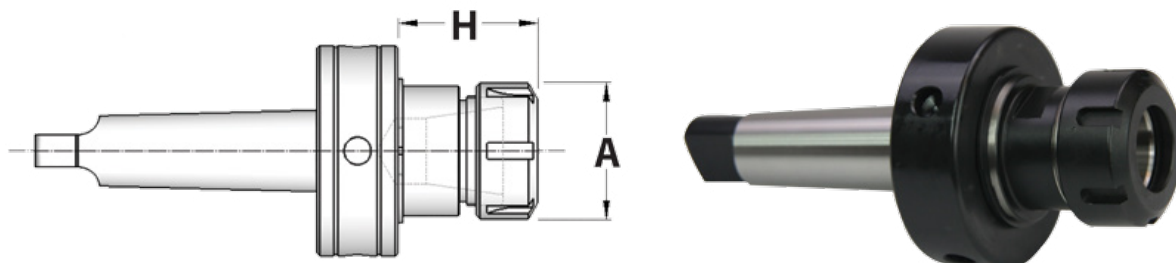
TABELLA PRECISIONE PINZE ER / ER COLLET ACCURACY TABLE

L mm	D mm	DIN 6343 STANDARD	Ultra Precise Ultra Precision mm
6	1-1,4	0,02	< 0,010
10	1,5-2,9	0,02	< 0,010
16	3-5,9	0,02	< 0,010
25	6-9,9	0,02	< 0,010
40	10-17,9	0,02	< 0,010
50	18-26,9	0,02	< 0,015
60	27-34	0,02	< 0,015



MANDRINI CILINDRICI E CONO MORSE STRAIGHT SHANK AND MORSE TAPER CHUCKS

**MANDRINO PORTAPINZE ER32 CON GHIERA PER SERRMAC/FAMUP E BIMAK
COLLET CHUCK ER32 WITH NUT IDEAL FOR SERRMAC/FAMUP E BIMAK**



ART.	Cono Taper	Passo filetto contro ghiera	H mm	A mm	Misura pinze Size collet
5550432SER	CM4	M60 x 2,5	52	50	3-20
5550432BIM	CM4	M60 x 3,0	52	50	3-20

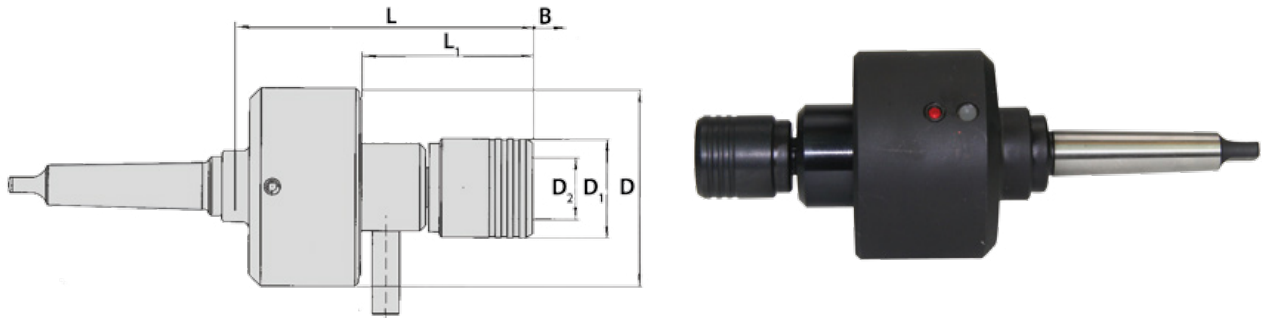
**CASSETTE CON MANDRINO PORTA PINZE CON GHIERA PER SERRMAC/FAMUP E BIMAK
CASES WITH COLLET CHUCK WITH NUT IDEAL FOR SERRMAC/FAMUP E BIMAK**

ART.	Composizione / Includes		
	N°	Descrizione / Description	ART.
5550432001SER	1	Mandrino porta pinze CM4 Collet chucks CM4	5550432SER
	7	Pinze / Collets ER32	EPR32
	1	Chiave per ghiera Nut wrench	EPR32180CH
5550432001BIM	1	Mandrino porta pinze CM4 Collet chucks CM4	5550432BIM
	7	Pinze / Collets ER32	EPR32
	1	Chiave per ghiera Nut wrench	EPR32180CH



MANDRINI CILINDRICI E CONO MORSE STRAIGHT SHANK AND MORSE TAPER CHUCKS

MANDRINO PER MASCHIARE AD INVERSIONE REVERSING TAPPING ATTACHMENT



ART.	Cono Taper	Filettatura Bussole GR1FE/NE Sleeves Threading GR1FE/NE	n. giri max (RPM)	B mm	L mm	L1 mm	D mm	D1 mm	D2 mm
8030201INV	CM2	M3 ÷ M12	1200	6	140	60	80	32	19

ASSORTIMENTO BUSSOLE CON MANDRINO PER MASCHIARE AD INVERSIONE SLEEVE SET WITH REVERSING TAPPING ATTACHMENT

ART.	Composizione / Includes		
	N°	Descrizione / Description	ART.
8030201001INV	1	Mandrino per maschiare ad inversione Reversing tapping attachment	8030201INV
	6	Bussole Nuts	GR1FE

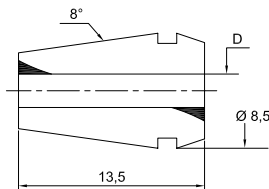


GAMMA DI BUSSOLE CHE COMPONGONO IL KIT: RANGE OF SLEEVES WHICH INCLUDE THE KIT:

ART.	Filetto Thread	d mm	D mm	D2 mm	L1 mm	L2 mm	L3 mm
GR1FE3527	M3	3,5	32	19	21,5	25	17
GR1FE4534	M4	4,5	32	19	21,5	25	17
GR1FE0649	M5-M6	6	32	19	21,5	25	17
GR1FE0862	M8	8	32	19	21,5	25	17
GR1FE0907	M12	9	32	19	21,5	25	17
GR1FE1008	M10	10	32	19	21,5	25	17

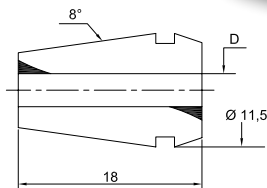
PINZE E GHIERE COLLETS AND NUTS

PINZE ER DIN 6499/B
COLLETS ER DIN 6499/B



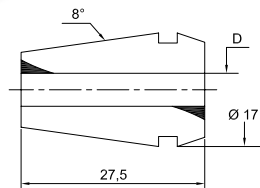
ER08

ART.	D mm
EPR08010	1
EPR08015	1,5
EPR08020	2
EPR08025	2,5
EPR08030	3
EPR08035	3,5
EPR08040	4
EPR08045	4,5
EPR08050	5



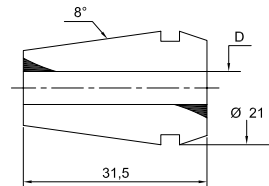
ER11

ART.	D mm
EPR11010	1
EPR11015	1,5
EPR11020	2
EPR11025	2,5
EPR11030	3
EPR11035	3,5
EPR11040	4
EPR11045	4,5
EPR11050	5
EPR11055	5,5
EPR11060	6
EPR11065	6,5
EPR11070	7



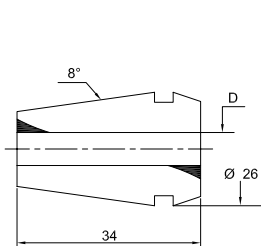
ER16

ART.	D mm
EPR16010	1
EPR16015	1,5
EPR16020	2
EPR16025	2,5
EPR16030	3
EPR16040	4
EPR16050	5
EPR16060	6
EPR16070	7
EPR16080	8
EPR16090	9
EPR16100	10



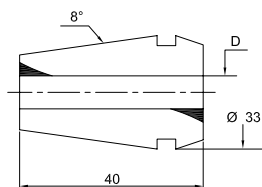
ER20

ART.	D mm
EPR20010	1
EPR20015	1,5
EPR20020	2
EPR20025	2,5
EPR20030	3
EPR20040	4
EPR20050	5
EPR20060	6
EPR20070	7
EPR20080	8
EPR20090	9
EPR20100	10
EPR20110	11
EPR20120	12
EPR20130	13



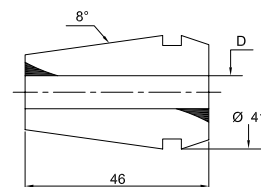
ER25

ART.	D mm
EPR25010	1
EPR25015	1,5
EPR25020	2
EPR25025	2,5
EPR25030	3
EPR25040	4
EPR25050	5
EPR25060	6
EPR25070	7
EPR25080	8
EPR25090	9
EPR25100	10
EPR25110	11
EPR25120	12
EPR25130	13
EPR25140	14
EPR25150	15
EPR25160	16



ER32

ART.	D mm
EPR32020	2
EPR32025	2,5
EPR32030	3
EPR32040	4
EPR32050	5
EPR32060	6
EPR32070	7
EPR32080	8
EPR32090	9
EPR32100	10
EPR32110	11
EPR32120	12
EPR32130	13
EPR32140	14
EPR32150	15
EPR32160	16
EPR32170	17
EPR32180	18
EPR32190	19
EPR32200	20



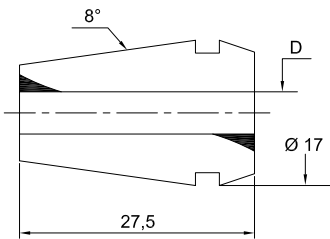
ER40

ART.	D mm
EPR40030	3
EPR40040	4
EPR40050	5
EPR40060	6
EPR40070	7
EPR40080	8
EPR40090	9
EPR40100	10
EPR40110	11
EPR40120	12
EPR40130	13
EPR40140	14
EPR40150	15
EPR40160	16

ART.	D mm
EPR40170	17
EPR40180	18
EPR40190	19
EPR40200	20
EPR40210	21
EPR40220	22
EPR40230	23
EPR40240	24
EPR40250	25
EPR40260	26
EPR40270	27
EPR40280	28
EPR40290	29
EPR40300	30

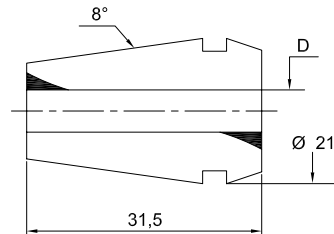
PINZE E GHIERE COLLETS AND NUTS

PINZE TENUTA STAGNA ER DIN 6499/B
WATERTIGHT COLLETS ER DIN 6499/B



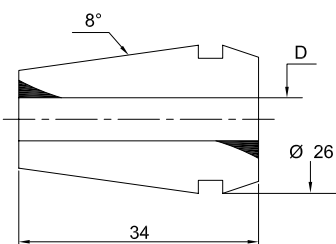
ER16

ART.	D mm
EPR16030TS	3
EPR16040TS	4
EPR16050TS	5
EPR16060TS	6
EPR16070TS	7
EPR16080TS	8
EPR16090TS	9
EPR16100TS	10



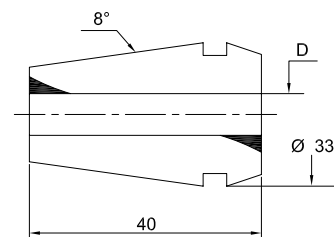
ER20

ART.	D mm
EPR20030TS	3
EPR20040TS	4
EPR20050TS	5
EPR20060TS	6
EPR20070TS	7
EPR20080TS	8
EPR20090TS	9
EPR20100TS	10
EPR20110TS	11
EPR20120TS	12
EPR20130TS	13



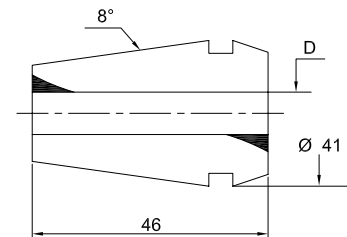
ER25

ART.	D mm
EPR25030TS	3
EPR25040TS	4
EPR25050TS	5
EPR25060TS	6
EPR25070TS	7
EPR25080TS	8
EPR25090TS	9
EPR25100TS	10
EPR25110TS	11
EPR25120TS	12
EPR25130TS	13
EPR25140TS	14
EPR25150TS	15
EPR25160TS	16



ER32

ART.	D mm
EPR32030TS	3
EPR32040TS	4
EPR32050TS	5
EPR32060TS	6
EPR32070TS	7
EPR32080TS	8
EPR32090TS	9
EPR32100TS	10
EPR32110TS	11
EPR32120TS	12
EPR32130TS	13
EPR32140TS	14
EPR32150TS	15
EPR32160TS	16
EPR32170TS	17
EPR32180TS	18
EPR32190TS	19
EPR32200TS	20

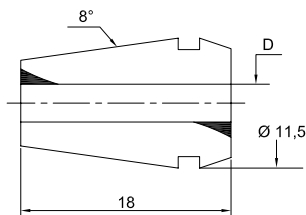


ER40

ART.	D mm
EPR40040TS	4
EPR40050TS	5
EPR40060TS	6
EPR40070TS	7
EPR40080TS	8
EPR40090TS	9
EPR40100TS	10
EPR40110TS	11
EPR40120TS	12
EPR40130TS	13
EPR40140TS	14
EPR40150TS	15
EPR40160TS	16
EPR40170TS	17
EPR40180TS	18
EPR40190TS	19
EPR40200TS	20
EPR40210TS	21
EPR40220TS	22
EPR40230TS	23
EPR40240TS	24
EPR40250TS	25
EPR40260TS	26

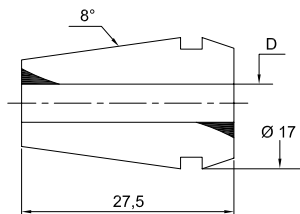
PINZE E GHIERE COLLETS AND NUTS

**PINZE ULTRA PRECISE ER DIN 6499/B
ULTRA PRECISION COLLETS ER DIN 6499/B**



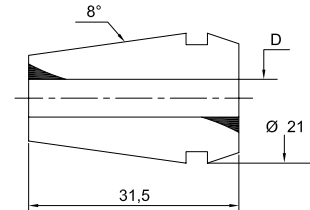
ER11

ART.	D mm
EPR11030UP	3
EPR11035UP	3,5
EPR11040UP	4
EPR11045UP	4,5
EPR11050UP	5
EPR11055UP	5,5
EPR11060UP	6
EPR11065UP	6,5
EPR11070UP	7



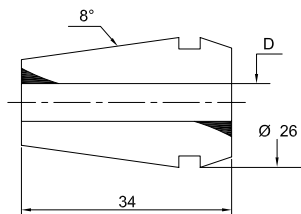
ER16

ART.	D mm
EPR16030UP	3
EPR16040UP	4
EPR16050UP	5
EPR16060UP	6
EPR16070UP	7
EPR16080UP	8
EPR16090UP	9
EPR16100UP	10



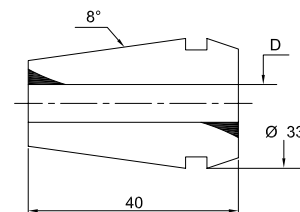
ER20

ART.	D mm
EPR20030UP	3
EPR20040UP	4
EPR20050UP	5
EPR20060UP	6
EPR20070UP	7
EPR20080UP	8
EPR20090UP	9
EPR20100UP	10
EPR20110UP	11
EPR20120UP	12
EPR20130UP	13



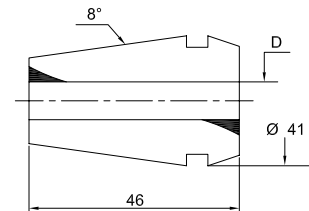
ER25

ART.	D mm
EPR25030UP	3
EPR25040UP	4
EPR25050UP	5
EPR25060UP	6
EPR25070UP	7
EPR25080UP	8
EPR25090UP	9
EPR25100UP	10
EPR25110UP	11
EPR25120UP	12
EPR25130UP	13
EPR25140UP	14
EPR25150UP	15
EPR25160UP	16



ER32

ART.	D mm
EPR32030UP	3
EPR32040UP	4
EPR32050UP	5
EPR32060UP	6
EPR32070UP	7
EPR32080UP	8
EPR32090UP	9
EPR32100UP	10
EPR32110UP	11
EPR32120UP	12
EPR32130UP	13
EPR32140UP	14
EPR32150UP	15
EPR32160UP	16
EPR32170UP	17
EPR32180UP	18
EPR32190UP	19
EPR32200UP	20

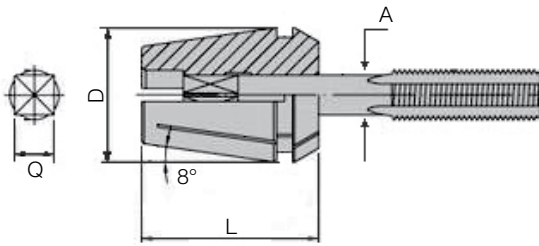


ER40

ART.	D mm
EPR40030UP	3
EPR40040UP	4
EPR40050UP	5
EPR40060UP	6
EPR40070UP	7
EPR40080UP	8
EPR40090UP	9
EPR40100UP	10
EPR40110UP	11
EPR40120UP	12
EPR40130UP	13
EPR40140UP	14
EPR40150UP	15
EPR40160UP	16
EPR40170UP	17
EPR40180UP	18
EPR40190UP	19
EPR40200UP	20
EPR40210UP	21
EPR40220UP	22
EPR40230UP	23
EPR40240UP	24
EPR40250UP	25

PINZE E GHIERE COLLETS AND NUTS

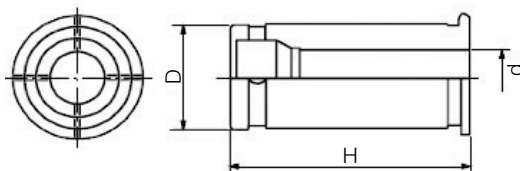
PINZE ER PORTA MASCHI PER MASCHIATURA RIGIDA RIGID TAP ER COLLETS



ART.	A mm	Q mm	D mm	L mm
EPR16035MR	3,5	2,7	17	27,5
EPR16040MR	4	3	17	27,5
EPR16045MR	4,5	3,4	17	27,5
EPR16050MR	5	4	17	27,5
EPR16055MR	5,5	4,3	17	27,5
EPR16060MR	6	4,9	17	27,5
EPR16070MR	7	5,5	17	27,5
EPR20035MR	3,5	2,7	21	31,5
EPR20040MR	4	3	21	31,5
EPR20045MR	4,5	3,4	21	31,5
EPR20050MR	5	4	21	31,5
EPR20055MR	5,5	4,3	21	31,5
EPR20060MR	6	4,9	21	31,5
EPR20070MR	7	5,5	21	31,5
EPR20080MR	8	6,2	21	31,5
EPR20090MR	9	7	21	31,5
EPR20100MR	10	8	21	31,5
EPR25035MR	3,5	2,7	26	34
EPR25040MR	4	3	26	34
EPR25045MR	4,5	3,4	26	34
EPR25050MR	5	4	26	34
EPR25055MR	5,5	4,3	26	34
EPR25060MR	6	4,9	26	34
EPR25070MR	7	5,5	26	34
EPR25080MR	8	6,2	26	34
EPR25090MR	9	7	26	34
EPR25100MR	10	8	26	34

ART.	A mm	Q mm	D mm	L mm
EPR25110MR	11	9	26	34
EPR25120MR	12	9	26	34
EPR32035MR	3,5	2,7	33	40
EPR32040MR	4	3	33	40
EPR32045MR	4,5	3,4	33	40
EPR32050MR	5	4	33	40
EPR32055MR	5,5	4,3	33	40
EPR32060MR	6	4,9	33	40
EPR32070MR	7	5,5	33	40
EPR32080MR	8	6,2	33	40
EPR32090MR	9	7	33	40
EPR32100MR	10	8	33	40
EPR32110MR	11	9	33	40
EPR32120MR	12	9	33	40
EPR32140MR	14	11	33	40
EPR32160MR	16	12	33	40
EPR40060MR	6	4,9	41	46
EPR40070MR	7	5,5	41	46
EPR40080MR	8	6,2	41	46
EPR40090MR	9	7	41	46
EPR40100MR	10	8	41	46
EPR40110MR	11	9	41	46
EPR40120MR	12	9	41	46
EPR40140MR	14	11	41	46
EPR40160MR	16	12	41	46
EPR40180MR	18	14,5	41	46
EPR40200MR	20	16	41	46

PINZE CILINDRICHE PER MANDRINI A FORTE SERRAGGIO STRAIGHT SHANK COLLETS FOR HIGH TIGHTENING TORQUE CHUCKS

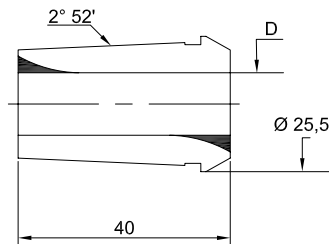
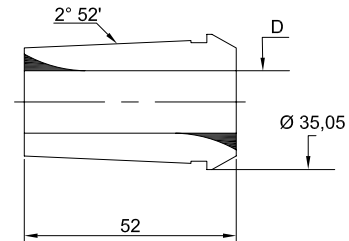
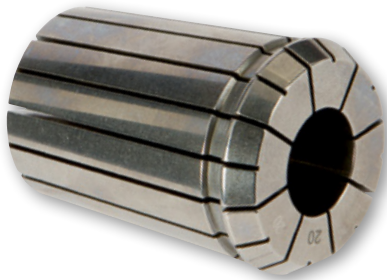


ART.	d mm	D mm	H mm
EPR2004FS	4	20	54
EPR2006FS	6	20	54
EPR2008FS	8	20	54
EPR2010FS	10	20	54
EPR2012FS	12	20	54
EPR2014FS	14	20	54
EPR2016FS	16	20	54
EPR3206FS	6	32	60

ART.	d mm	D mm	H mm
EPR3208FS	8	32	60
EPR3210FS	10	32	60
EPR3212FS	12	32	60
EPR3214FS	14	32	60
EPR3216FS	16	32	60
EPR3218FS	18	32	60
EPR3220FS	20	32	60
EPR3225FS	25	32	60

PINZE E GHIERE COLLETS AND NUTS

PINZE EOP DIN 6388/B COLLETS EOP DIN 6388/B



EOP16

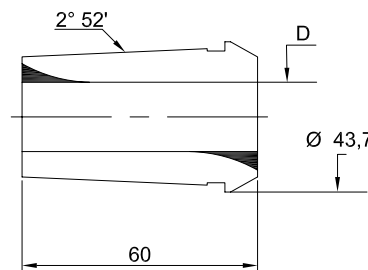
ART.	D mm
EOP16020	2
EOP16025	2,5
EOP16030	3
EOP16035	3,5
EOP16040	4
EOP16045	4,5
EOP16050	5
EOP16055	5,5
EOP16060	6
EOP16065	6,5
EOP16070	7
EOP16075	7,5
EOP16080	8
EOP16085	8,5
EOP16090	9

ART.	D mm
EOP16095	9,5
EOP16100	10
EOP16105	10,5
EOP16110	11
EOP16115	11,5
EOP16120	12
EOP16125	12,5
EOP16130	13
EOP16135	13,5
EOP16140	14
EOP16145	14,5
EOP16150	15
EOP16155	15,5
EOP16160	16

EOP25

ART.	D mm
EOP25020	2
EOP25025	2,5
EOP25030	3
EOP25035	3,5
EOP25040	4
EOP25045	4,5
EOP25050	5
EOP25055	5,5
EOP25060	6
EOP25065	6,5
EOP25070	7
EOP25075	7,5
EOP25080	8
EOP25085	8,5
EOP25090	9
EOP25095	9,5
EOP25100	10
EOP25105	10,5
EOP25110	11
EOP25115	11,5
EOP25120	12
EOP25125	12,5
EOP25130	13
EOP25135	13,5

ART.	D mm
EOP25140	14
EOP25145	14,5
EOP25150	15
EOP25155	15,5
EOP25160	16
EOP25165	16,5
EOP25170	17
EOP25175	17,5
EOP25180	18
EOP25185	18,5
EOP25190	19
EOP25195	19,5
EOP25200	20
EOP25205	20,5
EOP25210	21
EOP25215	21,5
EOP25220	22
EOP25225	22,5
EOP25230	23
EOP25235	23,5
EOP25240	24
EOP25245	24,5
EOP25250	25



EOP32

ART.	D mm
EOP32030	3
EOP32035	3,5
EOP32040	4
EOP32045	4,5
EOP32050	5
EOP32055	5,5
EOP32060	6
EOP32065	6,5
EOP32070	7
EOP32075	7,5
EOP32080	8
EOP32085	8,5
EOP32090	9
EOP32095	9,5
EOP32100	10

ART.	D mm
EOP32105	10,5
EOP32110	11
EOP32115	11,5
EOP32120	12
EOP32125	12,5
EOP32130	13
EOP32135	13,5
EOP32140	14
EOP32145	14,5
EOP32150	15
EOP32155	15,5
EOP32160	16
EOP32165	16,5
EOP32170	17
EOP32175	17,5

ART.	D mm
EOP32180	18
EOP32185	18,5
EOP32190	19
EOP32195	19,5
EOP32200	20
EOP32205	20,5
EOP32210	21
EOP32215	21,5
EOP32220	22
EOP32225	22,5
EOP32230	23
EOP32235	23,5
EOP32240	24
EOP32245	24,5
EOP32250	25

ART.	D mm
EOP32255	25,5
EOP32260	26
EOP32265	26,5
EOP32270	27
EOP32275	27,5
EOP32280	28
EOP32285	28,5
EOP32290	29
EOP32295	29,5
EOP32300	30
EOP32305	30,5
EOP32310	31
EOP32315	31,5
EOP32320	32

PINZE E GHIERE COLLETS AND NUTS

SERIE PINZE ER SU ZOCCOLO / ER COLLETS ON BASE

ART.	Pinza Collet	Misura pinze Collet size mm	Quantità pezzi Pieces
SER08001	ER08	1÷5 x 0,5	9
SER11001	ER11	1÷7 x 0,5	13
SER16001	ER16	1÷10 x 1,0	10
SER20001	ER20	2÷13 x 1,0	12
SER25001	ER25	2÷16 x 1,0	15
SER32001	ER32	3÷20 x 1,0	18
SER40001	ER40	4÷26 x 1,0	23



SERIE PINZE ER IN VALIGETTA METALLO / ER COLLETS IN METAL CASE

ART.	Pinza Collet	Misura pinze Collet size mm	Quantità pezzi Pieces
SER08001VA	ER08	1÷5 x 0,5	9
SER11001VA	ER11	1÷7 x 0,5	13
SER16001VA	ER16	1÷10 x 1,0	10
SER20001VA	ER20	2÷13 x 1,0	12
SER25001VA	ER25	2÷16 x 1,0	15
SER32001VA	ER32	3÷20 x 1,0	18
SER40001VA	ER40	4÷26 x 1,0	23



CASSETTE CON MANDRINO PORTA PINZE A FORTE SERRAGGIO CASES WITH HIGH TIGHTENING TORQUE COLLET CHUCKS

ART.	Composizione / Includes		
	N°	Descrizione / Description	ART.
6664020001FS	1	Mandrino porta pinze comprensivo di chiave per ghiera Collet chuck with nut wrench	1114020FS
	6	Pinze / Collets ER20FS 4-6-8-10-12-16 mm	EPR20FS
6664032001FS	1	Mandrino porta pinze comprensivo di chiave per ghiera Collet chuck with nut wrench	1114032FS
	7	Pinze / Collets ER32FS 6-8-10-12-16-20-25 mm	EPR32FS
6665032001FS	1	Mandrino porta pinze comprensivo di chiave per ghiera Collet chuck with nut wrench	1115032FS
	7	Pinze / Collets ER32FS 6-8-10-12-16-20-25 mm	EPR32FS
9994020001FS	1	Mandrino porta pinze comprensivo di chiave per ghiera Collet chuck with nut wrench	3334020FS
	6	Pinze / Collets ER20FS 4-6-8-10-12-16 mm	EPR20FS
9994032001FS	1	Mandrino porta pinze comprensivo di chiave per ghiera Collet chuck with nut wrench	3334032FS
	7	Pinze / Collets ER32FS 6-8-10-12-16-20-25 mm	EPR32FS
9995032001FS	1	Mandrino porta pinze comprensivo di chiave per ghiera Collet chuck with nut wrench	3335032FS
	7	Pinze / Collets ER32FS 6-8-10-12-16-20-25 mm	EPR32FS



PINZE E GHIERE COLLETS AND NUTS

CASSETTE CON MANDRINO PORTA PINZE CASES WITH COLLET CHUCK

ART.	Composizione / Includes	
	N°	Descrizione / Description ART.
6664032001	1	Mandrino porta pinze Collet chucks 6664032
	18	Pinze / Collets ER32 3 ÷ 20 mm EPR32
	1	Chiave per ghiera Nut wrench EPR32180CH
6664040001	1	Mandrino porta pinze Collet chucks 6664040
	23	Pinze / Collets ER40 4 ÷ 26 mm EPR40
	1	Chiave per ghiera Nut wrench EPR40180CH
6665032001	1	Mandrino porta pinze Collet chucks 6665032
	18	Pinze / Collets ER32 3 ÷ 20 mm EPR32
	1	Chiave per ghiera Nut wrench EPR32180CH
6665040001	1	Mandrino porta pinze Collet chucks 6665040
	23	Pinze / Collets ER40 4 ÷ 26 mm EPR40
	1	Chiave per ghiera Nut wrench EPR40180CH
9994032001	1	Mandrino porta pinze Collet chucks 9994032
	18	Pinze / Collets ER32 3 ÷ 20 mm EPR32
	1	Chiave per ghiera Nut wrench EPR32180CH
9994040001	1	Mandrino porta pinze Collet chucks 9994040
	23	Pinze / Collets ER40 4 ÷ 26 mm EPR40
	1	Chiave per ghiera Nut wrench EPR40180CH
9995032001	1	Mandrino porta pinze Collet chucks 9995032
	18	Pinze / Collets ER32 3 ÷ 20 mm EPR32
	1	Chiave per ghiera Nut wrench EPR32180CH
9995040001	1	Mandrino porta pinze Collet chucks 9995040
	23	Pinze / Collets ER40 4 ÷ 26 mm EPR40
	1	Chiave per ghiera Nut wrench EPR40180CH

ART.	Composizione / Includes	
	N°	Descrizione / Description ART.
0004032001	1	Mandrino porta pinze Collet chucks 0004032
	18	Pinze / Collets ER32 3 ÷ 20 mm EPR32
	1	Chiave per ghiera Nut wrench EPR32180CH

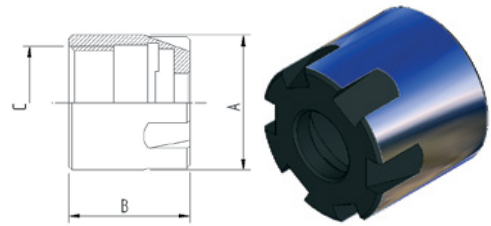


PINZE E GHIERE COLLETS AND NUTS

GHIERE MINI / MINI COLLET NUTS

ART.	Pinza Collet	A mm	B mm	C
EPR08100M	ER08	12	12	M10x0,75
EPR11100M	ER11	16	12	M13x0,75
EPR16100M	ER16	22	18	M19x1
EPR20100M	ER20	28	19	M24x1
EPR25100M	ER25	35	20	M30x1
EPR11100MSX	ER11	16	12	M13x0,75
EPR16100MSX	ER16	22	18	M19x1
EPR20100MSX	ER20	28	19	M24x1
EPR25100MSX	ER25	35	20	M30x1

Tipo SX = sinistre / Type SX = left



GHIERE PER PINZE DIN 6499 / COLLET NUTS DIN 6499

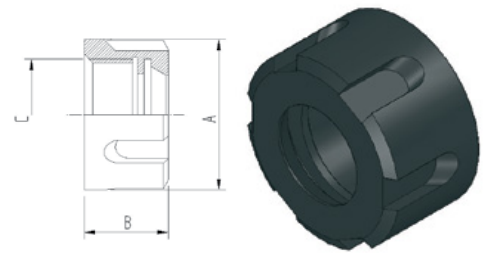
Tipo G con estrazione eccentrica pre bilanciata
G type with pre-balanced eccentric extraction

ART.	Pinza Collet	A mm	B mm	C
EPR16120G	ER16	32	17	M22x1,5
EPR20120G	ER20	35	19	M25x1,5
EPR25120G	ER25	42	20	M32x1,5
EPR32120G	ER32	50	22,5	M40x1,5
EPR32130G*	ER32	50	26	M40x1,5
EPR40120G	ER40	63	25,5	M50x1,5
EPR40130G*	ER40	63	29	M50x1,5

* Con sfere / With ball bearing

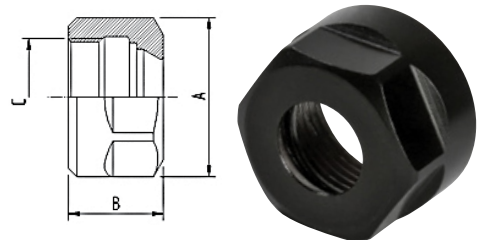
Tipo GC con estrazione concentrica
GC type with concentric extraction

ART.	Pinza Collet	A mm	B mm	C
EPR16120GC	ER16	32	17	M22x1,5
EPR25120GC	ER25	42	20	M32x1,5
EPR32120GC	ER32	50	22,5	M40x1,5
EPR40120GC	ER40	63	25,5	M50x1,5



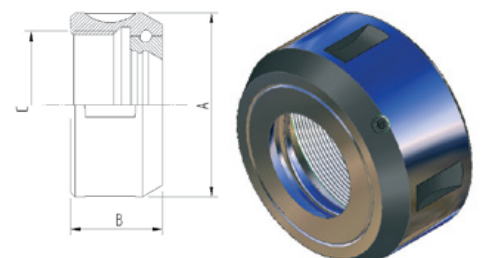
GHIERE PER PINZE DIN 6499 FORMA ESAGONALE HEX COLLET NUTS DIN 6499

ART.	Pinza Collet	A mm	B mm	C
EPR11120ES	ER11	19	11,3	M14x0,75
EPR16120ES	ER16	28	17,5	M22x1,5
EPR20120ES	ER20	34	19	M25x1,5



GHIERE CON SFERE PER PINZE DIN 6388 COLLET NUTS WITH BALL BEARING DIN 6388

ART.	Pinza Collet	A mm	B mm	C
EOP16130G	EOP16	43	24	M33x1,5
EOP25130G	EOP25	60	30	M48x2
EOP32130G	EOP32	72	33,5	M60x2,5

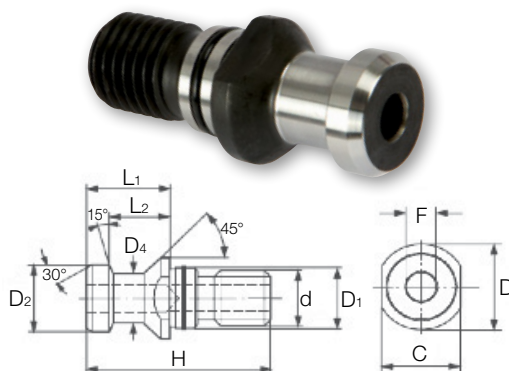


ACCESSORI E PARTI DI RICAMBIO ACCESSORIES AND SPARE PARTS

TIRANTI FORATI E NON FORATI DIN 69872A PULL STUDS WITH OR WITHOUT HOLES DIN 69872A

ART.	ISO	d	D	D1	D2	D4	H	L1	L2	C	F
DIN4015	40	M16	23	17	19	14	54	26	20	19	7
DIN4015NF	40	M16	23	17	19	14	54	26	20	19	7
DIN5015	50	M24	36	25	28	21	74	34	25	30	11,5
DIN5015NF	50	M24	36	25	28	21	74	34	25	30	11,5

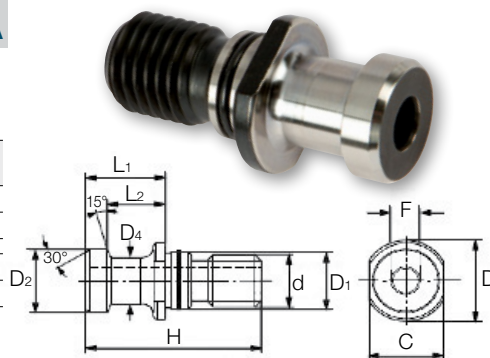
Tipo NF = non forati / Type NF = without holes



TIRANTI FORATI E NON FORATI ISO/DIN 7388/2 A PULL STUDS WITH OR WITHOUT HOLES ISO/DIN 7388/2 A

ART.	ISO	d	D	D1	D2	D4	H	L1	L2	C	F
TC4015	40	M16	23	17	19	14	54	26	20	19	7
TC4015NF	40	M16	23	17	19	14	54	26	20	19	7
TC5015	50	M24	36	25	28	21	74	34	25	30	11,5
TC5015NF	50	M24	36	25	28	21	74	34	25	30	11,5

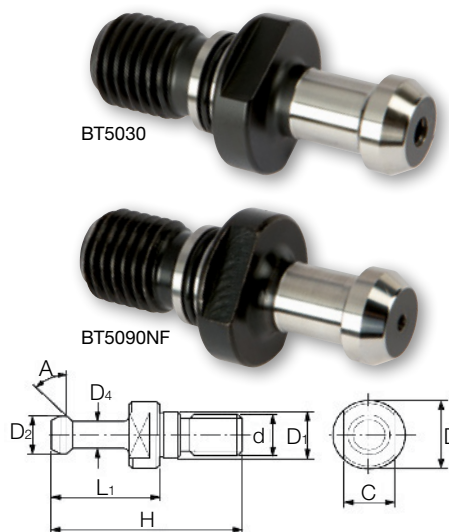
Tipo NF = non forati / Type NF = without holes



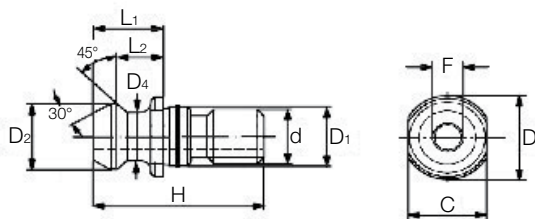
TIRANTI FORATI E NON FORATI MAS 403/BT PULL STUDS WITH OR WITHOUT HOLES MAS 403/BT

ART.	ISO	A	d	D	D1	D2	D4	H	L1	C
BT4030	40	30°	M16	23	17	15	10	60	35	19
BT4045	40	45°	M16	23	17	15	10	60	35	19
BT4090	40	90°	M16	23	17	15	10	60	35	19
BT4030NF	40	30°	M16	23	17	15	10	60	35	19
BT4045NF	40	45°	M16	23	17	15	10	60	35	19
BT4090NF	40	90°	M16	23	17	15	10	60	35	19
BT5030	50	30°	M24	38	25	23	17	85	45	30
BT5045	50	45°	M24	38	25	23	17	85	45	30
BT5090	50	90°	M24	38	25	23	17	85	45	30
BT5030NF	50	30°	M24	38	25	23	17	85	45	30
BT5045NF	50	45°	M24	38	25	23	17	85	45	30
BT5090NF	50	90°	M24	38	25	23	17	85	45	30

Tipo NF = non forati / Type NF = without holes



TIRANTI FORATI E NON FORATI ISO/DIN 7388/2 PULL STUDS WITH OR WITHOUT HOLES ISO/DIN 7388/2

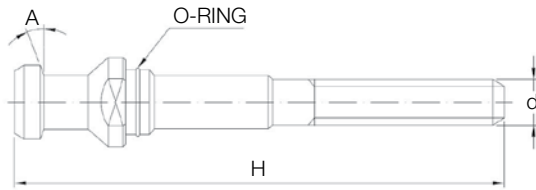


ART.	ISO	d	D	D1	D2	D4	H	L1	L2	C	F
CAT4045	40	M16	22,5	17	18,9	12,9	44,5	16,5	11,2	18	7,3
CAT4045NF	40	M16	22,5	17	18,9	12,9	44,5	16,5	11,2	18	7,3
CAT5045	50	M24	37	25	29,1	19,6	65,5	25,5	17,9	30	11,5
CAT5045NF	50	M24	37	25	29,1	19,6	65,5	25,5	17,9	30	11,5

Tipo NF = non forati / Type NF = without holes

ACCESSORI E PARTI DI RICAMBIO ACCESSORIES AND SPARE PARTS

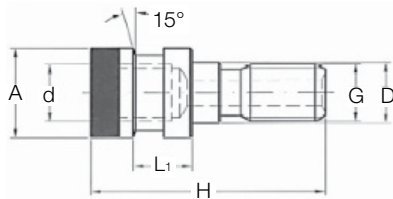
TIRANTI PROLUNGATI PER MANDRINI COMBINATI P/F LONG PULL STUDS FOR MORSE TAPER P/F



ART.	ISO	CM MT	d	H mm	A mm
DIN4015M10	40	2	M10	110	-
DIN4015M12	40	3	M12	110	-
DIN4015M16	40	4	M16	120	-
TC4015M10	40	2	M10	110	-
TC4015M12	40	3	M12	110	-
TC4015M16	40	4	M16	120	-
CAT4045M10	40	2	M10	100	-
CAT4045M12	40	3	M12	105	-
CAT4045M16	40	4	M16	110	-

ART.	ISO	CM MT	d	H mm	A mm
BT4030M10	40	2	M10	120	30°
BT4030M12	40	3	M12	120	30°
BT4030M16	40	4	M16	125	30°
BT4045M10	40	2	M10	120	45°
BT4045M12	40	3	M12	120	45°
BT4045M16	40	4	M16	125	45°
BT4090M10	40	2	M10	120	90°
BT4090M12	40	3	M12	120	90°
BT4090M16	40	4	M16	125	90°

TIRANTI OTT / OTT PULL STUDS



ART.	ISO	d	H mm	A mm	L1 mm	G	D mm
OTT40DIN	40	M16	53	25	14,52	M16	17
OTT40BT	40	M16	56	25	17,54	M16	17
OTT50	50	M24	65	39,6	14	M24	25

CHIAVI PER GHIERA / NUT WRENCHES



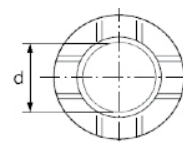
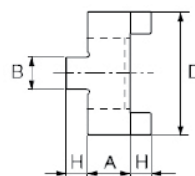
ART.	Ghiera Nut
EPR08160M	EPR08100M
EPR11160M	EPR11100M
EPR16160M	EPR16100M
EPR20160M	EPR20100M
EPR25160M	EPR25100M

ART.	Ghiera Nut
EPR16180CH	EPR16120G
EPR20180CH	EPR20120G
EPR25180CH	EPR25120G
EPR32180CH	EPR32120G
EPR40180CH	EPR40120G

ART.	Ghiera Nut
EOP16180CHS	EOP16130G
EOP25180CHS	EOP25130G
EOP32180CHS	EOP32130G

ANELLI DI TRASCINAMENTO / DRIVE RINGS

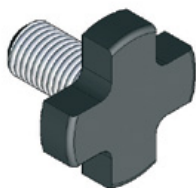
ART.	d mm	D mm	A mm	B mm	H mm
ANTRA16	16	32	10	8	5
ANTRA22	22	40	12	10	5,6
ANTRA27	27	48	12	12	6,3
ANTRA32	32	58	14	14	7
ANTRA40	40	70	14	16	8



ACCESSORI E PARTI DI RICAMBIO ACCESSORIES AND SPARE PARTS

VITI A CROCE ARBOR SCREWS

ART.	Filettatura Thread
VICROM08	M8
VICROM10	M10
VICROM12	M12
VICROM16	M16
VICROM20	M20



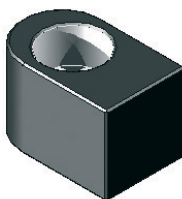
VITI PER CONO MORSE MOUNTING SCREWS

ART.	Filettatura Thread
VITICM1F	M6
VITICM2F	M10
VITICM3F	M12
VITICM4F	M16
VITICM5F	M20



TASSELLI DI TRASCINAMENTO DRIVE KEYS

ART.	Tipo Type
TASSRI16TF	16TF
TASSRI22TF	22TF
TASSRI27TF	27TF
TASSRI32TF	32TF
TASSRI40TF	40TF



GHIERE TENUTA VITI BACK UP SCREWS

ART.	CM MT
GHIERASXCM1	1
GHIERASXCM2	2
GHIERASXCM3	3
GHIERASXCM4	4
GHIERASXCM5	5



GRANI FISSAGGIO FRESE WELDON END MILL SCREWS

ART.	Weldon	DxL
GRANIM0610	6	M6x10
GRANIM0810	8	M8x10
GRANIM1012	10	M10x12
GRANIM1216	12/14	M12x16
GRANIM1416	16/18	M14x16
GRANIM1616	20	M16x16
GRANIM1820	25	M18x2x20
GRANIM2020	32/40	M20x2x20



RACCORDI PER REFRIGERANTE COOLANT CONNECTOR

ART.	Foro Hole mm	Filettatura Thread
ADUHSK50A	6,5	M16x1
ADUHSK63A	8	M18x1
ADUHSK100A	12	M24x1,5



MANDRINI AUTOSERRANTI / KEYLESS CHUCKS

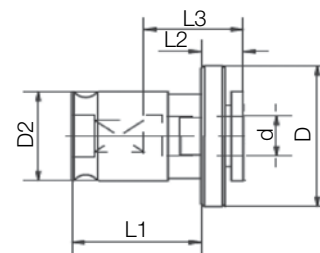
ART.	DIN	Per punte Drill bits ø mm
02.0101012	B12	1-10
02.0101316	B16	1-13
3050626	B16	0-16



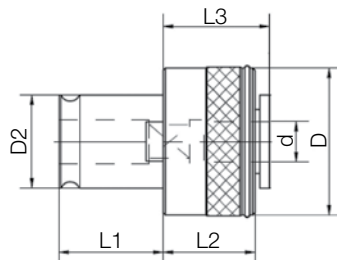
ACCESSORI E PARTI DI RICAMBIO ACCESSORIES AND SPARE PARTS

BUSSOLE PORTA MASCHIO SENZA FRIZIONE TAP COLLETS WITHOUT CLUTCH

ART.	Filetto Thread	d mm	D mm	D2 mm	L1 mm	L2 mm	L3 mm
GR1NE2821	M2-M2,5	2,8	30	19	21,5	7	17
GR1NE3527	M3	3,5	30	19	21,5	7	17
GR1NE0403	M3,5	4	30	19	21,5	7	17
GR1NE4534	M4	4,5	30	19	21,5	7	17
GR1NE0540	M5	5	30	19	21,5	7	17
GR1NE0649	M6	6	30	19	21,5	7	17
GR1NE0755	M10	7	30	19	21,5	7	17
GR1NE0862	M8	8	30	19	21,5	7	17
GR1NE0907	M12	9	30	19	21,5	7	17
GR1NE1008	M10	10	30	19	21,5	7	17
GR1NE1109	M14	11	30	19	21,5	7	17
GR2NE0649	M5-M6	6	48	31	35	11	30
GR2NE0755	M10	7	48	31	35	11	30
GR2NE0862	M8	8	48	31	35	11	30
GR2NE0907	M12	9	48	31	35	11	30
GR2NE1008	M10	10	48	31	35	11	30
GR2NE1109	M14	11	48	31	35	11	30
GR2NE1209	M16	12	48	31	35	11	30
GR2NE1411	M18	14	48	31	35	11	30
GR2NE1612	M20	16	48	31	35	11	30
GR2NE18145	M22	18	48	31	35	11	30



BUSSOLE PORTA MASCHIO CON FRIZIONE TAP ADAPTERS WITH CLUTCH

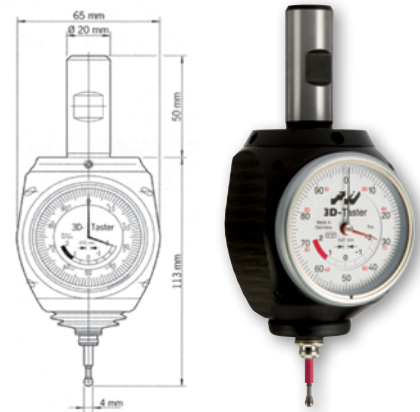


ART.	Filetto Thread	d mm	D mm	D2 mm	L1 mm	L2 mm	L3 mm
GR1FE3527	M3	3,5	32	19	21,5	25	17
GR1FE4534	M4	4,5	32	19	21,5	25	17
GR1FE5543	M5	5,5	32	19	21,5	25	17
GR1FE0649	M5-M6	6	32	19	21,5	25	17
GR1FE0755	M10	7	32	19	21,5	25	17
GR1FE0862	M8	8	32	19	21,5	25	17
GR1FE0907	M12	9	32	19	21,5	25	17
GR1FE1008	M10	10	32	19	21,5	25	17
GR1FE1109	M14	11	32	19	21,5	25	17
GR2FE0649	M5-M6	6	50	31	35	34	30
GR2FE0755	M10	7	50	31	35	34	30
GR2FE0862	M8	8	50	31	35	34	30
GR2FE0907	M12	9	50	31	35	34	30
GR2FE1008	M10	10	50	31	35	34	30
GR2FE1109	M14	11	50	31	35	34	30
GR2FE1209	M16	12	50	31	35	34	30
GR2FE1411	M18	14	50	31	35	34	30
GR2FE1612	M20	16	50	31	35	34	30
GR2FE18145	M22-M24	18	50	31	35	34	30

CENTRATORI TASTATORI EDGE FINDERS

CENTRATORE TRIDIMENSIONALE / 3D TASTER

ART.	Descrizione / Description
FH3DUNIV	Centratore tridimensionale ad orologio precisione 0,01 mm 3D edge finder with precision clock 0,01 mm
FH3DPUNTA4C	Puntalino ricambio per 3D \varnothing 4 mm tipo corto (25 mm) Short spare probe for 3D 4 mm (25 mm)
FH3DPUNTA8L	Puntalino ricambio per 3D \varnothing 8 mm tipo lungo (65 mm) Long spare probe for 3D 8 mm (65 mm)



CERCACENTRO ANALOGICO "AXIS OFFSET" "AXIS OFFSET" CENTRING INDICATOR

Centratore utilizzabile in qualsiasi angolazione, verticale ed orizzontale. Il comparatore è sempre in posizione frontale, per una facile lettura dell'operatore.
Confezione: astuccio legno.

This device can be used at any angle, vertical and horizontal. The indicator always faces the operator for an easy reading.
Wooden case.



ACCESSORI IN DOTAZIONE / SUPPLIED ACCESSORIES

N° 3 tastatori dritti lunghezza 50-100-150 mm (\varnothing sfera tastatori 3 mm)
N. 3 straight feelers 50-100-150 mm (\varnothing contact point 3 mm)

N° 3 tastatori ricurvi lunghezza 50-100-150 mm (\varnothing sfera tastatori 3 mm)
N. 3 curved feelers 50-100-150 mm (\varnothing contact point 3 mm)

N° 1 tastatore snodato a cuspidi rientrante
N. 1 spring-loaded center point feeler

N° 1 asta di stazionamento \varnothing 4x170 mm
N. 1 restraining rod \varnothing 4x170 mm

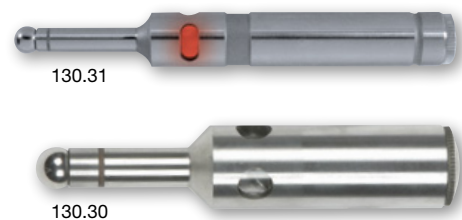
ART.	Campo di misura Measuring range mm	Unità di formato Graduation mm	Letture quadrante Dial reading mm	\varnothing quadrante Dial \varnothing mm	Max velocità di rotazione Max rotating speed giri/min	Codulo di attacco Shank mm
130.00	5	0,01	1	40	800	\varnothing 10x22

CENTRATORI CON SEGNALE LUMINOSO ELECTRONIC EDGE FINDERS WITH LED INDICATOR

Sfera di contatto temperata e rettificata. Per trapani e fresatrici, per il centraggio interno ed esterno montato su mandrini rotanti o stazionari.

Hardened and ground contact point. For drilling and milling machines, for inner and outer centring mounted on rotating or stationary chucks.

ART.	Codulo di attacco Shank \varnothing mm	Sfera Contact point \varnothing mm	Lunghezza totale Length mm	Tolleranza Tolerance mm	Batterie alimentazione Batteries
130.30	20	10	100	0,01	SR44-2x1,5V
130.31	20	10	157	0,01	SR44-2x1,5V



CENTRATORE TASTATORE CON SEGNALE LUMINOSO E SONORO ELECTRONIC EDGE FINDER WITH LED AND AUDIBLE INDICATOR

ART.	Codulo di attacco Shank \varnothing mm	Sfera Contact point \varnothing mm	Lunghezza totale Length mm	Tolleranza Tolerance mm	Batterie alimentazione Batteries
130.33	20	10	160	0,01	R1P-2x1,5V

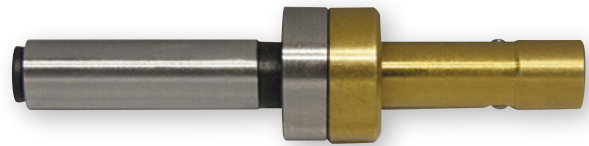


CENTRATORI TASTATORI E AZZERATORI EDGE FINDERS AND ZERO SETTERS

CENTRATORE TASTATORE MECCANICO AMAGNETICO NON-MAGNETIC MECHANICAL EDGE FINDER

Tutte le parti sono temprate e rettificate. Il centraggio dei pezzi da lavorare avviene accostando il tastero amagnetico alla superficie del pezzo in lavorazione.

All parts are hardened and ground. Centring of work pieces takes place putting the feeler close to the surface.



ART.	Codulo di attacco Shank Ø mm	Contacto Contact point Ø mm	Lunghezza totale Length mm	Tolleranza Tolerance mm	Max velocità di rotazione Max rotating speed giri/min.
130.A10	10	10	80	0,01	600

TASTATORI CENTRATORI MECCANICI MECHANICAL EDGE FINDERS

Tutte le parti sono temprate e rettificate. Il centraggio dei pezzi da lavorare avviene accostando il tastero alla superficie del pezzo in lavorazione.

All parts are hardened and ground. Centring of work pieces takes place putting the feeler close to the surface.



ART.	Codulo di attacco Shank Ø mm	Tastatore Feeler Ø mm	Lunghezza totale Length mm	Tolleranza Tolerance mm	Velocità di rotazione Rotating speed giri/min.
130.10	10	10	89	0,01	450 ÷ 600
130.20	10	4	89	0,01	450 ÷ 600

AZZERATORI CON MAGNETE INCORPORATO ZERO SETTERS WITH BUILT-IN MAGNET

ART.	Descrizione / Description
ZDI50	Azzeratore con magnete con comparatore incorporato h50 mm precisione ± 0,005 mm Zero setter with built-in magnet and indicator h50 mm accuracy ± 0,005 mm
ZDI100	Azzeratore con magnete con comparatore incorporato h100 mm precisione ± 0,005 mm Zero setter with built-in magnet and indicator h100 mm accuracy ± 0,005 mm



ZDI50



ZDI100

SMONTACONI A RUOTA LIBERA TOOL SETTING STANDS

ART.	HSK
HSK40SMRL	40
HSK50SMRL	50
HSK63SMRL	63
HSK100SMRL	100



SMONTACONI ORIENTABILI ADJUSTABLE TOOL SETTING STANDS

ART.	ISO
ISO30SM	30
ISO40SM	40
ISO50SM	50



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00040	da 16U a 40UL	29	11150	da 16U a 40UL160	18	444100	da A16U a A32U	24
00040	20FS-32FS	28	11150	40FI-60FI	18	444100	da ACM2F a ACM5F	24
00040	da AW06 a AW40	27	11150	da B12 a B18	20	444100	da ACM2P a ACM5P	24
00040	da B12 a B18	30	11150	da CM1F a CM5F	17	444100	da AM12L87 a AM16L237	26
00040	da CM1F a CM4FL	29	11150	da CM1P a CM5PL	17	444100	AM820-AM1433	25
00040	da CM1P a CM4PL	28	11150	M312-M820	20	444100	APC13I-APC16I	25
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00050	da CM1F a CM5F	29	33340	da B12 a B18	12	44463	da A16 a A40L160	22
00050	da CM1P a CM5PL	28	33340	da CM1F a CM4FL	9	44463	da A16TF a A40TFL	25
00050	da EOP16 a EOP32	28	33340	da CM1P a CM4PL	9	44463	da A16U a A32U	24
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00050	da W06 a W40	27	33340	PC13-PC16	11	44463	da ACM1F a ACM4F	24
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CONDIZIONI GENERALI DI VENDITA

Le ordinazioni sono accettate esclusivamente alle seguenti condizioni:

PREZZI

Si intendono franco nostra sede.

IMBALLO

Da effettuarsi al costo.

PAGAMENTI

- a) Devono essere effettuati nei termini stabiliti.
- b) Non sono riconosciuti validi i pagamenti effettuati a persone non munite di nostro regolare mandato.
- c) Gli assegni devono essere sbarrati, intestati a noi con la dicitura <<NON TRASFERIBILE>> anche se l'assegno viene consegnato direttamente ai nostri incaricati.
- d) Non si accettano sconti, abbuoni e arrotondamenti non concordati preventivamente per iscritto.
- e) Eventuali contestazioni non danno diritto alla sospensione dei pagamenti.
- f) Sui pagamenti non effettuati alla scadenza, decorreranno gli interessi di mora.
- g) Sconti di pronta cassa, regolarmente concordati si devono calcolare sull'importo netto della merce escluso imposte, imballo e trasporto.

SPEDIZIONI

- a) La merce viaggia sempre a rischio e pericolo del committente anche se venduta franco destino.
- b) Non indicando sull'ordine il mezzo di spedizione, questa verrà da noi effettuata con il mezzo ritenuto più idoneo, senza assumere alcuna responsabilità.

CONSEGNE

- a) Gli ordini vengono evasi secondo le disponibilità del magazzino senza garanzia di saldo.
- b) I termini di consegna indicati nelle nostre offerte si devono intendere sempre salvo venduto e comunque senza alcun nostro impegno.

RITORNI

- a) Non si accetta merce di ritorno senza preventiva autorizzazione scritta.
- b) La merce resa, qualunque ne sia il motivo, deve essere resa franco nostra sede di Antegnate (Bergamo).

GARANZIA

- a) Ci impegnamo alla sostituzione o all'accredito (a nostra scelta) degli articoli eventualmente riscontrati difettosi, senza però assumere a nostro carico alcun debito per danno e spese di qualsiasi ragione o causa.

RECLAMI

- a) Per eventuali ammanchi nei quantitativi o per difetti, dovranno pervenirci entro 8 giorni dalla data di spedizione della merce.

COSTI

- a) Verificandosi nel corso della fornitura, aumenti salariali, di materie prime o di altre voci connesse alla produzione applicheremo la corrispondente maggiorazione.

CONTROVERSIA

- a) Per ogni controversia s'intende competente il Foro di Bergamo.

AGGIORNAMENTI

- a) Le dimensioni e le caratteristiche degli articoli descritti nel presente catalogo non sono impegnative e possono essere variate senza preavviso.

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