

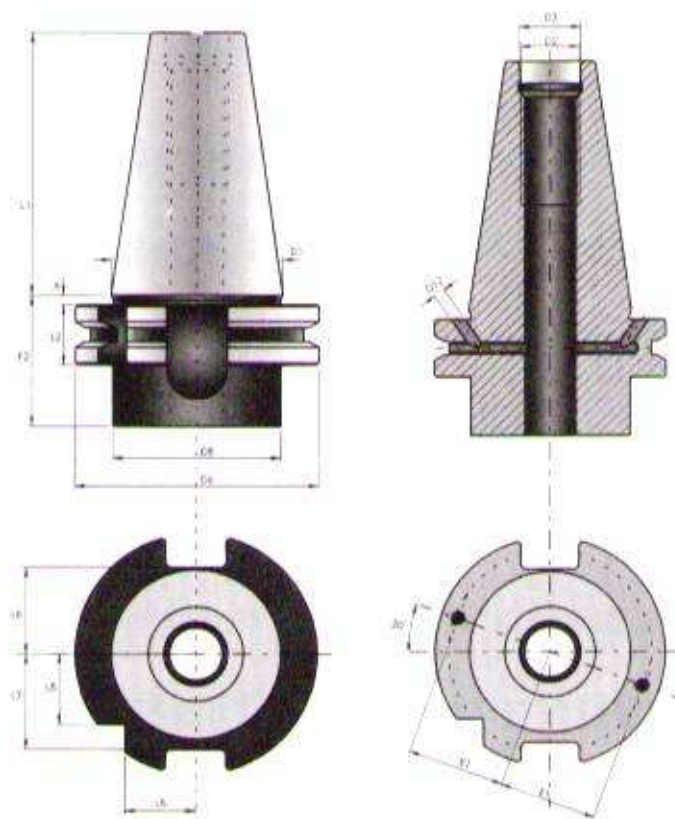
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Le quote indicate sul presente catalogo sono indicative e possono subire lievi variazioni a ns. discrezione.
The size in this catalogue is indicative and can be varied.

Per evitare disguidi in fase di ordinazione indicare sempre il codice dell'articolo.
Please write the article code in your order to avoid technical misunderstanding.

DIN 69871



CONO ADAPT.	D1	D2	D3	D6	D8	D12	L1	L2	L5	L6	L7	A	E1	F2
ISO TC 30	31,75	M12	13	50	<45	4	47,80	15,90	15	16,40	19	3,20	21	35
ISO TC 40	44,45	M16	17	63,55	<50	4	68,40	15,90	18,50	22,80	25	3,20	27	35
ISO TC 50	69,85	M24	25	97,50	<80	4	101,75	15,90	30	35,50	37,70	3,20	42	35

MATERIALE:
TRATTAMENTI TERMICI:
DUREZZA:
ESECUZIONE:

acciaio da cementazione di elevata qualità
cementazione, tempra e rinvenimento
56 – 60 HRC
AT 3

Il massimo scostamento di eccentricità tra cono e sede pinza è compreso tra 0,003 e 0,007 mm.

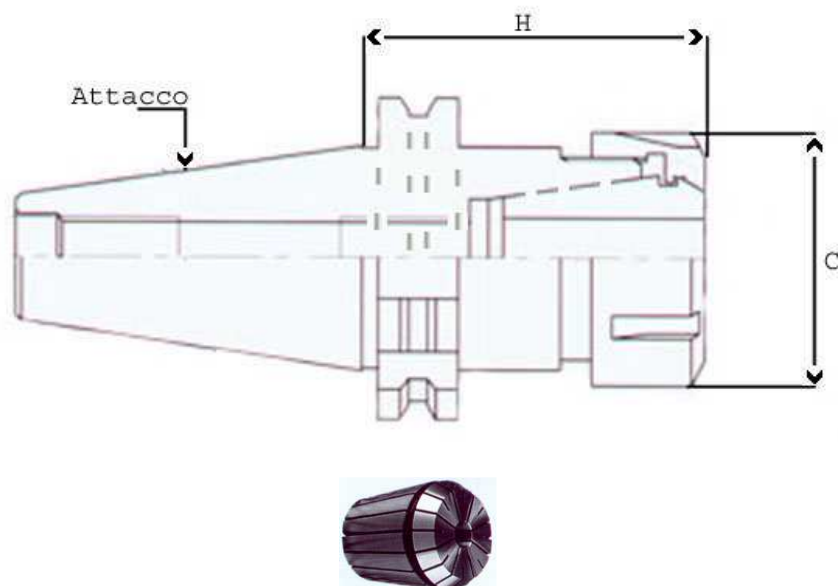
MATERIAL:
HEAT TREATMENT:
HARDNESS:
EXECUTION:

high quality carburizing steel
carburized, hardened and tempered
HRC 56 - 60
AT 3

The run out accuracy are guaranteed to be within 0,003 and 0,007 mm. at the tool seat

DIN 69871/A - DIN 69871/AD+B
MANDRINI PORTAPINZE ER
ER COLLET CHUCKS

RpM 12.000



ARTICOLO ARTICLE	ATTACCO ADAPTER	H	C	PINZA COLLET	CAPACITA' CAPACITY	PREZZO PRICE
10/30ER25	ISO 30 (A)	63	42	ER 25	1-16	€ 73,00
10/30ER32	ISO 30 (A)	63	50	ER 32	2-20	€ 73,00
10/30ER40	ISO 30 (A)	120	63	ER 40	3-30	€ 125,00
10/40ER16	ISO 40 (AD+B)	63	32	ER 16	1-10	€ 68,00
10/40ER16	ISO 40 (AD+B)	120	32	ER 16	1-10	€ 118,00
10/40ER20	ISO 40 (AD+B)	70	35	ER 20	1-13	€ 85,00
10/40ER25	ISO 40 (A)	70	42	ER 25	1-16	€ 63,00
10/40BER25	ISO 40 (AD+B)	70	42	ER 25	1-16	€ 68,00
10/401ER25	ISO 40 (A)	200	42	ER 25	1-16	€ 185,00
10/405ER32	ISO 40 corto/short	50	50	ER32	2-20	€ 110,00
10/401ER32	ISO 40 Standard (A)	70	50	ER 32	2-20	€ 56,00
10/401BER32	ISO40 Standard (AD+B)	70	50	ER 32	2-20	€ 61,00
10/402ER32	ISO 40 (AD+B)	100	50	ER 32	2-20	€ 88,00
10/403ER32	ISO 40 (A)	140	50	ER 32	2-20	€ 145,00
10/404ER32	ISO 40 (A)	200	50	ER 32	2-20	€ 185,00
10/404ER40	ISO 40 corto/short	50	63	ER40	3-30	€ 115,00
10/40ER40	ISO 40 (AD+B)	75	63	ER 40	3-30	€ 69,00
10/401ER40	ISO 40 (AD+B)	100	63	ER 40	3-30	€ 95,00
10/50ER32	ISO 50 (AD+B)	80	50	ER 32	2-20	€ 100,00
10/50ER40	ISO 50 (AD+B)	80	63	ER 40	3-30	€ 110,00

DIN 69871/A - DIN 69871/AD+B
KIT MANDRINI PORTAPINZE ER
KIT ER COLLET CHUCKS

RpM 12.000



ARTICOLO ARTICLE	ATTACCO ADAPTER	PINZA COLLET	PINZE NEL KIT COLLET SIZE ON THE KIT	PREZZO PRICE
10/40/KIT25	ISO 40 H= 70 FORMA A	STANDARD Nr. 15 pz.	2-3-4-5-6-7-8-9-10-11-12 13-14-15-16	€ 197,00
10/40/KIT32	ISO 40 H=70 FORMA A	STANDARD Nr. 11 pz.	3-4-5-6-8-10-12-14 16-18-20	€ 140,00
10/40/KIT25T	ISO 40 H= 70 FORMA AD+B	A TENUITA Nr. 14 pz.	3-4-5-6-7-8-9-10-11-12-13 14-15-16	€ 475,00
10/40/KIT32T	ISO 40 H=70 FORMA AD+B	A TENUITA Nr. 11 pz.	3-4-5-6-8-10-12-14 16-18-20	€ 360,00

A RICHIESTA SI COSTRUISCONO ALTRE MISURE
ON REQUEST WE MANUFACTURE ALSO OTHERS MEASURES

A RICHIESTA GHIERA ER25 E ER32 BILANCIATA PER ALTA VELOCITA'
SENZA VARIAZIONE DI PREZZO.
ON REQUEST ER25 AND ER32 BALANCED NUT FOR HIGH SPEED
WITHOUT ANY PRICE'S DIFFERENCES.

BILANCIATURA

Si esegue a richiesta, con certificato
We make on request, with certificate

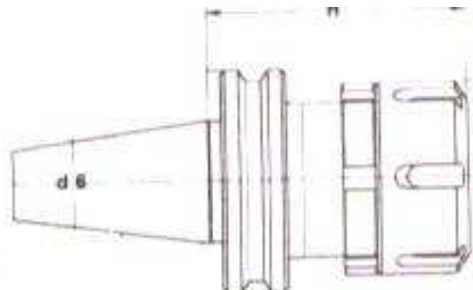
GRADO DI BILANCIATURA – BALANCING GRADE	PREZZO – PRICE
G 6,3 Rpm 15.000 / 20.000 / 25.000	€ 25,00
G 2,5 Rpm 15.000 / 20.000 / 25.000	€ 28,00

Brusa & C. s.r.l. Tooling

Telefono 0374/350031 Fax 0374/353854

**DIN 69871/A MANDRINI PORTAPINZE
PER MACCHINE LAVORAZIONE LEGNO
COLLET CHUCKS FOR WOOD MACHINERY**

RpM 15.000

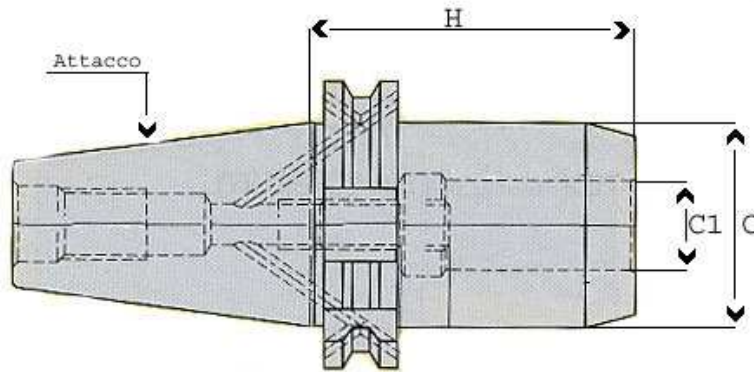


ARTICOLO ARTICLE	ATTACCO ADAPTER	H	C	PINZA COLLET	CAPACITA' CAPACITY	PREZZO PRICE
10/30/290	ISO 30	57	50	ART.290	3-25	€ 135,00
10/40/290	ISO 40	57	50	ART.290	3-25	€ 135,00

- SENZA TACCHE DI TRASCINAMENTO PER LAVORAZIONE LEGNO
- WITHOUT NOTCH FOR WOOD MACHINES
- A RICHIESTA TRATTAMENTO SUPERFICIALE PROTETTIVO CHEM-COAT
- ON REQUEST PROTECTIVE SURFACES TREATMENT CHEM-COAT

**DIN 69871/B+AD MANDRINO IDRAULICO
HYDRAULIC CHUCK**

RpM 8.000

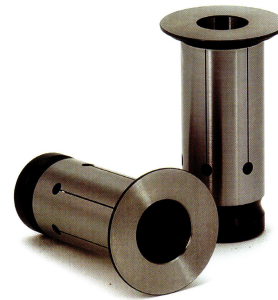
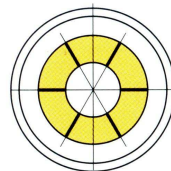
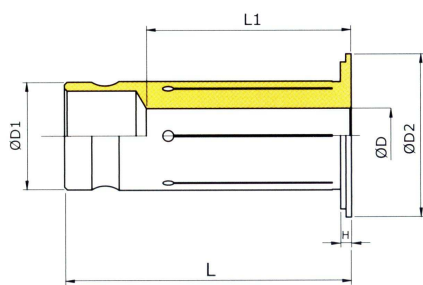


ARTICOLO ARTICLE	ATTACCO ADAPTER	H	C	C1	PINZA COLLET	CAP.	PREZZO PRICE
10/40/20	ISO 40	64,50	49,50	20	105/20	3-18	€ 430,00

**A RICHIESTA ALTRE VERSIONI
ON REQUEST ALSO OTHER VERSIONS**

**PINZA PER MANDRINI IDRAULICI
COLLET FOR HYDRAULIC CHUCKS**

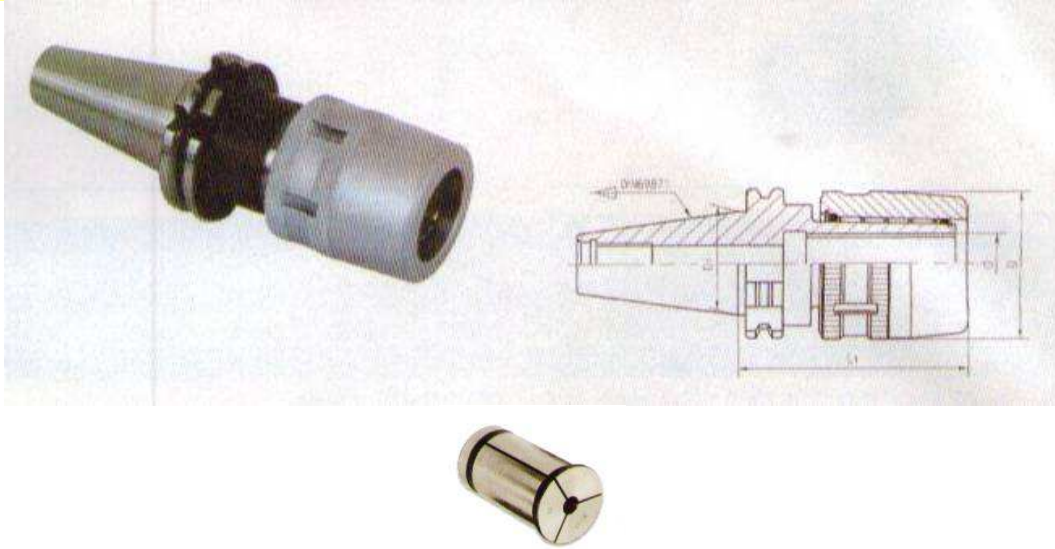
**A TENUTA MECCANICA DEL REFRIGERANTE
MECHANICAL SEALED FOR HIGH PRESSURE**



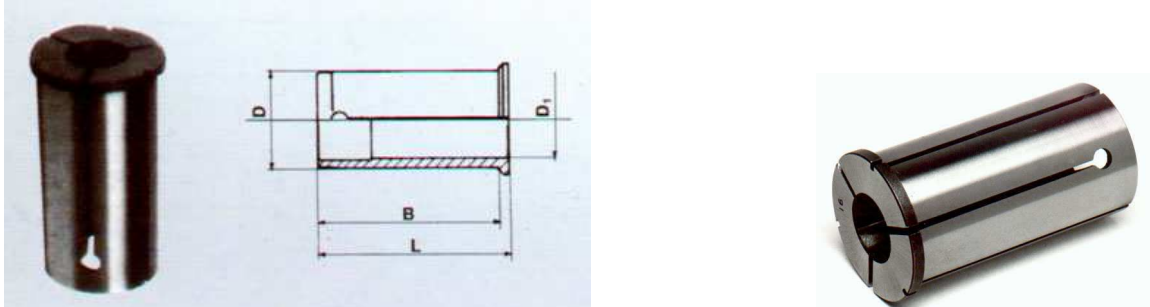
ARTICOLO ARTICOLO	D1	D	L1	L	PREZZO PRICE	
105/20	20	3-16	D.3	15	52,5	€ 74,00
			D.4 e 5	22		
			D.6 e 7	27		
			D.8-16	37,5		
			D.10	30		
			D.12 e 14	33		
			D.16	40		

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DIN 69871/A**MANDRINO A FORTE SERRAGGIO
MILLING CHUCK**

ARTICOLO ARTICLE	ATTACCO ADAPTER	L1	d	D	PINZA COLLET	CAP.	PREZZO PRICE
10/40/20FS	ISO 40	95	20	63	100/20	3-18	€ 180,00
10/40/25FS	ISO 40	105	25	70	100/25	3-22	€ 190,00
10/40/32FS	ISO 40	105	32	90	100/32	3-28	€ 200,00
10/50/20FS	ISO 50	95	20	63	100/20	3-18	€ 220,00
10/50/32FS	ISO 50	120	32	90	100/32	3-28	€ 240,00

A RICHIESTA ALTRE VERSIONI**- ON REQUEST ALSO OTHERS TYPES****PINZE CILINDRICHE****CYLINDRICAL COLLETS**

ARTICOLO ARTICLE	D	D1	B	L	PREZZO PRICE
100/20	20	3-18	50	54	€ 30,00
100/25	25	3-22	56	60	€ 33,00
100/32	32	3-28	60	64	€ 35,00

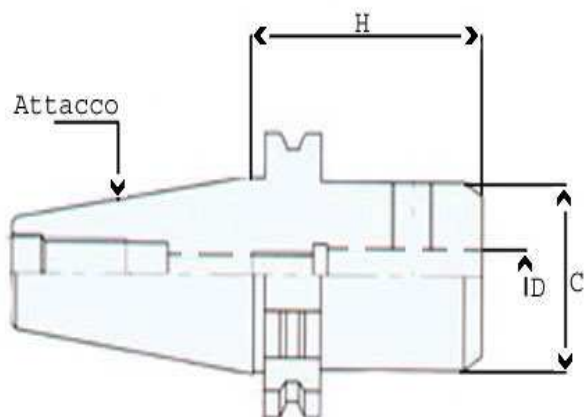
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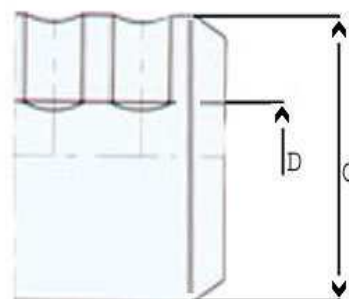
KIT MANDRINI FORTE SERRAGGIO compl. di chiave
KIT MILLING CHUCK compl. with key



ARTICOLO ARTICLE	ATTACCO ADAPTER	PINZA COLLET	PINZE NEL KIT COLLET SIZE ON THE KIT	PREZZO PRICE
10/KIT40/20FS	ISO 40 DIAM. 20	100/20 Nr.10 pz.	3-4-5-6-8-10-12-14-16-18	€ 380,00
10/KIT40/32FS	ISO 40 DIAM. 32	100/32 Nr.12 pz.	4-5-6-8-10-12-14-16-18-20-25-28	€ 500,00

DIN 69871/AD+B**MANDRINI ATTACCO WELDON
WELDON MILLING HOLDERS**

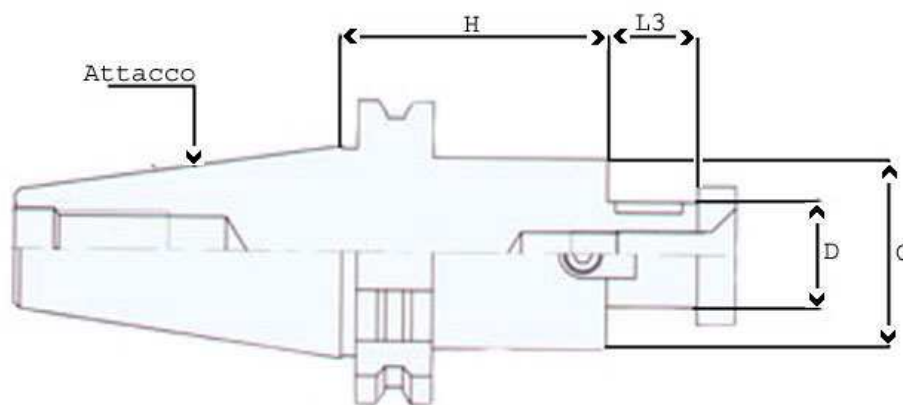
D ≤ 20



D ≥ 25

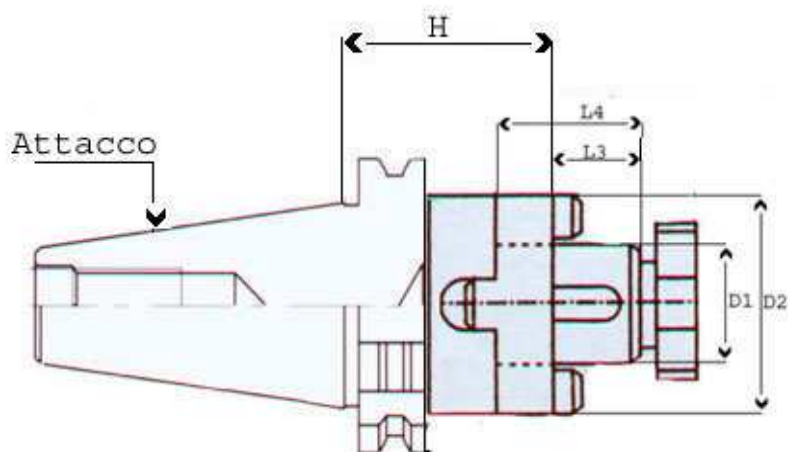
ARTICOLO ARTICLE	ATTACCO ADAPTER	D	H	C	PREZZO PRICE
10/30WE06	ISO 30	6	50	25	€ 90,00
10/30WE08	ISO 30	8	50	28	€ 90,00
10/30WE10	ISO 30	10	50	35	€ 90,00
10/30WE12	ISO 30	12	50	42	€ 90,00
10/30WE16	ISO 30	16	63	48	€ 90,00
10/30WE20	ISO 30	20	70	52	€ 90,00
10/40WE06	ISO 40	6	50	25	€ 64,00
10/40WE08	ISO 40	8	50	28	€ 64,00
10/40WE10	ISO 40	10	63	35	€ 64,00
10/40WE12	ISO 40	12	63	42	€ 64,00
10/40WE14	ISO 40	14	63	44	€ 64,00
10/40WE16	ISO 40	16	63	48	€ 64,00
10/40WE18	ISO 40	18	63	50	€ 64,00
10/40WE20	ISO 40	20	63	52	€ 66,00
10/40WE25	ISO 40	25	90	65	€ 71,00
10/40WE32	ISO 40	32	100	72	€ 73,00
10/40WE40	ISO 40	40	120	80	€ 99,00
10/50WE06	ISO 50	6	63	25	€ 125,00
10/50WE08	ISO 50	8	63	28	€ 125,00
10/50WE10	ISO 50	10	63	35	€ 125,00
10/50WE12	ISO 50	12	63	42	€ 125,00
10/50WE16	ISO 50	16	63	48	€ 125,00
10/50WE20	ISO 50	20	63	52	€ 125,00
10/50WE25	ISO 50	25	80	65	€ 135,00
10/50WE32	ISO 50	32	100	72	€ 145,00
10/50WE40	ISO 50	40	112	90	€ 165,00

DIN 69871/A MANDRINI PORTAFRESE FISSI SHELL MILLING HOLDERS



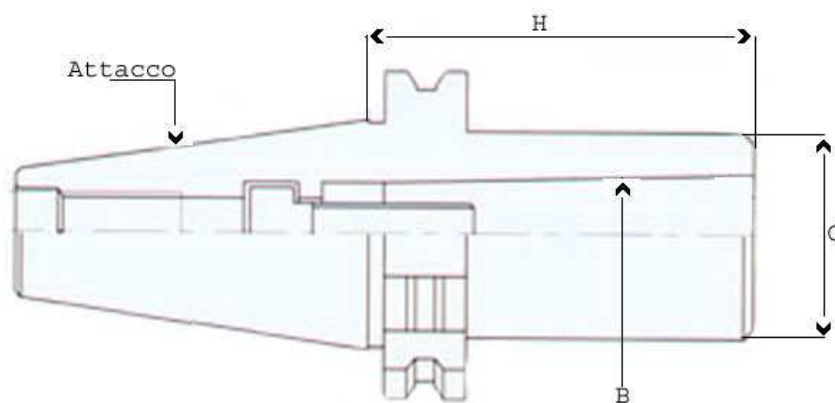
ARTICOLO ARTICLE	ATTACCO ADAPTER	D	H	L3	C	PREZZO PRICE
10/30F16	ISO 30	16	35	17	32	€ 105,00
10/30F22	ISO 30	22	35	19	40	€ 105,00
10/30F27	ISO 30	27	38	21	45	€ 115,00
10/30F32	ISO 30	32	41	24	45	€ 150,00
10/40F16	ISO 40	16	35	17	38	€ 79,00
10/40F22	ISO 40	22	35	19	48	€ 79,00
10/40F27	ISO 40	27	35	21	58	€ 79,00
10/40F32	ISO 40	32	50	24	66	€ 95,00
10/40F40	ISO 40	40	60	27	80	€ 120,00
10/50F16	ISO 50	16	45	17	38	€ 120,00
10/50F22	ISO 50	22	45	19	48	€ 120,00
10/50F27	ISO 50	27	45	21	58	€ 125,00
10/50F32	ISO 50	32	50	24	66	€ 130,00
10/50F40	ISO 50	40	50	27	89	€ 140,00

DI69871/A MANDRINI PORTAFRESE COMBINATI
Trascinamento frontale e chiavetta
COMBINED SHELL MILLING HOLDERS
Frontal dragging and key



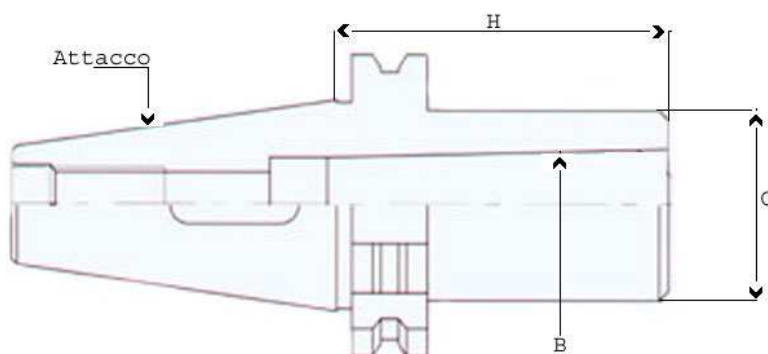
ARTICOLO ARTICLE	ATTACCO ADAPTER	D1	D2	H	L3	L4	PREZZO PRICE
10/30C16	ISO 30	16	32	50	17	27	€ 110,00
10/30C22	ISO 30	22	40	50	19	31	€ 110,00
10/30C27	ISO 30	27	48	55	21	33	€ 125,00
10/30C32	ISO 30	32	58	60	24	38	€ 150,00
10/40C16	ISO 40	16	32	55	17	27	€ 80,00
10/40C22	ISO 40	22	40	55	19	31	€ 80,00
10/40C27	ISO 40	27	48	55	21	33	€ 80,00
10/40C32	ISO 40	32	58	60	24	38	€ 96,00
10/40C40	ISO 40	40	70	68	26	40	€ 120,00
10/50C16	ISO 50	16	32	55	17	27	€ 130,00
10/50C22	ISO 50	22	40	55	19	31	€ 130,00
10/50C27	ISO 50	27	48	55	21	33	€ 140,00
10/50C32	ISO 50	32	58	55	24	38	€ 150,00
10/50C40	ISO 50	40	70	55	27	41	€ 165,00

DIN 69871/A RIDUZIONI CONO MORSE PER FRESE MORSE TAPER ADAPTOR FOR MILLS



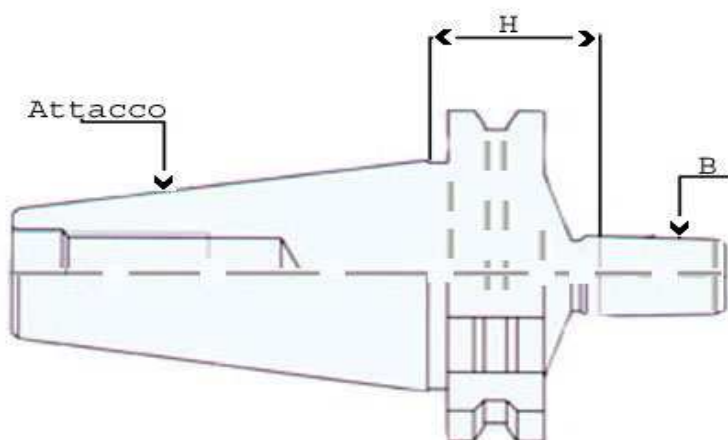
ARTICOLO ARTICLE	ATTACCO ADAPTER	H	C	B	PREZZO PRICE
10/40CM2F	ISO 40	50	32	CM 2	€ 75,00
10/40CM3F	ISO 40	70	40	CM 3	€ 75,00
10/40CM4F	ISO 40	95	48	CM 4	€ 81,00
10/50CM2F	ISO 50	60	32	CM 2	€ 140,00
10/50CM3F	ISO 50	65	40	CM 3	€ 140,00
10/50CM4F	ISO 50	95	48	CM 4	€ 160,00
10/50CM5F	ISO 50	100	63	CM 5	€ 220,00

DIN 69871/A RIDUZIONI CONO MORSE PER PUNTE MORSE TAPER ADAPTOR FOR DRILLS

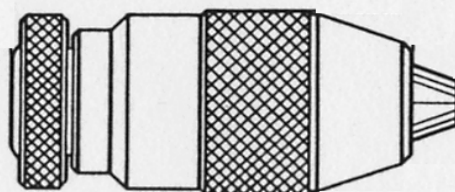


ARTICOLO ARTICLE	ATTACCO ADAPTER	H	C	B	PREZZO PRICE
10/40CM1P	ISO 40	50	25	CM 1	€ 63,00
10/40CM2P	ISO 40	50	32	CM 2	€ 63,00
10/40CM3P	ISO 40	70	40	CM 3	€ 63,00
10/40CM4P	ISO 40	95	48	CM 4	€ 75,00
10/50CM2P	ISO 50	60	32	CM 2	€ 120,00
10/50CM3P	ISO 50	65	40	CM 3	€ 120,00
10/50CM4P	ISO 50	95	48	CM 4	€ 130,00
10/50CM5P	ISO 50	105	63	CM 5	€ 145,00

DIN 69871/A ATTACCHI MANDRINI PORTAPUNTE DRILL CHUCKS ARBORS

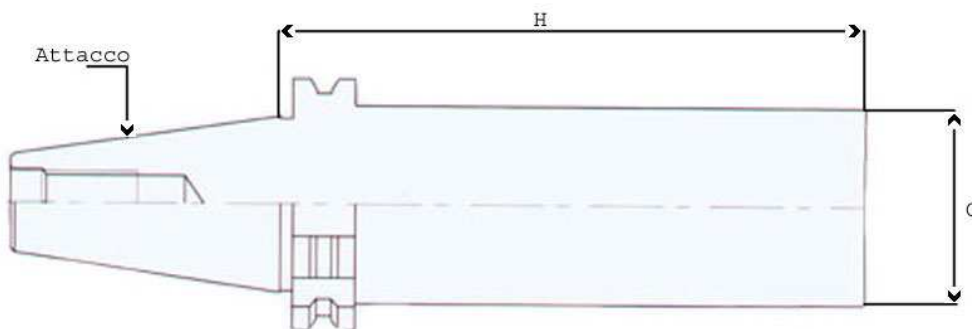


ARTICOLO ARTICLE	ATTACCO ADAPTER	H	B	PREZZO PRICE
10/30B12	ISO 30	25	B 12	€ 97,00
10/30B16	ISO 30	25	B 16	€ 97,00
10/40B12	ISO 40	40	B 12	€ 60,00
10/40B16	ISO 40	40	B 16	€ 60,00
10/40B18	ISO 40	40	B 18	€ 78,00
10/50B16	ISO 50	40	B 16	€ 150,00
10/50B18	ISO 50	40	B 18	€ 150,00



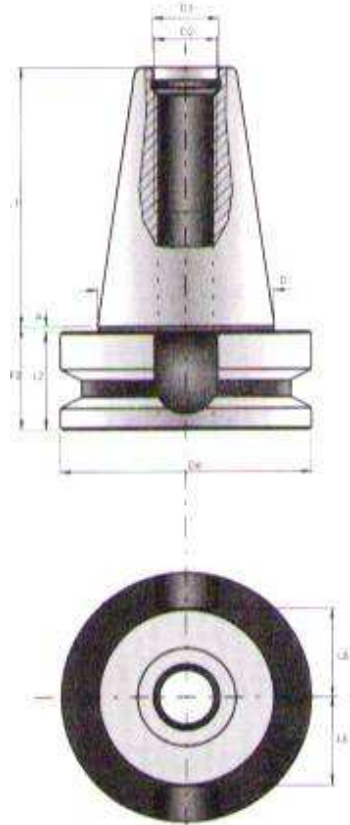
MANDR. AUTOSERRANTI SERIE ULTRA PRECISA ULTRA-PRECISE KEYLESS DRILL CHUCKS				MANDR. AUTOSERRANTI SERIE STANDARD STANDARD KEYLESS DRILL CHUCKS			
ARTICOLO ARTICLE	ATTACCO ADAPTER	CAPACITA' CAPACITY	PREZZO PRICE	ARTICOLO ARTICLE	ATTACCO ADAPTER	CAPACITA' CAPACITY	PREZZO PRICE
35UP/08/B12	B 12	0-8	€ 160,00	35ST/08/B12	B 12	0-8	€ 60,00
35UP/10/B12	B 12	0-10	€ 168,00	35ST/10/B12	B 12	0-10	€ 77,00
35UP/10/B16	B 16	0-10	€ 168,00	35ST/13/B16	B 16	1-13	€ 87,00
35UP/13/B16	B 16	1-13	€ 178,00	35ST/16/B16	B 16	3-16	€ 100,00
35UP/16/B16	B 16	3-16	€ 197,00	35ST/16/B18	B 18	3-16	€ 100,00
35UP/16/B18	B 18	3-16	€ 197,00				

**DIN 69871/A MANDRINI CON STELO TENERO LAVORABILE
CHUCKS WITH MACHINABLE BLANK ARBORS**



ARTICOLO ARTICLE	ATTACCO ADAPTER	H	C	PREZZO PRICE
10/40ST40/250	ISO 40	250	40	€ 185,00
10/40ST63/250	ISO 40	250	63	€ 185,00
10/50ST97/315	ISO 50	315	97	€ 300,00

DIN 2080



CONO ADAPTER	D1	D2	D6	L1	A	F2
ISO 30	31,75	M12	50,0	68,4	1,60	8
ISO 40	44,45	M16	63,0	93,4	3,20	10
ISO 50	69,85	M24	97,5	126,8	3,20	12

MATERIALE:
TRATTAMENTI TERMICI:
DUREZZA:
ESECUZIONE:

acciaio da cementazione di elevata qualità
cementazione, tempra e rinvenimento
56 – 60 HRC
AT 3

Il massimo scostamento di eccentricità tra cono e sede pinza è compreso tra 0,003 e 0,007 mm.

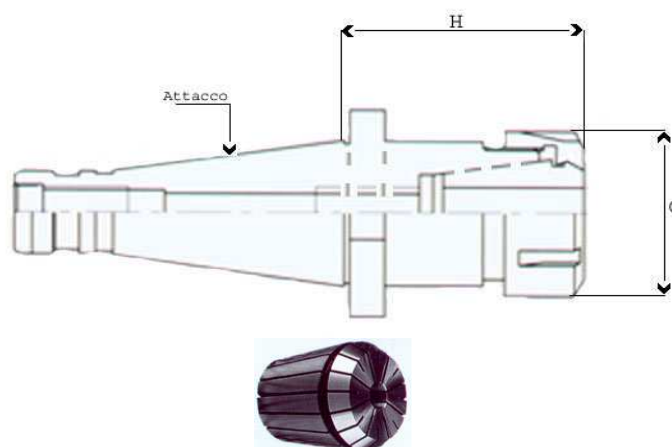
MATERIAL:
HEAT TREATMENT:
HARDNESS:
EXECUTION:

high quality carburizing steel
carburized, hardened and tempered
HRC 56 - 60
AT 3

The run out accuracy are guaranteed to be within 0,003 and 0,007 mm. at the tool seat

DIN 2080 MANDRINI PORTAPINZE ER ER COLLET CHUCKS

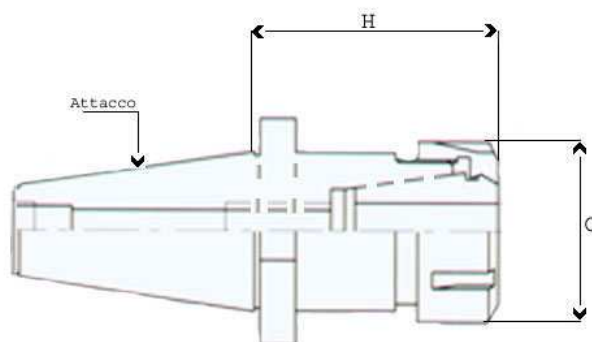
RpM 12.000



ARTICOLO ARTICLE	ATTACCO ADAPTER	H	C	PINZA COLLET	CAPACITA' CAPACITY	PREZZO PRICE
20/30ER16	ISO 30	50	28	ER 16	1-10	€ 100,00
20/30ER25	ISO 30	39	42	ER 25	1-16	€ 74,50
20/30ER32	ISO 30 Standard	53	50	ER 32	2-20	€ 72,00
20/301ER32	ISO 30	60	50	ER 32	2-20	€ 74,50
20/303ER32	ISO 30	80	50	ER 32	2-20	€ 86,50
20/304ER32	ISO 30	90	50	ER 32	2-20	€ 86,50
20/305ER32	ISO 30	100	50	ER 32	2-20	€ 93,00
20/306ER32	ISO 30	120	50	ER 32	2-20	€ 99,00
20/307ER32	ISO 30	130	50	ER 32	2-20	€ 105,00
20/301ER40	ISO 30	50	63	ER 40	3-30	€ 105,00
20/30ER40	ISO 30 Standard	60	63	ER 40	3-30	€ 105,00
20/302ER40	ISO 30	80	63	ER 40	3-30	€ 105,00
20/303ER40	ISO 30	100	63	ER 40	3-30	€ 121,00
20/304ER40	ISO 30	120	63	ER 40	3-30	€ 138,00
20/40ER16	ISO 40	63	28	ER 16	1-10	€ 102,00
20/40ER20	ISO 40	47	34	ER 20	1-13	€ 102,00
20/40ER25	ISO 40	60	42	ER 25	1-16	€ 102,00
20/40ER32	ISO 40 Standard	70	50	ER 32	2-20	€ 59,00
20/401ER32	ISO 40	100	50	ER 32	2-20	€ 110,00
20/402ER32	ISO 40	140	50	ER 32	2-20	€ 140,00
20/403ER32	ISO 40	200	50	ER 32	2-20	€ 195,00
20/40ER40	ISO 40	52	63	ER 40	3-30	€ 105,00
20/401ER40	ISO 40	140	63	ER 40	3-30	€ 162,00
20/50ER32	ISO 50	70	50	ER 32	2-20	€ 120,00
20/50ER40	ISO 50	70	63	ER 40	3-30	€ 125,00

A RICHIESTA SI COSTRUISCONO ANCHE ALTRE MISURE.
ON REQUEST WE MANUFACTURE ALSO OTHERS MEASUREMENTS.

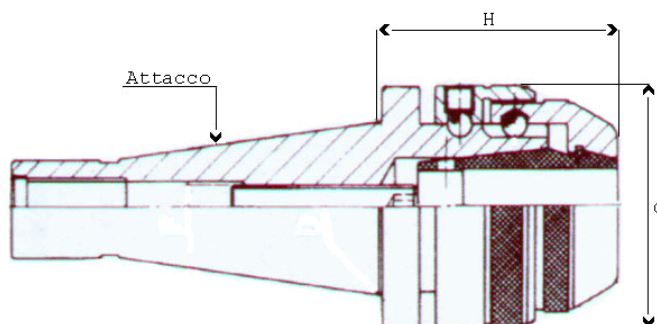
DIN 2080 MANDRINI PER MACCHINE TRANSFER CHUCKS FOR TRANSFER MACHINE



ARTICOLO ARTICLE	ATTACCO ADAPTER	H	C	PINZA COLLET	CAPACITA' CAPACITY	PREZZO PRICE
20/T3032/L060	ISO 30	60	50	ER 32	2-20	€ 82,50
20/T3032/L080	ISO 30	80	50	ER 32	2-20	€ 82,50
20/T3032/L100	ISO 30	100	50	ER 32	2-20	€ 88,00
20/T3032/L120	ISO 30	120	50	ER 32	2-20	€ 99,00
20/T3040/L060	ISO 30	60	63	ER 40	3-30	€ 96,50
20/T3040/L080	ISO 30	80	63	ER 40	3-30	€ 96,50
20/T3040/L100	ISO 30	100	63	ER 40	3-30	€ 111,00
20/T3040/L120	ISO 30	120	63	ER 40	3-30	€ 121,00
20/T4032/L060	ISO 40	60	50	ER 32	2-20	€ 88,00
20/T4032/L080	ISO 40	80	50	ER 32	2-20	€ 88,00
20/T4032/L100	ISO 40	100	50	ER 32	2-20	€ 93,50
20/T4032/L120	ISO 40	120	50	ER 32	2-20	€ 114,00
20/T4040/L060	ISO 40	60	63	ER 40	3-30	€ 96,50
20/T4040/L080	ISO 40	80	63	ER 40	3-30	€ 96,50
20/T4040/L100	ISO 40	100	63	ER 40	3-30	€ 111,00
20/T4040/L120	ISO 40	120	63	ER 40	3-30	€ 132,00

DIN 2080 MANDRINO PORTAPINZE GRIFO
GRIFO COLLET CHUCKS

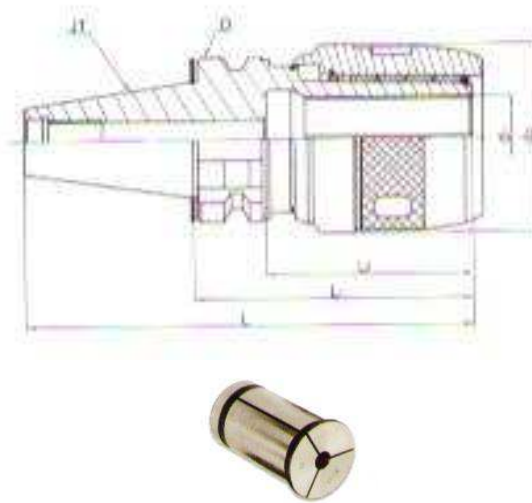
RpM 10.000



ARTICOLO ARTICLE	ATTACCO ADAPTER	H	C	PINZA COLLET	CAPACITA' CAPACITY	PREZZO PRICE
20/307GRIFO	ISO 30	63	62	ART.700	3-20	€ 146,00
20/407GRIFO	ISO 40	63	62	ART.700	3-20	€ 146,00
20/408GRIFO	ISO 40	79	82	ART.800	6-32	€ 180,00
20/457GRIFO	ISO 45	67	62	ART.700	3-20	€ 180,00
20/458GRIFO	ISO 45	69	82	ART.800	6-32	€ 220,00
20/507GRIFO	ISO 50	69	62	ART.700	3-20	€ 220,00
20/508GRIFO	ISO 50	69	82	ART.800	6-32	€ 230,00

Attacco ISO50 / ISO50 Adapter RpM 6.000

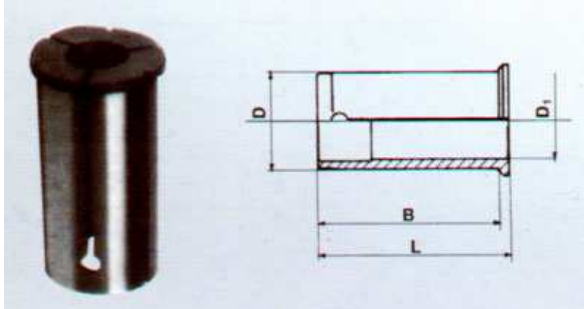
ARTICOLI DISPONIBILI SOLO FINO AD ESAURIMENTO SCORTE
AVAILABLE ONLY UNTIL RUN OUT OF STOCK

DIN 2080**MANDRINO A FORTE SERRAGGIO
MILLING CHUCK**

ARTICOLO ARTICLE	ATTACCO ADAPTER	L1	L2	L	D1	D2	PINZA COLLET	CAP.	PREZZO PRICE
10/40/20FS	ISO 40	85	70	153,40	20	55	100/20	3-18	€ 190,00
10/40/32FS	ISO 40	105	75	173,40	32	73	100/32	4-28	€ 220,00
10/50/20FS	ISO 50	105	70	206,75	20	55	100/20	3-18	€ 240,00
10/50/32FS	ISO 50	105	75	206,75	32	73	100/32	4-28	€ 250,00

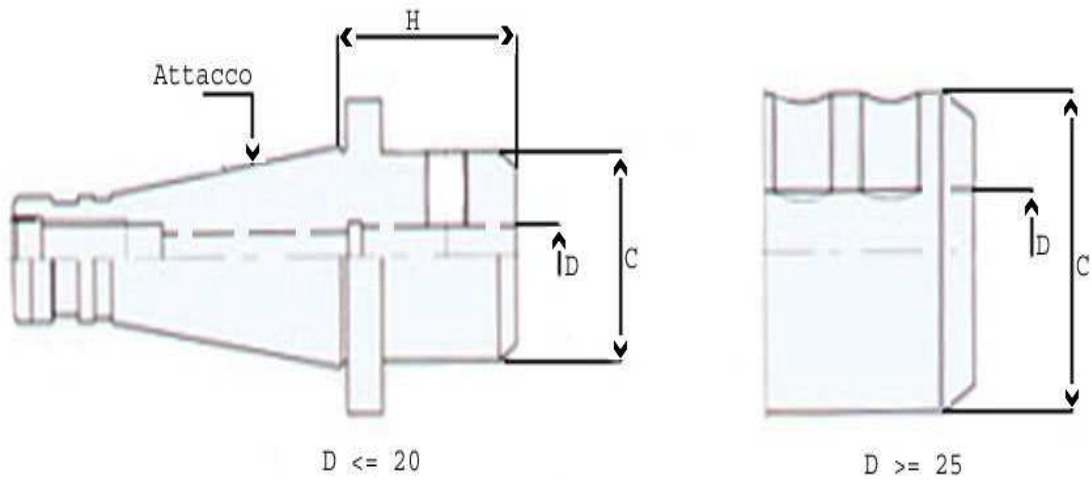
A RICHIESTA ALTRE VERSIONI

- ON REQUEST ALSO OTHERS TYPES

PINZE CILINDRICHE**CYLINDRICAL COLLETS**

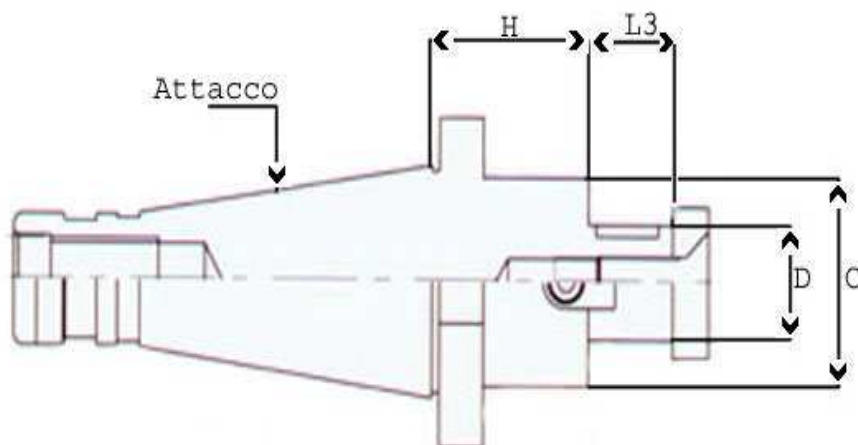
ARTICOLO ARTICLE	D	D1	B	L	PREZZO PRICE
100/20	20	3-18	50	54	€ 30,00
100/25	25	3-22	56	60	€ 33,00
100/32	32	3-28	60	64	€ 35,00

DIN 2080 MANDRINI ATTACCO WELDON WELDON MILLING HOLDERS



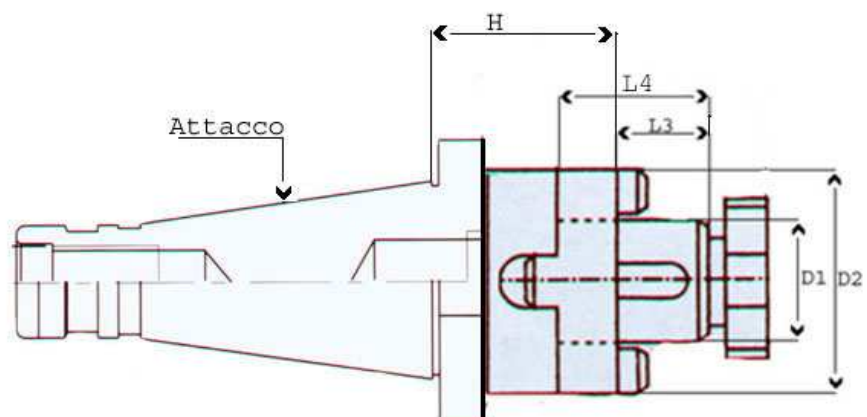
ARTICOLO ARTICLE	ATTACCO ADAPTER	D	H	C	PREZZO PRICE
20/30WE06	ISO 30	6	40	25	€ 99,00
20/30WE08	ISO 30	8	40	28	€ 93,00
20/30WE10	ISO 30	10	40	35	€ 93,00
20/30WE12	ISO 30	12	40	42	€ 93,00
20/30WE16	ISO 30	16	50	48	€ 93,00
20/30WE20	ISO 30	20	63	52	€ 96,00
20/40WE06	ISO 40	6	50	25	€ 74,00
20/40WE08	ISO 40	8	50	28	€ 74,00
20/40WE10	ISO 40	10	50	35	€ 74,00
20/40WE12	ISO 40	12	50	42	€ 74,00
20/40WE14	ISO 40	14	50	44	€ 74,00
20/40WE16	ISO 40	16	63	48	€ 74,00
20/40WE18	ISO 40	18	63	50	€ 74,00
20/40WE20	ISO 40	20	63	52	€ 76,00
20/40WE25	ISO 40	25	90	65	€ 81,00
20/40WE32	ISO 40	32	90	72	€ 83,00
20/40WE40	ISO 40	40	90	90	€ 129,00
20/50WE06	ISO 50	6	63	25	€ 138,00
20/50WE08	ISO 50	8	63	28	€ 125,00
20/50WE10	ISO 50	10	63	35	€ 125,00
20/50WE12	ISO 50	12	63	42	€ 125,00
20/50WE16	ISO 50	16	63	48	€ 125,00
20/50WE20	ISO 50	20	63	52	€ 125,00
20/50WE25	ISO 50	25	80	65	€ 137,00
20/50WE32	ISO 50	32	80	72	€ 145,00
20/50WE40	ISO 50	40	90	90	€ 169,00

DIN 2080 MANDRINI PORTAFRESE FISSI SHELL MILLING HOLDERS



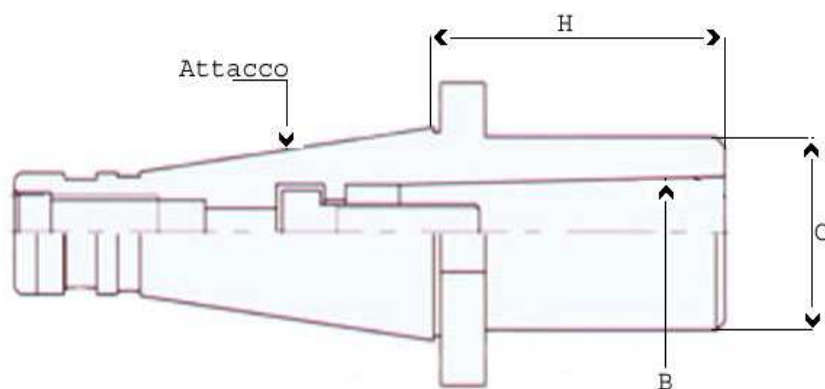
ARTICOLO ARTICLE	ATTACCO ADAPTER	D	H	L3	C	PREZZO PRICE
20/30F16	ISO 30	16	35	17	32	€ 120,00
20/30F22	ISO 30	22	35	19	42	€ 120,00
20/30F27	ISO 30	27	35	21	60	€ 125,00
20/30F32	ISO 30	32	35	24	65	€ 160,00
20/40F16	ISO 40	16	30	17	38	€ 80,00
20/40F22	ISO 40	22	35	19	48	€ 80,00
20/40F27	ISO 40	27	35	21	58	€ 80,00
20/40F32	ISO 40	32	35	24	65	€ 98,00
20/50F16	ISO 50	16	45	17	38	€ 135,00
20/50F22	ISO 50	22	45	19	48	€ 135,00
20/50F27	ISO 50	27	45	21	58	€ 145,00
20/50F32	ISO 50	32	45	24	65	€ 154,00
20/50F40	ISO 50	40	45	27	80	€ 175,00

DIN 2080 MANDRINI PORTAFRESE COMBINATI
Trascinamento frontale e chiavetta
COMBINED SHELL MILLING HOLDERS
Frontal dragging and key



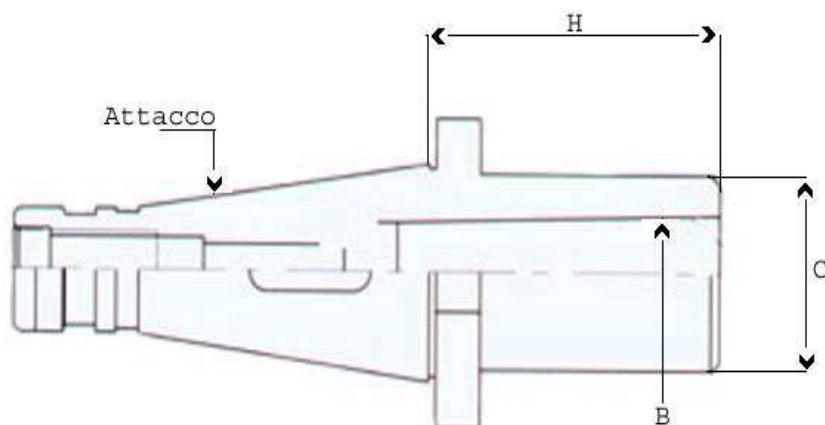
ARTICOLO ARTICLE	ATTACCO ADAPTER	D1	D2	H	L3	L4	PREZZO PRICE
20/30C16	ISO 30	16	32	50	17	27	€ 140,00
20/30C22	ISO 30	22	40	50	19	31	€ 140,00
20/30C27	ISO 30	27	48	50	21	33	€ 150,00
20/30C32	ISO 30	32	58	50	24	38	€ 177,00
20/40C16	ISO 40	16	32	52	17	27	€ 85,00
20/40C22	ISO 40	22	40	52	19	31	€ 85,00
20/40C27	ISO 40	27	48	52	21	33	€ 85,00
20/40C32	ISO 40	32	58	52	24	38	€ 98,00
20/50C16	ISO 50	16	32	55	17	27	€ 145,00
20/50C22	ISO 50	22	40	55	19	31	€ 145,00
20/50C27	ISO 50	27	48	55	21	33	€ 155,00
20/50C32	ISO 50	32	58	55	24	38	€ 165,00
20/50C40	ISO 50	40	70	55	27	41	€ 180,00

**DIN 2080 RIDUZIONI CONO MORSE PER FRESE
MORSE TAPER ADAPTOR FOR MILLS**



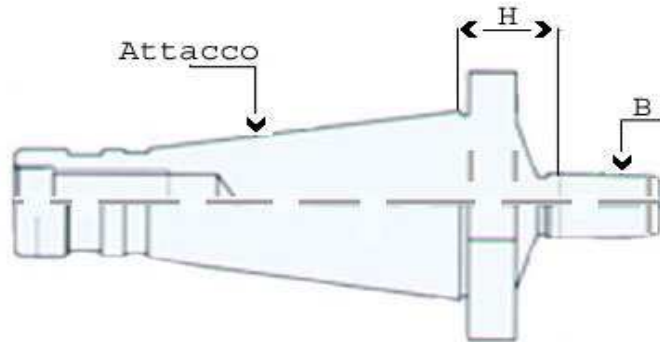
ARTICOLO ARTICLE	ATTACCO ADAPTER	H	C	B	PREZZO PRICE
20/30CM2F	ISO 30	50	32	CM 2	€ 99,00
20/30CM3F	ISO 30	78	40	CM 3	€ 99,00
20/40CM2F	ISO 40	50	32	CM 2	€ 80,00
20/40CM3F	ISO 40	65	40	CM 3	€ 80,00
20/40CM4F	ISO 40	95	48	CM 4	€ 88,00
20/50CM2F	ISO 50	60	32	CM 2	€ 170,00
20/50CM3F	ISO 50	65	40	CM 3	€ 170,00
20/50CM4F	ISO 50	65	48	CM 4	€ 170,00
20/50CM5F	ISO 50	100	63	CM 5	€ 230,00

DIN 2080 RIDUZIONI CONO MORSE PER PUNTE MORSE TAPER ADAPTOR FOR DRILLS

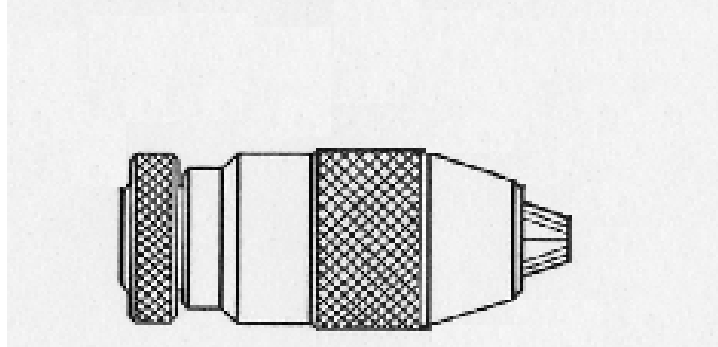


ARTICOLO ARTICLE	ATTACCO ADAPTER	H	C	B	PREZZO PRICE
20/30CM2P	ISO 30	50	32	CM 2	€ 89,00
20/30CM3P	ISO 30	72	40	CM 3	€ 89,00
20/40CM2P	ISO 40	50	32	CM 2	€ 70,00
20/40CM3P	ISO 40	65	40	CM 3	€ 70,00
20/40CM4P	ISO 40	95	48	CM 4	€ 77,00
20/50CM2P	ISO 50	60	32	CM 2	€ 135,00
20/50CM3P	ISO 50	65	40	CM 3	€ 135,00
20/50CM4P	ISO 50	70	48	CM 4	€ 145,00
20/50CM5P	ISO 50	105	63	CM 5	€ 170,00

DIN 2080 ATTACCHI PER MANDRINI PORTAPUNTE DRILL CHUCKS ARBORS



ARTICOLO	ATTACCO ADAPTER	H	B	PREZZO PRICE
20/30B12	ISO 30	15	B 12	€ 99,00
20/30B16	ISO 30	15	B 16	€ 99,00
20/40B12	ISO 40	17	B 12	€ 65,00
20/40B16	ISO 40	17	B 16	€ 65,00
20/40B18	ISO 40	17	B 18	€ 81,00
20/50B16	ISO 50	20	B 16	€ 145,00
20/50B18	ISO 50	20	B 18	€ 145,00



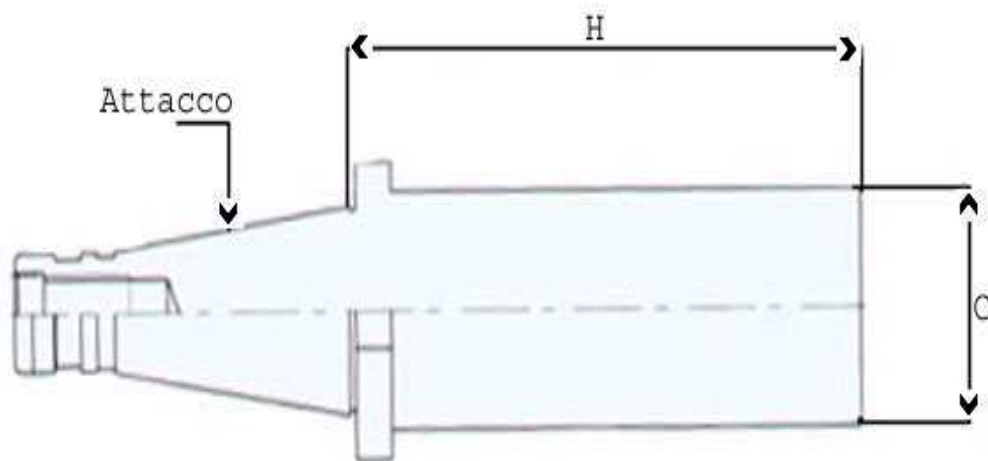
GRIFFE DI RICAMBIO A PAG. 61 / REPLACEMENT CLUTCH PAGE 61

MANDR. AUTOSERRANTI SERIE ULTRA PRECISA ULTRA-PRECISE KEYLESS DRILL CHUCKS				MANDR. AUTOSERRANTI SERIE STANDARD STANDARD KEYLESS DRILL CHUCKS			
ARTICOLO ARTICLE	ATTACCO ADAPTER	CAPACITA' CAPACITY	PREZZO PRICE	ARTICOLO ARTICLE	ATTACCO ADAPTER	CAPACITA' CAPACITY	PREZZO PRICE
35UP/08/B12	B 12	0-8	€ 160,00	35ST/08/B12	B 12	0-8	€ 60,00
35UP/10/B12	B 12	0-10	€ 168,00	35ST/10/B12	B 12	0-10	€ 77,00
35UP/10/B16	B 16	0-10	€ 168,00	35ST/13/B16	B 16	1-13	€ 87,00
35UP/13/B16	B 16	1-13	€ 178,00	35ST/16/B16	B 16	3-16	€ 100,00
35UP/16/B16	B 16	3-16	€ 197,00	35ST/16/B18	B 18	3-16	€ 100,00
35UP/16/B18	B 18	3-16	€ 197,00				

Brusa & C. s.r.l. Tooling

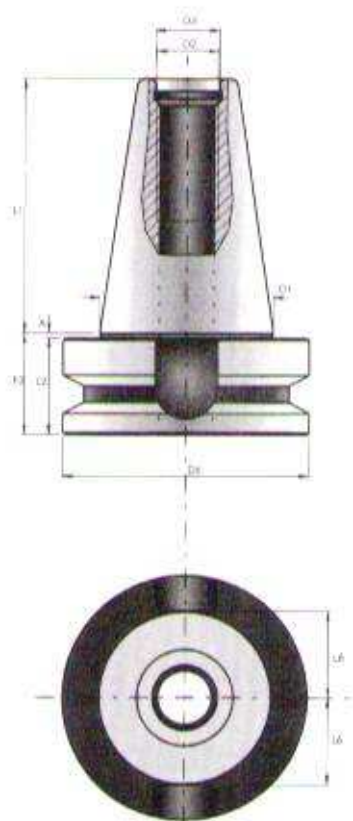
Telefono 0374/350031 Fax 0374/353854

**DIN 2080 MANDRINI CON STELO TENERO LAVORABILE
CHUCKS WITH MACHINABLE BLANK ARBORS**



ARTICOLO ARTICLE	ATTACCO ADAPTER	H	C	PREZZO PRICE
20/40ST40/250	ISO 40	250	40	€ 210,00
20/50ST97/315	ISO 50	315	97	€ 360,00

MAS-BT



CONO ADAPT.	D1	D2	D3	D6	L1	L2	L6	A	F2
BT 30	31,75	M 12	12,5	46,00	48,40	20,00	21,00	2,00	22
BT 40	44,45	M16	17	63,00	65,40	25,00	22,50	2,00	27
BT 50	69,85	M24	25	100,00	101,80	35,00	35,50	3,00	38

MATERIALE:
TRATTAMENTI TERMICI:
DUREZZA:
ESECUZIONE:

acciaio da cementazione di elevata qualità
cementazione, tempra e rinvenimento
56 – 60 HRC
AT 3

Il massimo scostamento di eccentricità tra cono e sede pinza è compreso tra 0,003 e 0,007 mm.

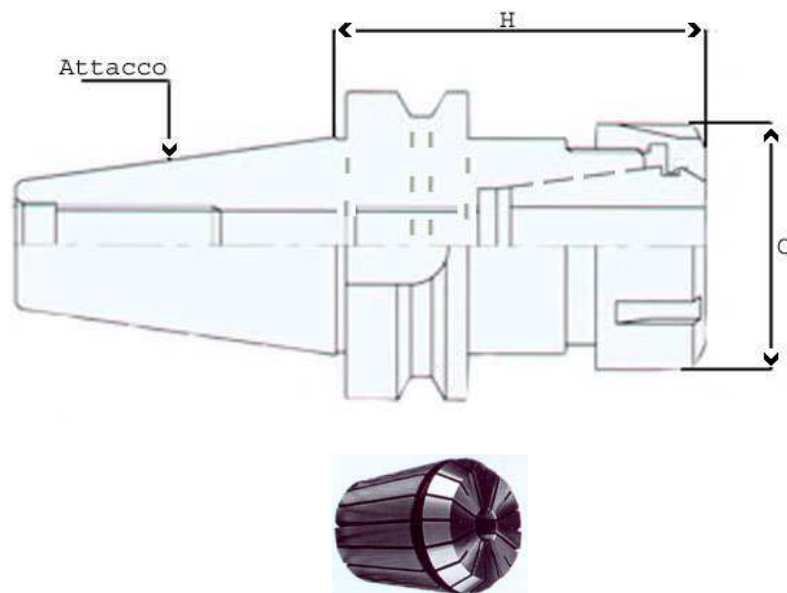
MATERIAL:
HEAT TREATMENT:
HARDNESS:
EXECUTION:

high quality carburizing steel
carburized, hardened and tempered
HRC 56 - 60
AT 3

The run out accuracy are guaranteed to be within 0,003 and 0,007 mm. at the tool seat

**BT MANDRINO PORTAPINZE ER AD+B
ER COLLET CHUCK**

RpM 12.000



ARTICOLO ARTICLE	ATTACCO ADAPTER	H	C	PINZA COLLET	CAPACITA' CAPACITY	PREZZO PRICE
30/30ER25	BT 30 (A)	60	42	ER 25	1-16	€ 73,00
30/30ER32	BT 30 (A)	65	50	ER 32	2-20	€ 73,00
30/40ER16	BT 40 (AD+B)	70	32	ER 16	1-10	€ 68,00
30/40ER20	BT 40 (AD+B)	70	35	ER 20	1-13	€ 85,00
30/40ER25	BT 40 (A)	70	42	ER 25	1-16	€ 63,00
30/40ER25	BT 40 (AD+B)	70	42	ER 25	1-16	€ 68,00
30/40ER32	BT 40 Standard (A)	70	50	ER 32	2-20	€ 56,00
30/40BER32	BT 40 Standard (AD+B)	70	50	ER 32	2-20	€ 61,00
30/401ER32	BT 40 (A)	100	50	ER 32	2-20	€ 99,00
30/402ER32	BT 40 (A)	140	50	ER 32	2-20	€ 145,00
30/403ER32	BT 40 (A)	200	50	ER 32	2-20	€ 185,00
30/40ER40	BT 40 (AD+B)	80	63	ER 40	3-30	€ 75,00
30/401ER40	BT 40 (AD+B)	100	63	ER 40	3-30	€ 95,00
30/402ER40	BT 40 (AD+B)	120	63	ER 40	3-30	€ 110,00
30/50ER32	BT 50 (A)	100	50	ER 32	2-20	€ 120,00
30/50ER40	BT 50 (A)	100	63	ER 40	3-30	€ 125,00

A RICHIESTA GHIERA BILANCIATA PER ALTA VELOCITA' PER ER25 E ER32 SENZA VARIAZIONE DI PREZZO.
ON REQUEST BALANCED NUT ER32 FOR HIGH SPEED WITHOUT PRICE'S DIFFERENCES.

MAS-BT	KIT MANDRINI PORTAPINZE ER KIT ER COLLET CHUCKS	RpM 12.000
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ARTICOLO ARTICLE	ATTACCO ADAPTER	PINZA COLLET	PINZE NEL KIT COLLET SIZE IN THE KIT	PREZZO PRICE
30/40/KIT25	BT 40 H= 70 FORMA A	STANDARD Nr. 15 pz.	2-3-4-5-6-7-8-9-10-11-12 13-14-15-16	€ 197,00
30/40/KIT32	BT 40 H=70 FORMA A	STANDARD Nr. 11 pz.	3-4-5-6-8-10-12-14 16-18-20	€ 140,00
30/40/KIT25T	BT 40 H= 70 FORMA AD+B	A TENUTA Nr. 14 pz.	3-4-5-6-7-8-9-10-11-12-13 14-15-16	€ 475,00
30/40/KIT32T	BT 40 H=70 FORMA AD+B	A TENUTA Nr. 11 pz.	3-4-5-6-8-10-12-14 16-18-20	€ 360,00

**A RICHIESTA SI COSTRUISCONO ALTRE MISURE
ON REQUEST WE MANUFACTURE ALSO OTHERS MEASURES**

**A RICHIESTA GHIERA ER25 E ER32 BILANCIATA PER ALTA VELOCITA'
SENZA VARIAZIONE DI PREZZO.
ON REQUEST ER25 AND ER32 BALANCED NUT FOR HIGH SPEED
WITHOUT ANY PRICE'S DIFFERENCES.**

BILANCIATURA

Si esegue a richiesta, con certificato
We make on request, with certificate

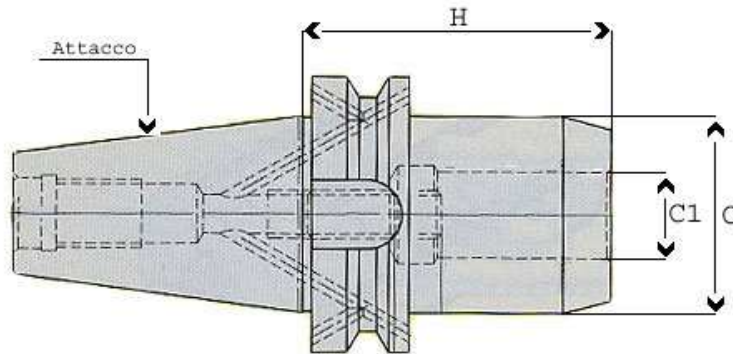
GRADO DI BILANCIATURA – BALANCING GRADE	PREZZO – PRICE
G 6,3 Rpm 15.000 / 20.000 / 25.000	€ 25,00
G 2,5 Rpm 15.000 / 20.000 / 25.000	€ 28,00

Brusa & C. s.r.l. Tooling

Telefono 0374/350031 Fax 0374/353854

**BT/B+AD MANDRINO IDRAULICO
HYDRAULIC CHUCK**

RpM 8.000

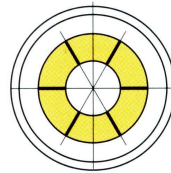
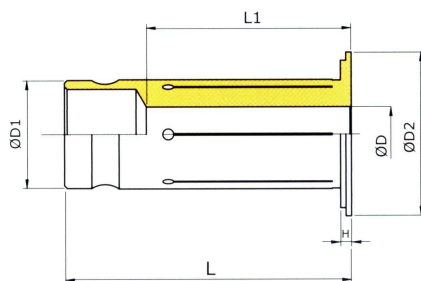


ARTICOLO ARTICLE	ATTACCO ADAPTER	H	C	C1	PINZA COLLET	CAP.	PREZZO PRICE
30/40.20	BT 40	72,50	49,50	20	105/20	3-18	€ 430,00

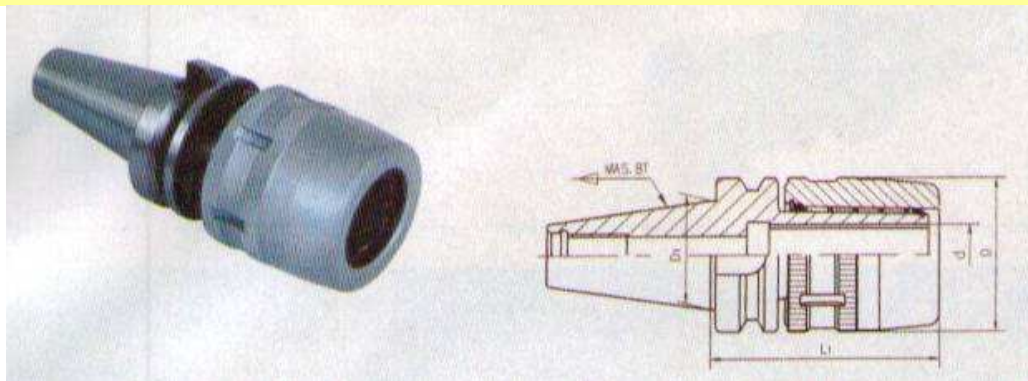
**A RICHIESTA ALTRE VERSIONI
ON REQUEST ALSO OTHER VERSIONS**

**PINZA PER MANDRINI IDRAULICI
COLLET FOR HYDRAULIC CHUCKS**

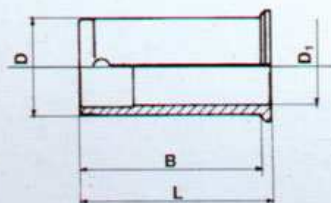
**A TENUTA MECCANICA DEL REFRIGERANTE
MECHANICAL SEALED FOR HIGH PRESSURE**



ARTICOLO ARTICOLO	D1	D	L1	L	PREZZO PRICE	
105/20	20	3-16	D.3	15	52,5	€ 74,00
			D.4 e 5	22		
			D.6 e 7	27		
			D.8-16	37,5		
			D.10	30		
			D.12 e 14	33		
		D.16	40			

MAS-BT**MANDRINO A FORTE SERRAGGIO
MILLING CHUCK**

ARTICOLO ARTICLE	ATTACCO ADAPTER	L1	d	D	PINZA COLLET	CAP.	PREZZO PRICE
30/40/20FS	BT 40	100	20	63	100/20	3-18	€ 180,00
30/40/25FS	BT 40	105	25	70	100/25	3-22	€ 190,00
30/40/32FS	BT 40	115	32	90	100/32	3-28	€ 200,00
30/50/32FS	BT 50	120	32	90	100/32	3-28	€ 240,00

A RICHIESTA ALTRE VERSIONI**- ON REQUEST ALSO OTHERS TYPES****PINZE CILINDRICHE****CYLINDRICAL COLLETS**

ARTICOLO ARTICLE	D	D1	B	L	PREZZO PRICE
100/20	20	3-18	50	54	€ 30,00
100/25	25	3-22	56	60	€ 33,00
100/32	32	3-28	60	64	€ 35,00

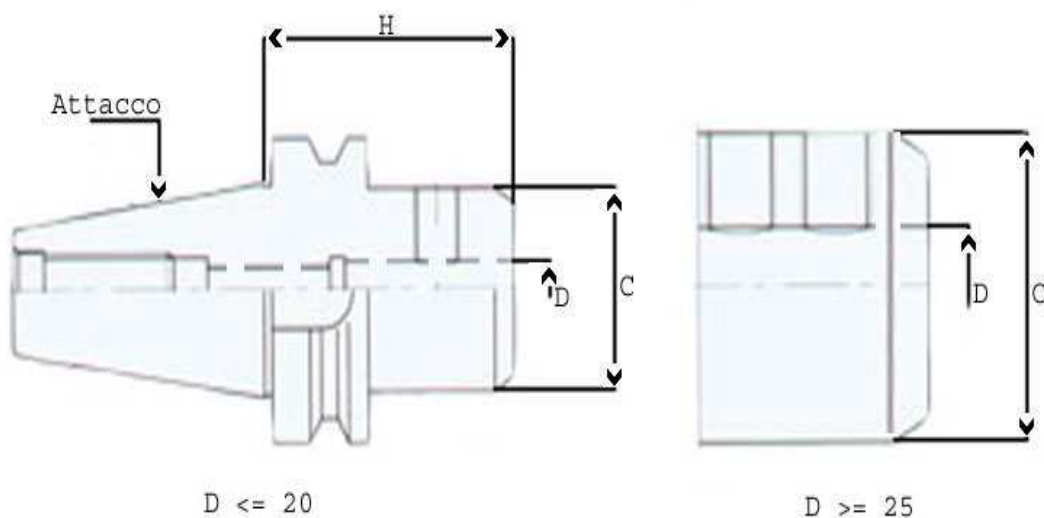
Brusa & C. s.r.l. Tooling

Telefono 0374/350031 Fax 0374/353854

MAS-BT**KIT MANDRINI FORTE SERRAGGIO compl. di chiave
KIT MILLING CHUCK compl. with key**

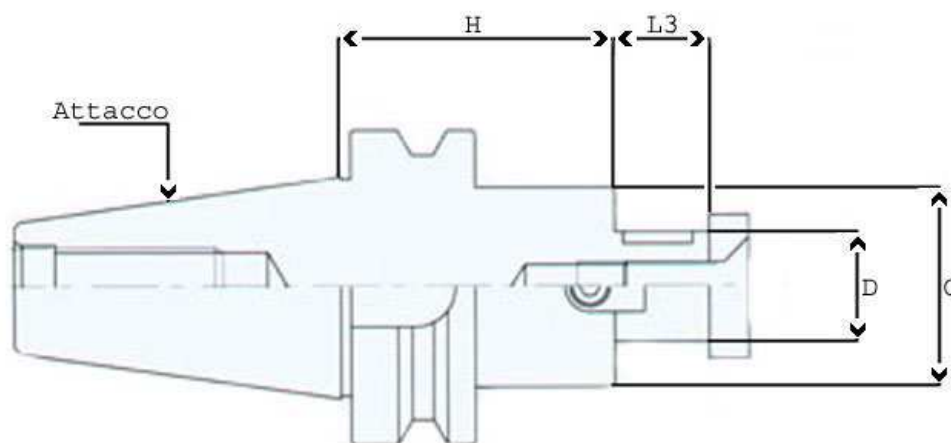
ARTICOLO ARTICLE	ATTACCO ADAPTER	PINZA COLLET	PINZE NEL KIT COLLET SIZE ON THE KIT	PREZZO PRICE
30/KIT40/20FS	BT 40 DIAM. 20	100/20 Nr.10 pz.	3-4-5-6-8-10-12-14-16-18	€ 380,00
30/KIT40/32FS	BT 40 DIAM. 32	100/32 Nr.12 pz.	4-5-6-8-10-12-14-16-18-20-25-28	€ 500,00

BT MANDRINI PORTAFRESE ATTACCO WELDON WELDON MILLING HOLDERS



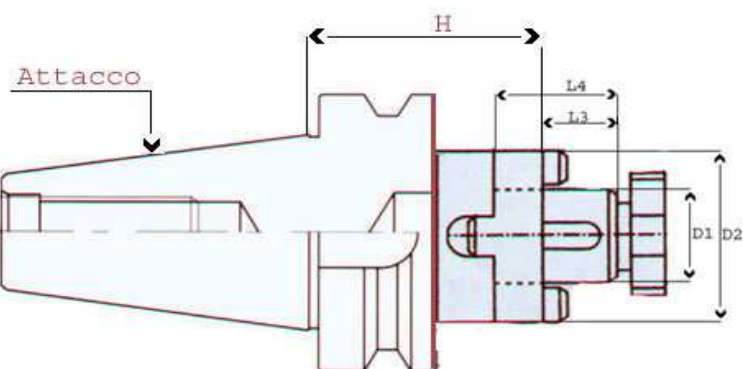
ARTICOLO ARTICLE	ATTACCO ADAPTER	D	H	C	PREZZO PRICE
30/30WE06	BT 30	6	60	25	€ 90,00
30/30WE08	BT 30	8	60	28	€ 90,00
30/30WE10	BT 30	10	60	35	€ 90,00
30/30WE12	BT 30	12	60	42	€ 90,00
30/30WE16	BT 30	16	60	48	€ 90,00
30/30WE20	BT 30	20	80	52	€ 90,00
30/40WE06	BT 40	6	60	25	€ 64,00
30/40WE08	BT 40	8	60	28	€ 64,00
30/40WE10	BT 40	10	65	35	€ 64,00
30/40WE12	BT 40	12	65	42	€ 64,00
30/40WE16	BT 40	16	70	48	€ 64,00
30/40WE18	BT40	18	70	50	€ 64,00
30/40WE20	BT 40	20	70	52	€ 66,00
30/40WE25	BT 40	25	100	65	€ 71,00
30/40WE32	BT 40	32	100	72	€ 73,00
30/40WE40	BT 40	40	120	90	€ 99,00
30/50WE06	BT 50	6	63	25	€ 125,00
30/50WE08	BT 50	8	63	28	€ 125,00
30/50WE10	BT 50	10	63	35	€ 125,00
30/50WE12	BT 50	12	80	42	€ 125,00
30/50WE16	BT 50	16	80	48	€ 125,00
30/50WE20	BT 50	20	80	52	€ 125,00
30/50WE25	BT 50	25	100	65	€ 135,00
30/50WE32	BT 50	32	105	72	€ 145,00
30/50WE40	BT 50	40	120	90	€ 165,00

BT MANDRINI PORTAFRESE FISSI SHELL MILLING HOLDERS



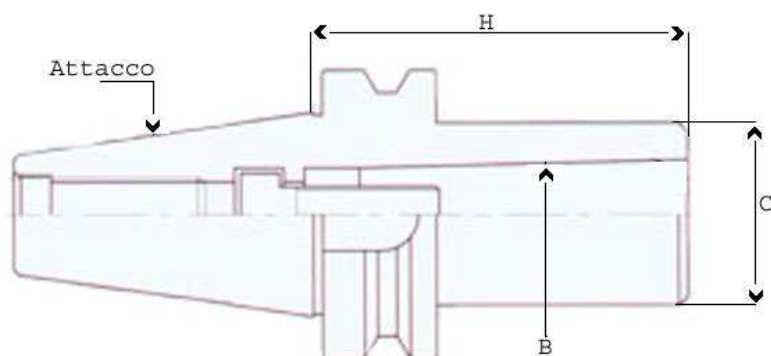
ARTICOLO ARTICLE	ATTACCO ADAPTER	D	H	L3	C	PREZZO PRICE
30/30F16	BT 30	16	43	17	36	€ 115,00
30/30F22	BT 30	22	43	19	50	€ 115,00
30/30F27	BT 30	27	50	21	50	€ 120,00
30/30F32	BT 30	32	50	24	58	€ 160,00
30/40F16	BT 40	16	35	17	38	€ 79,00
30/40F22	BT 40	22	35	19	48	€ 79,00
30/40F27	BT 40	27	35	21	58	€ 79,00
30/40F32	BT 40	32	50	24	66	€ 95,00
30/50F16	BT 50	16	75	17	38	€ 150,00
30/50F22	BT 50	22	75	19	48	€ 150,00
30/50F27	BT 50	27	75	21	58	€ 160,00
30/50F32	BT 50	32	75	24	66	€ 170,00
30/50F40	BT 50	40	75	27	89	€ 180,00

BT MANDRINI PORTAFRESE COMBINATI
Trascinamento frontale e chiavetta
COMBINED SHELL MILLING HOLDERS
Frontal dragging and key



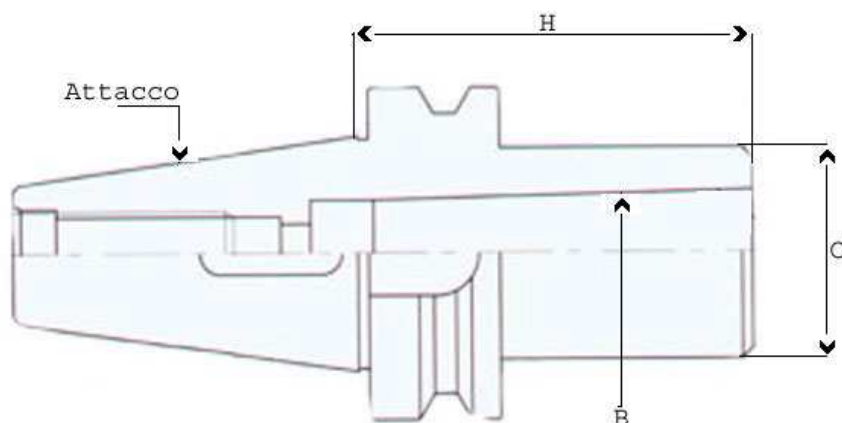
ARTICOLO ARTICLE	ATTACCO ADAPTER	D1	D2	H	L3	L4	PREZZO PRICE
30/30C16	BT 30	16	32	43	17	27	€ 120,00
30/30C22	BT 30	22	40	50	19	31	€ 120,00
30/30C27	BT 30	27	48	50	21	33	€ 130,00
30/30C32	BT 30	32	58	57	24	38	€ 150,00
30/40C16	BT 40	16	32	55	17	27	€ 80,00
30/40C22	BT 40	22	40	55	19	31	€ 80,00
30/40C27	BT 40	27	48	55	21	33	€ 80,00
30/40C32	BT 40	32	58	60	24	38	€ 96,00
30/50C16	BT 50	16	32	70	17	27	€ 140,00
30/50C22	BT 50	22	40	70	19	31	€ 140,00
30/50C27	BT 50	27	48	70	21	33	€ 150,00
30/50C32	BT 50	32	58	70	24	38	€ 160,00
30/50C40	BT 50	40	70	70	27	41	€ 180,00

BT RIDUZIONI CONO MORSE PER FRESE MORSE TAPER ADAPTOR FOR MILLS



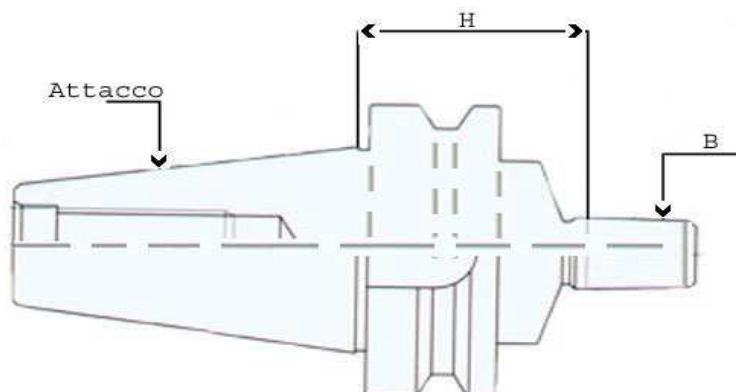
ARTICOLO ARTICLE	ATTACCO ADAPTER	H	C	B	PREZZO PRICE
30/40CM2F	BT 40	50	32	CM 2	€ 75,00
30/40CM3F	BT 40	70	40	CM 3	€ 75,00
30/40CM4F	BT 40	95	48	CM 4	€ 81,00
30/50CM2F	BT 50	60	32	CM 2	€ 150,00
30/50CM3F	BT 50	65	40	CM 3	€ 150,00
30/50CM4F	BT 50	85	48	CM 4	€ 180,00
30/50CM5F	BT 50	100	63	CM 5	€ 220,00

BT RIDUZIONI CONO MORSE PER PUNTE MORSE TAPER ADAPTOR FOR DRILLS

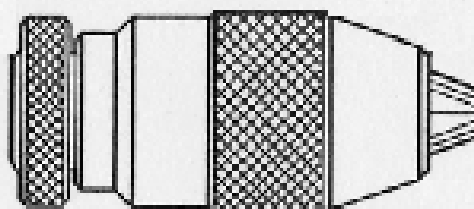


ARTICOLO ARTICLE	ATTACCO ADAPTER	H	C	B	PREZZO PRICE
30/40CM1P	BT 40	50	25	CM 1	€ 63,00
30/40CM2P	BT 40	50	32	CM 2	€ 63,00
30/40CM3P	BT 40	70	40	CM 3	€ 63,00
30/40CM4P	BT 40	95	48	CM 4	€ 75,00
30/50CM2P	BT 50	60	32	CM 2	€ 135,00
30/50CM3P	BT 50	65	40	CM 3	€ 135,00
30/50CM4P	BT 50	95	48	CM 4	€ 145,00
30/50CM5P	BT 50	105	63	CM 5	€ 160,00

BT ATTACCHI PER MANDRINI PORTAPUNTE DRILL CHUCKS ARBORS

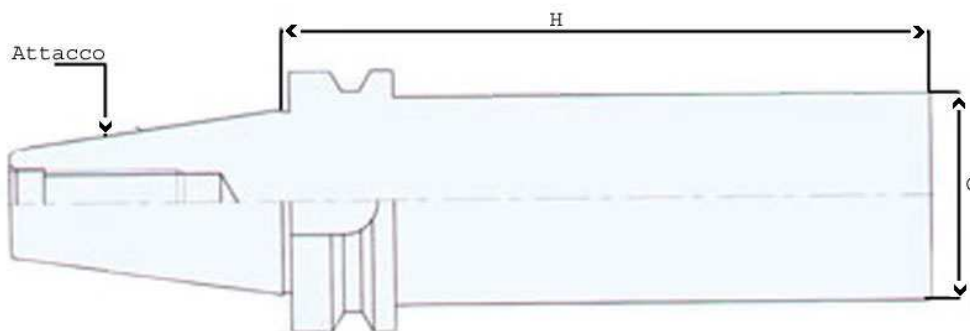


ARTICOLO ARTICLE	ATTACCO ADAPTER	H	B	PREZZO PRICE
30/30B12	BT 30	30	B 12	€ 97,00
30/30B16	BT 30	30	B 16	€ 97,00
30/40B12	BT 40	40	B 12	€ 60,00
30/40B16	BT 40	42	B 16	€ 60,00
30/40B18	BT 40	42	B 18	€ 78,00
30/50B16	BT 50	45	B 16	€ 155,00
30/50B18	BT 50	45	B 18	€ 155,00



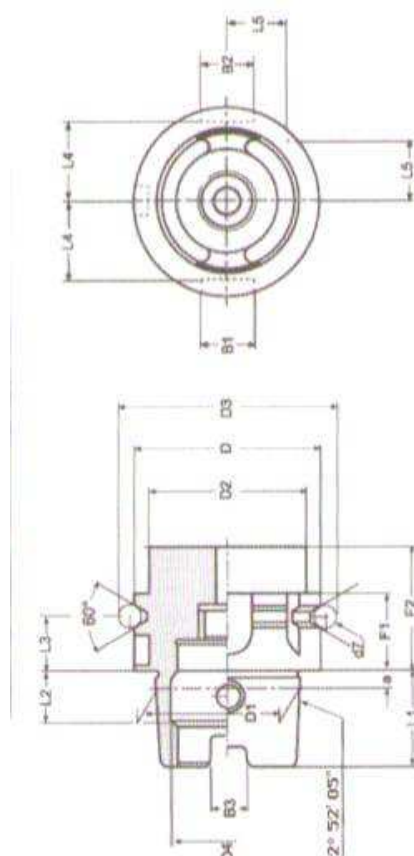
MANDR.AUTOSERRANTI SERIE ULTRA PRECISA ULTRA-PRECISE KEYLESS DRILL CHUCKS				MANDR.AUTOSERRANTI SERIE STANDARD STANDARD KEYLESS DRILL CHUCKS			
ARTICOLO ARTICLE	ATTACCO ADAPTER	CAPACITA' CAPACITY	PREZZO PRICE	ARTICOLO ARTICLE	ATTACCO ADAPTER	CAPACITA' CAPACITY	PREZZO PRICE
35UP/08/B12	B 12	0-8	€ 160,00	35ST/08/B12	B 12	0-8	€ 60,00
35UP/10/B12	B 12	0-10	€ 168,00	35ST/10/B12	B 12	0-10	€ 77,00
35UP/10/B16	B 16	0-10	€ 168,00	35ST/13/B16	B 16	1-13	€ 87,00
35UP/13/B16	B 16	1-13	€ 178,00	35ST/16/B16	B 16	3-16	€ 100,00
35UP/16/B16	B 16	3-16	€ 197,00	35ST/16/B18	B 18	3-16	€ 100,00
35UP/16/B18	B 18	3-16	€ 197,00				

BT MANDRINI CON STELO TENERO LAVORABILE
BT CHUCKS WITH MACHINABLE BLANK ARBORS



ARTICOLO ARTICLE	ATTACCO ADAPTER	H	C	PREZZO PRICE
30/40ST40/250	BT 40	250	40	€ 200,00
30/40ST63/250	BT 40	250	63	€ 200,00
30/50ST97/315	BT 50	315	97	€ 330,00

HSK DIN 69893



CONO ADAPT.	D	D1	D2	D3	B1	B2	B3	a	d 7	L1	L2	L3	L4	L5	F1	F2
KSK 63	63	48,010	53	72,30	18	16	12,54	6,3	7	32	18,13	18	26,5	20	26	42

MATERIALE:
 TRATTAMENTI TERMICI:
 DUREZZA:
 ESECUZIONE:

acciaio da cementazione di elevata qualità
 cementazione, tempra e rinvenimento
 56 – 60 HRC
 AT 3

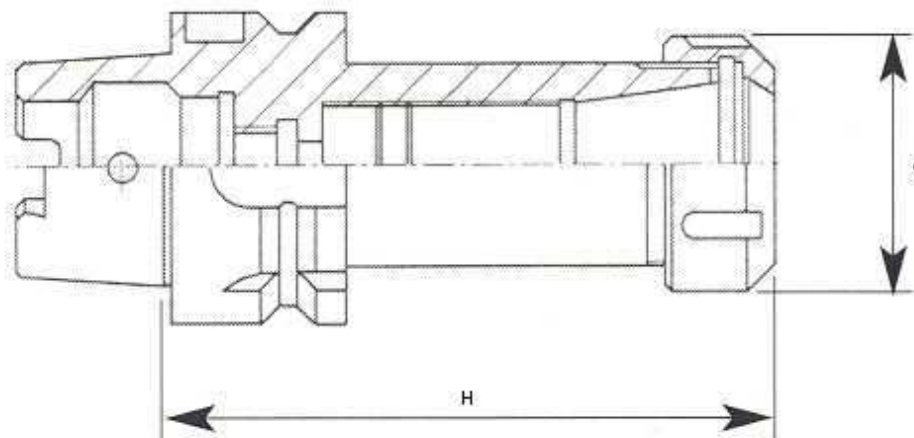
Il massimo scostamento di eccentricità tra cono e sede pinza è compreso tra 0,003 e 0,007 mm.

MATERIAL:
 HEAT TREATMENT:
 HARDNESS:
 EXECUTION:

high quality carburizing steel
 carburized, hardened and tempered
 HRC 56 - 60
 AT 3

The run out accuracy are guaranteed to be within 0,003 and 0,007 mm. at the tool seat

**DIN 69893 MANDRINO PORTAPINZE ER ATTACCO HSK
HSK ER COLLET CHUCKS**



ARTICOLO ARTICLE	ATTACCO ADAPATER	D	H	C	PINZA COLLET	CAPACITA' CAPACITY	PREZZO PRICE
40/63A/ER16	HSK 63 A	63	100	32	ER 16	1-10	€ 180,00
40/63A/ER25	HSK 63 A	63	100	42	ER 25	1-16	€ 140,00
40/63A/ER32	HSK 63 A	63	100	50	ER 32	2-20	€ 110,00
40/63A/ER40	HSK 63 A	63	80	63	ER 40	3-30	€ 120,00
40/63A/ER40/0	HSK 63 A	63	100	63	ER 40	3-30	€ 120,00
40/63A/ER40/1	HSK 63 A	63	120	63	ER 40	3-30	€ 170,00
40/63F/ER32	HSK 63 F	63	100	50	ER32	2-20	€ 120,00
40/63F/290	HSK 63 F	63	65	50	GRIFO 290	3-25	€ 130,00

**A RICHIESTA HSK 40 - 50 - 80 - 100 FORME B - C - D - E - F
ON REQUEST HSK 40 - 50 - 80 - 100 FORMS B - C - D - E - F**

DIN 69893**HSK63A – 63F****RpM 12.000****KIT MANDRINI PORTAPINZE ER
KIT ER COLLET CHUCKS**

ARTICOLO ARTICLE	ATTACCO ADAPTER	PINZA COLLET	PINZE NEL KIT COLLET SIZE ON THE KIT	PREZZO PRICE
40/63A/KIT32	HSK63A ER32	STANDARD Nr. 11 pz.	3-4-5-6-8-10-12-14 16-18-20	€ 185,00
40/63F/KIT32	HSK63F ER32	STANDARD Nr. 11 pz.	3-4-5-6-8-10-12-14 16-18-20	€ 200,00

**A RICHIESTA SI COSTRUISCONO ALTRE MISURE
ON REQUEST WE MANUFACTURE ALSO OTHERS MEASURES**

**A RICHIESTA GHIERA ER25 E ER32 BILANCIATA PER ALTA VELOCITA'
SENZA VARIAZIONE DI PREZZO.
ON REQUEST ER25 AND ER32 BALANCED NUT FOR HIGH SPEED
WITHOUT ANY PRICE'S DIFFERENCES.**

BILANCIATURA

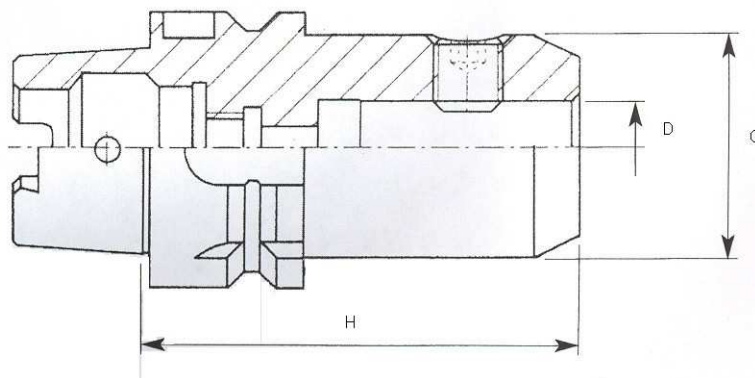
**Si esegue a richiesta, con certificato
We make on request, with certificate**

GRADO DI BILANCIATURA – BALANCING GRADE	PREZZO – PRICE
G 6,3 Rpm 15.000 / 20.000 / 25.000	€ 25,00
G 2,5 Rpm 15.000 / 20.000 / 25.000	€ 28,00

Brusa & C. s.r.l. Tooling

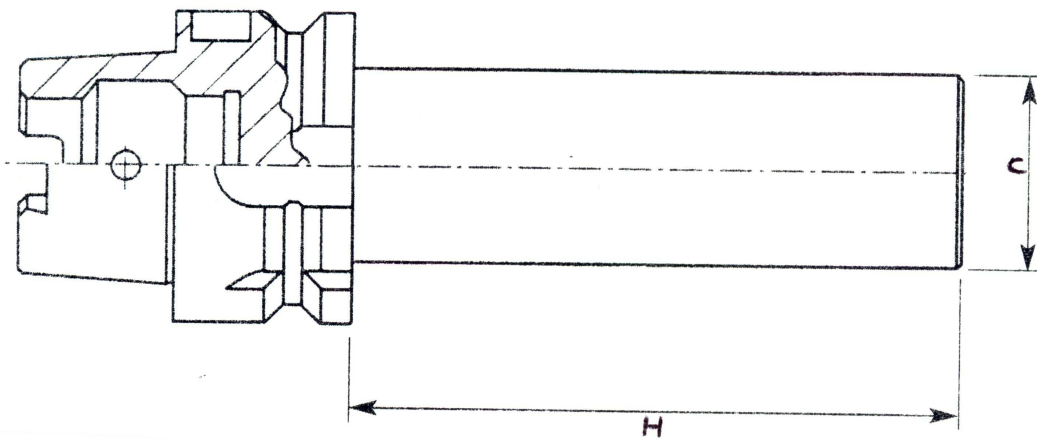
Telefono 0374/350031 Fax 0374/353854

**DIN 69893 MANDRINO PORTAFRESE WELDON ATTACCO HSK
HSK WELDON MILLING HOLDERS**



ARTICOLO ARTICLE	ATTACCO ADAPTER	D	H	C	PREZZO PRICE
40/63A/WE06	HSK 63 A	6	65	25	€ 163,00
40/63A/WE08	HSK 63 A	8	65	28	€ 157,00
40/63A/WE10	HSK 63 A	10	65	35	€ 157,00
40/63A/WE12	HSK 63 A	12	80	42	€ 157,00
40/63A/WE16	HSK 63 A	16	80	48	€ 157,00
40/63A/WE20	HSK 63 A	20	80	52	€ 157,00
40/63A/WE25	HSK 63 A	25	110	65	€ 160,00
40/63A/WE32	HSK 63 A	32	110	72	€ 165,00

**DIN 69893 MANDRINI CON STELO TENERO LAVORABILE
HSK CHUCKS WITH MACHINABLE BLANK ARBORS**

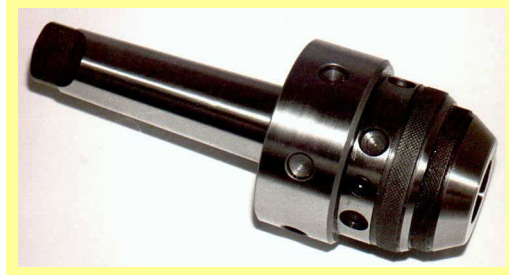


ARTICOLO ARTICLE	ATTACCO ADAPTER	H	C	PREZZO PRICE
40/63A/ST63	HSK 63-A	200	63	€ 175,00
40/63A/ST63.2	HSK 63-A	250	63	€ 175,00

**A RICHIESTA ALTRE VERSIONI
ON REQUEST ALSO OTHER VERSIONS**

CONO MORSE

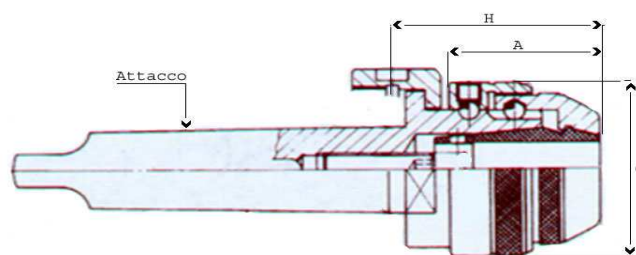
MORSE TAPER TOOLING



Brusa & C. s.r.l. Tooling

Telefono 0374/350031 Fax 0374/353854

MANDRINO PORTAPINZE GRIFO CONO MORSE 4 RAG/BIMAK GRIFO MORSE 4 RAG/BIMAK COLLET CHUCK



ART.	ATTACCO ADAPT.	H	A	C	GHIERA NUT	PINZA COLLET	CAP.	PREZZO PRICE
50/RAG/ER32	CM 4	44	34	50	RAG FIL.60x2,5	ER32	2-20	€ 160,00

** 50/RAG700	CM 4	66	47	62	RAG FIL.60x2,5	ART.700	3-20	€ 175,00
** 50/BIMAK700	CM 4	66	47	62	BIMAK FIL.60x3	ART.700	3-20	€ 175,00

** DISPONIBILI SOLO FINO AD ESAURIMENTO SCORTE – AVAILABLE ONLY UNTIL CLEARANCE SALE



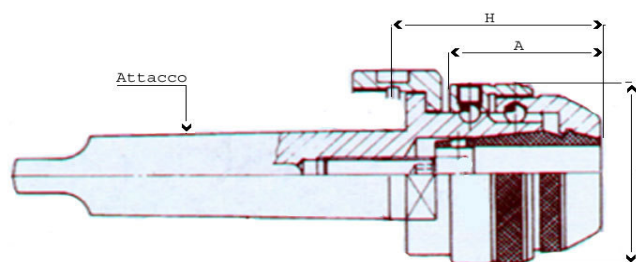
ART.50/RAG/KIT32 Confezione mandrino portapinze GRIFO CM4 con ghiera RAG complete di Nr.7 pinze ER32 nei diam.4-6-8-10-12-16-20 e chiave di servizio.
Kit GRIFO collet spindle with RAG nut fitted with N°7 collets ER32 diam.4-6-8-10-12-16-20 and service key. Prezzo - Price € 233,00

**** ART.50/RAG/KIT700** Confezione mandrino portapinze GRIFO CM4 con ghiera RAG completa di Nr.7 pinze art.700 nei diam.4-6-8-10-12-16-20 e chiave di servizio.
Kit GRIFO collet spindle with RAG nut fitted with N°7 collets art.700 diam. 4-6-8-10-12-16-20 and service key. Prezzo - Price € 348,00

**** ART.50/BIMAK/KIT700** Confezione mandrino portapinze GRIFO CM4 con ghiera BIMAK completa di Nr.7 pinze art.700 nei diam. 4-6-8-10-12-16-20 e chiave di servizio.
Kit GRIFO collet spindle with BIMAK nut fitted with N°7 collets art.700 diam.4-6-8-10-12-16-20 and service key. Prezzo – Price € 348,00

** DISPONIBILI SOLO FINO AD ESAURIMENTO SCORTE – AVAILABLE ONLY UNTIL CLEARANCE SALE

MANDRINO PORTAPINZE GRIFO CONO MORSE 4 RAG/BIMAK GRIFO MORSE 4 RAG/BIMAK COLLET CHUCK



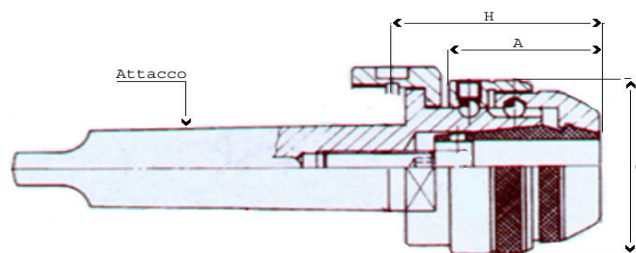
ART.	ATTACCO ADAPT.	H	A	C	GHIERA NUT	PINZA COLLET	CAP.	PREZZO PRICE
50/RAG/ER32	CM 4	44	34	50	RAG FIL.60x2,5	ER32	2-20	€ 160,00



ART.50/RAG/KIT32 Confezione mandrino portapinze GRIFO CM4 con ghiera RAG complete di Nr.7 pinze ER32 nei diam.4-6-8-10-12-16-20 e chiave di servizio.
Kit GRIFO collet spindle with RAG nut fitted with N°7 collets ER32 diam.4-6-8-10-12-16-20 and service key.

Prezzo - Price € 233,00

MANDRINO PORTAPINZE GRIFO CONO MORSE 4 RAG/BIMAK GRIFO MORSE 4 RAG/BIMAK COLLET CHUCK



ART.	ATTACCO ADAPT.	H	A	C	GHIERA NUT	PINZA COLLET	CAP.	PREZZO PRICE
50/RAG/ER32	CM 4	44	34	50	RAG FIL.60x2,5	ER32	2-20	€ 160,00

** 50/RAG700	CM 4	66	47	62	RAG FIL.60x2,5	ART.700	3-20	€ 175,00
** 50/BIMAK700	CM 4	66	47	62	BIMAK FIL.60x3	ART.700	3-20	€ 175,00

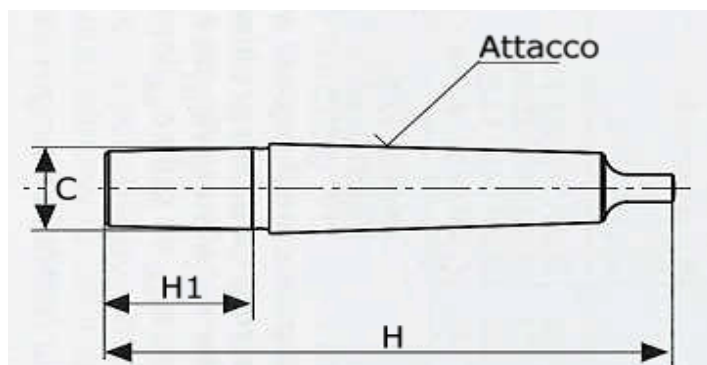
** DISPONIBILI SOLO FINO AD ESAURIMENTO SCORTE - AVAILABLE ONLY UNTIL CLEARANCE SALE



ART.50/RAG/KIT32 Confezione mandrino portapinze GRIFO CM4 con ghiera RAG complete di Nr.7 pinze ER32 nei diam.4-6-8-10-12-16-20 e chiave di servizio.
Kit GRIFO collet spindle with RAG nut fitted with N°7 collets ER32 diam.4-6-8-10-12-16-20 and service key.

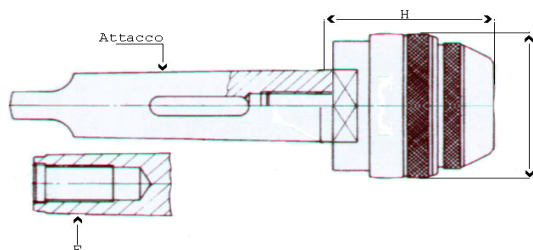
Prezzo - Price € 233,00

ATTACCO MANDRINO PORTAPUNTE CONO MORSE MORSE DRILL CHUCKS ARBORS



ARTICOLO ARTICLE	ATTACCO ADAPTER	C	H	H1	PREZZO PRICE
50/CM2/16	B 16	16	112	30	€ 7,00
50/CM3/16	B 16	16	134	30	€ 8,50
50/CM3/18	B 18	18	140	37	€ 13,00
50/CM4/16	B 16	16	159	30	€ 14,00
50/CM4/18	B 18	18	140	37	€ 16,00

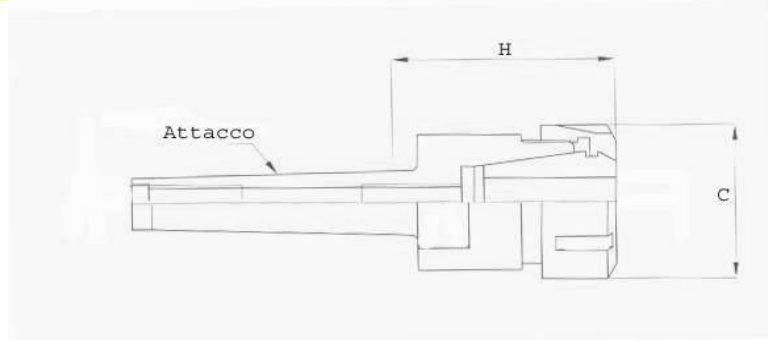
DIN 228 MANDRINO GRIFO ATTACCO CONO MORSE RpM 10.000 GRIFO MORSE COLLET CHUCKS



ART.	ATTACCO ADAPT.	H	C	E	PINZA COLLET	CAP.	PREZZO PRICE
** 50/CM2G	CM 2	69	62	M 10	ART.700	3-20	€ 162,00
** 50/CM3G	CM 3	75	62	M 12	ART.700	3-20	€ 162,00
** 50/CM4G	CM 4	80	62	M 16	ART.700	3-20	€ 162,00
** 50/CM5G	CM 5	78	62	ALESATR.	ART.700	3-20	€ 224,00

** DISPONIBILI SOLO FINO AD ESAURIMENTO SCORTE - AVAILABLE ONLY UNTIL CLEARANCE SALE

DIN 228/A MANDRINO ER ATTACCO CONO MORSE ER MORSE COLLET CHUCKS



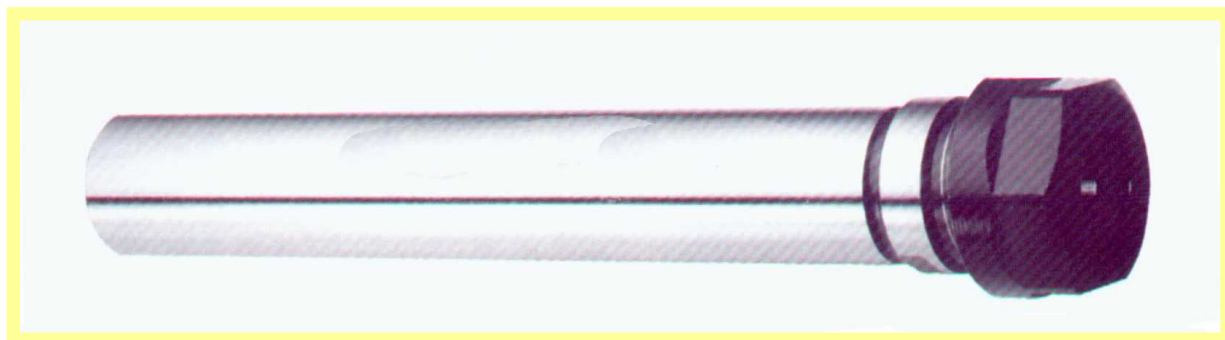
ARTICOLO ARTICLE	ATTACCO ADAPTER	H		C	PINZA COLLET	CAPACITA' CAPACITY	PREZZO PRICE
50/CM2ER16	CM 2	42		32	ER 16	1-10	€ 68,00
50/CM2ER20	CM 2	50		35	ER 20	1-13	€ 68,00
50/CM2ER25	CM 2	54		42	ER 25	1-16	€ 68,00
50/CM3ER25	CM 3	53		42	ER 25	1-16	€ 68,00
50/CM3ER32	CM 3	70		50	ER 32	2-20	€ 68,00
50/CM4ER32	CM 4	60		50	ER 32	2-20	€ 78,00
50/CM4ER40	CM 4	81		63	ER 40	3-30	€ 78,00
50/CM5ER32	CM 5	50		50	ER 32	2-20	€ 120,00
50/CM5ER40	CM 5	82		63	ER 40	3-30	€ 135,00

TENONI PER ATTACCHI CONO MORSE REMOVABLE TANGS FOR MORSE TAPER SHANKS

ARTICOLO ARTICLE	ATTACCO ADAPTER	PREZZO PRICE
50/CM2	CONO MORSE 2	€ 16,00
50/CM3	CONO MORSE 3	€ 18,00
50/CM4	CONO MORSE 4	€ 20,00
50/CM5	CONO MORSE 5	€ 30,00

PORTAPINZE CILINDRICI

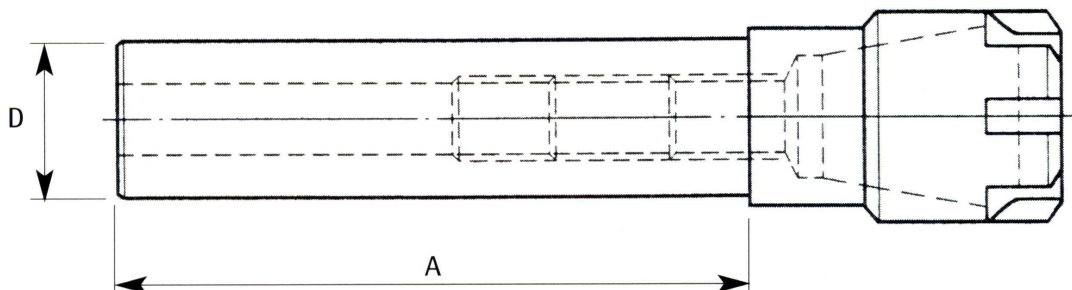
STRAIGH SHANK TOOLING



Brusa & C. s.r.l. Tooling

Telefono 0374/350031 Fax 0374/353854

**PORTAPINZE ER CILINDRICI STANDARD E PROLUNGATI
STANDARD AND EXTENSION STRAIGH SHANK COLLET CHUCKS**



ARTICOLO ARTICLE	DIAM.	A	GHIERA NUT	DIAM. GHIERA NUT DIAM.	PINZA COLLET	CAP.	PREZZO PRICE
60/D8ER8	8	100	MINI	12	ER8	1-5	€ 46,00
60/D12ER8	12	100	MINI	12	ER8	1-5	€ 46,00
60/D16ER11	16	100	MINI	16	ER11	1-7	€ 46,00
60/D16ER11P	16	160	MINI	16	ER11	1-7	€ 60,00
60/D16ER16	16	100	MINI	22	ER16	1-10	€ 46,00
60/D20ER16	20	100	MINI	22	ER16	1-10	€ 46,00
60/D20ER16P	20	160	MINI	22	ER16	1-10	€ 60,00
60/D25ER16	25	160	MINI	22	ER16	1-10	€ 60,00
60/D20ER20	20	100	MINI	28	ER20	1-13	€ 46,00
60/D20ER20P	20	160	MINI	28	ER20	1-13	€ 60,00
60/D20ER25	20	100	MINI	35	ER25	1-16	€ 60,00
60/D25ER25	25	160	MINI	35	ER25	1-16	€ 65,00
60/D32ER25	32	60	STANDARD	42	ER25	1-16	€ 60,00
60/D32ER32	32	70	STANDARD	50	ER32	2-20	€ 60,00
60/D40ER32	40	80	STANDARD	50	ER32	2-20	€ 60,00
60/D25ER40	25	145	STANDARD	63	ER40	3-30	€ 130,00

**A RICHIESTA MISURE DIVERSE
ON REQUEST ALSO OTHER MEASURES**

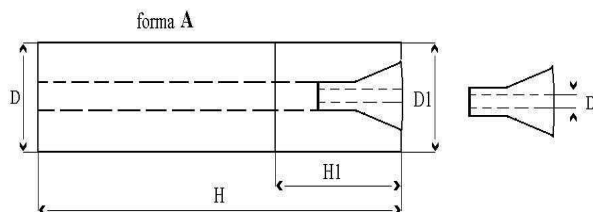
**KIT PORTAPINZE ER CILINDRICI STANDARD COMPL. DI CHIAVE
KIT STANDARD STRAIGH SHANK COLLET CHUCKS WITH WRENCH**



ARTICOLO ARTICLE	DIAM.	A	GHIERA NUT	PINZA COLLET	PINZE NEL KIT COLLET SIZE ON THE KIT	PREZZO PRICE
60/16ER16	16	100	MINI	Nr. 10 pz. ER16	1-2-3-4-5-6-7-8-9-10	€ 133,00
60/20ER16	20	100	MINI	Nr. 10 pz. ER16	1-2-3-4-5-6-7-8-9-10	€ 133,00
60/20ER20	20	100	MINI	Nr. 13 pz. ER20	1-2-3-4-5-6-7-8-9-10-11 12-13	€ 159,00
60/20ER25	20	100	MINI	Nr. 15 pz. ER25	1-2-3-4-5-6-7-8-9-10-11 12-13-14-15	€ 190,00
60/25ER25	25	160	MINI	Nr. 15 pz. ER25	1-2-3-4-5-6-7-8-9-10-11 12-13-14-15	€ 195,00
60/32ER25	32	60	STANDARD	Nr. 15 pz. ER25	1-2-3-4-5-6-7-8-9-10-11 12-13-14-15	€ 190,00

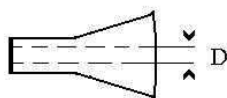
**SI CONFEZIONANO ANCHE VALIGETTE PERSONALIZZATE
IS POSSIBLE TO HAVE ALSO KIT AT YOUR PICK ITEMS**

**PROLUNGHE PORTAPINZE SENZA GHIERA E BLOCCAGGIO CON TIRANTE
EXTENSION COLLET CHUCK WITHOUT NUT AND CLAMPING TIE ROD**



ART.	H	H1	D	D1	CAPACITA' CAPACITY	ART. PINZA ITEM ART.	PREZZO PRICE
10-10/085	85	35	10	10	2-6	ABC/08,5	€ 100,00
12-12/100	100	40	12	12	3-8	ABC/10,5	€ 118,00
16-16/100	100	40	16	16	3-12	ABC/14,5	€ 118,00
16-12/150	150	50	16	12	3-8	ABC/10,5	€ 130,00
20-16/150	150	50	20	16	3-12	ABC/14,5	€ 135,00

Pinza

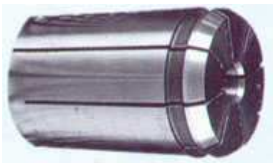


ARTICOLO ARTICLE	DIAM. INT.	DIAM. EST.	H	PREZZO PRICE
ABC/08,5	2-6	8,5	30	€ 58,00
ABC/10,5	3-8	10,5	32	€ 58,00
ABC/14,5	3-12	14,5	34	€ 58,00



ACCESSORI - RICAMBI

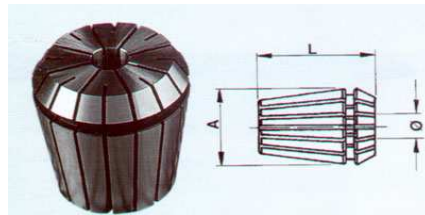
SPARE PARTS



PINZE ER STANDARD

STANDARD ER COLLETS

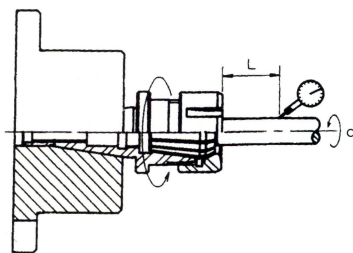
DIN 6499



CONICITA' 8°
 CONCENTRICITA': PINZA STANDARD mm. 0,015 – 0,020

Valori riferiti al diametro nominale delle pinze. / The tolerances are valid only for nominal diameter of the collet.
 L'utensile deve essere bloccato per tutta la lunghezza utile di presa della pinza.
 The chucking length of cutting tool shank is longer than the collet's bore length.

ARTICOLO ARTICLE	A	L	CAPACITA' CAPACITY	DIAMETRI DIAMETERS	PREZZO PRICE
ER 8 STANDARD	8	13,5	1 - 5	1 - 1,5 - 2 - 2,5 3 - 3,5 - 4 - 4,5 - 5	€ 13,00 € 11,00
ER 11 STANDARD	11	18	1 - 7	1 - 1,5 - 2 - 2,5 3 - 3,5 - 4 - 4,5 - 5 - 5,5 - 6 - 6,5 - 7	€ 13,00 € 11,00
ER 16 STANDARD	16	27,5	1 - 10	1 - 1,5 - 2 - 2,5 3,5 - 4,5 - 5,5 - 6,5 - 7,5 - 8,5 - 9,5 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10	€ 13,00 € 13,00 € 11,00
ER 20 STANDARD	20	31,5	1 - 13	1 - 1,5 - 2 - 2,5 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10 - 11 - 12 - 13	€ 13,00 € 11,00
ER 25 STANDARD	25	34	1 - 16	1 - 1,5 - 2 - 2,5 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10 11 - 12 - 13 - 14 - 15 - 16	€ 13,00 € 11,00
ER 32 STANDARD	32	40	2 - 20	2 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10 - 11 - 12 13 - 14 - 15 - 16 - 17 - 18 - 19 - 20	€ 13,00 € 9,80
ER 40 STANDARD	40	46	3 - 30	3 - 4 - 5 - 6 - 7 - 8 - 9 - 10 - 11 - 12 13 - 14 - 15 - 16 - 17 - 18 - 19 - 20 - 21 22 - 23 - 24 - 25 - 26 - 27 - 28 - 29 - 30	€ 14,00
ER 50 STANDARD	50	60	6 - 34	6-7-8-9-10-11-12-13-14-15-16-17-18-19-20 21-22-23-24-25-26-27-28-29-30-31-32-33-34	€ 38,00

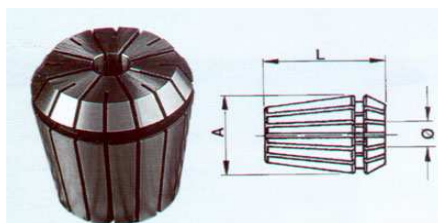


L (mm.)	D1 (mm.)	CONCENTRICITA' STANDARD STANDARD CONCENTRICITY
6	1,0 - 1,4	0,015
10	1,5 - 2,9	0,015
16	3,0 - 5,9	0,015
25	6,0 - 9,9	0,015
40	10,0 - 17,9	0,020
50	18,0 - 26,9	0,020
60	27,0 - 34,0	0,020

PINZE ER ULTRA PRECISE

HIGH PRECISION ER COLLET

DIN 6499



CONICITA' 8°

CONCENTRICITA': PINZA ULTRA PRECISA

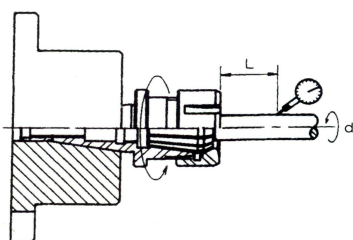
mm. 0,005 - 0,010

Valori riferiti al diametro nominale delle pinze. / The tolerances are valid only for nominal diameter of the collet.

L'utensile deve essere bloccato per tutta la lunghezza utile di presa della pinza.

The chucking length of cutting tool shank is longer than the collet's bore length.

ARTICOLO ARTICLE	A	L	CAPACITA' CAPACITY	DIAMETRI DIAMETERS	PREZZO PRICE
ER 8 U.P. ULTRA PRECISA	8	13,5	1 - 5	1 - 1,5 - 2 - 2,5 3 - 3,5 - 4 - 4,5 - 5	€ 25,00 € 21,50
ER 11 U.P. ULTRA PRECISA	11	18	1 - 7	1 - 1,5 - 2 - 2,5 3 - 3,5 - 4 - 4,5 - 5 - 5,5 - 6 - 6,5 - 7	€ 25,00 € 21,50
ER 16 U.P. ULTRA PRECISA	16	27,5	1 10	1 - 1,5 - 2 - 2,5 3,5 - 4,5 - 5,5 - 6,5 - 7,5 - 8,5 - 9,5 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10	€ 25,00 € 22,00 € 21,50
ER 20 U.P. ULTRA PRECISA	20	31,5	1 - 13	1 - 1,5 - 2 - 2,5 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10 - 11 - 12 - 13	€ 25,00 € 21,50
ER 25 U.P. ULTRA PRECISA	25	34	1,5 - 16	1 - 1,5 - 2 - 2,5 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10 11 - 12 - 13 - 14 - 15 - 16	€ 25,00 € 21,50
ER 32 U.P. ULTRA PRECISA	32	40	2 - 20	2 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10 - 11 - 12 13 - 14 - 15 - 16 - 17 - 18 - 19 - 20	€ 25,00 € 21,50
ER 40 U.P. ULTRA PRECISA	40	46	3 - 30	3 - 4 - 5 - 6 - 7 - 8 - 9 - 10 - 11 - 12 13 - 14 - 15 - 16 - 17 - 18 - 19 - 20 - 21 22 - 23 - 24 - 25 - 26 - 27 - 28 - 29 - 30	€ 25,00



L (mm.)	D1 (mm.)	CONCENTRICITA' ULTRA PRECISA HIGH PRECISION CONCENTRICITY
6	1,0 - 1,4	0,005
10	1,5 - 2,9	0,005
16	3,0 - 5,9	0,005
25	6,0 - 9,9	0,005
40	10,0 - 17,9	0,010
50	18,0 - 26,9	0,010
60	27,0 - 34,0	0,010

**SERIE PINZE ER STANDARD
IN VALIGETTA**

**STANDARD ER COLLET SET
ON PLASTIC BOX**

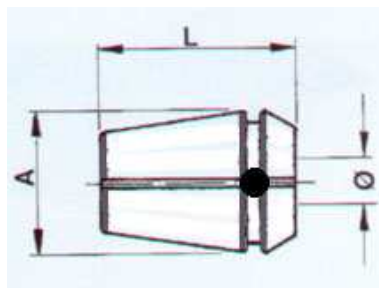


ARTICOLO - ARTICLE	DIAMETRI - DIAMETERS	NR. PZ. TOT.	PREZZO - PRICE
ER11/1-7	1 - 2 - 3 - 4 - 5 - 6 - 7	7	€ 80,00
ER16/1-10	1 - 2 - 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10	10	€ 115,00
ER20/1-13	1 - 2 - 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10 11 - 12 - 13	13	€ 145,00
ER25/2-16	2 - 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10 - 11 12 - 13 - 14 - 15 - 16	15	€ 160,00
ER32/3-20	3 - 4 - 5 - 6 - 7 - 8 - 9 - 10 - 11 - 12 13 - 14 - 15 - 16 - 17 - 18 - 19 - 20	18	€ 180,00
ER40/3-30	3 - 4 - 5 - 6 - 7 - 8 - 9 - 10 - 11 - 12 - 13 14 - 15 - 16 - 17 - 18 - 19 - 20 - 21 - 22 23 - 24 - 25 - 26 - 27 - 28 - 29 - 30	28	€ 395,00

VALIGETTA PORTA PINZE ER PLASTIC BOX FOR ER COLLET		(vuota) (empty)
ARTICOLO ARTICLE	TIPO PINZA COLLET TYPE	PREZZO - PRICE
ER11-16-20/VAL	ER11 - ER 16 - ER20	€ 2,50
ER25-32/VAL	ER25 - ER32	€ 4,00
ER40/VAL	ER40	€ 6,80

PIASTRE PORTA PINZE ER IN PVC NERO BLACK PLASTIC ER COLLET HOLDERPLATE		(vuote) (empty)
ARTICOLO - ARTICLE	PREZZO - PRICE	
ER11/P	€ 5,90	
ER16/P	€ 5,90	
ER20/P	€ 5,90	
ER25/P	€ 6,80	
ER32/P	€ 6,80	
ER40/P	€ 8,50	

PINZE ER A TENUTA PER PUNTE CON FORI PER REFRIGERANTE ER SEALED COLLETS



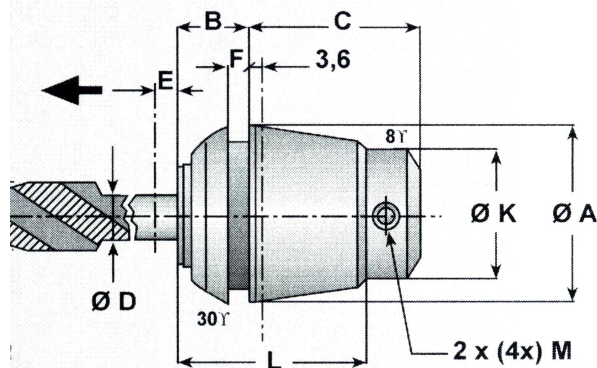
ARTICOLO ARTICLE	A	L	DIAM.	PREZZO PRICE
ERT16	16	27,5	3-10	€ 34,00
ERT20	20	31,5	3-13	€ 34,00
ERT25	25	34	3-16	€ 34,00
ERT32	32	40	3-20	€ 32,00
ERT40	40	46	4-26	€ 39,00



SERIE PINZE ER A TENUTA ER SEALED COLLETS SET ON PLATE

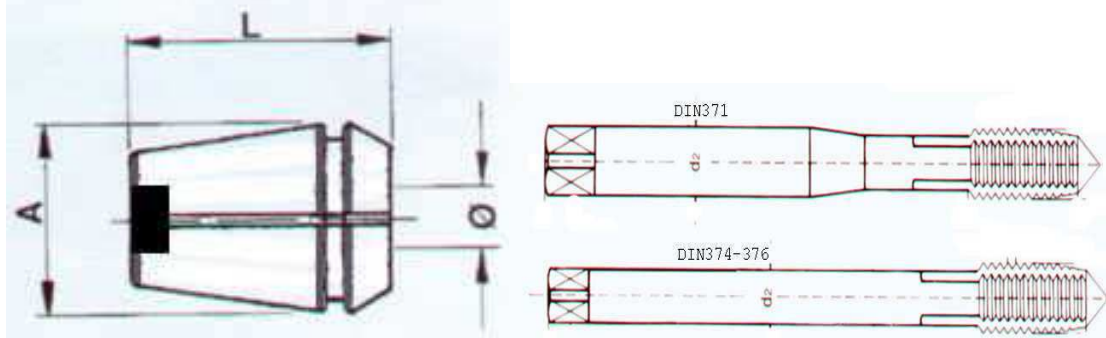
ARTICOLO - ARTICLE	DIAMETRI - DIAMETERS	NR. PZ. TOT.	PREZZO - PRICE
ERT16/3-10	3-4-5-6-7-8-9-10	8	€ 270,00
ERT20/3-13	3-4-5-6-7-8-9-10-11-12-13	11	€ 370,00
ERT25/3-16	3-4-5-6-7-8-6-10-11-12-13-14-15-16	14	€ 460,00
ERT32/3-20	3-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20	18	€ 560,00
ERT40/4-26	4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20-21-22-23-24-25-26	23	€ 880,00

**PINZE DI MASCHIATURA
CON COMPENSAZIONE ASSIALE INCORPORATA
TAP COLLETS WITH BUILT-IN LENGTH ADJUSTMENT**



ART.	Diam. maschio Tap diam.	A	B	C	D max	E	F	K	L	M	PREZZO PRICE
ERMC32	4,5 - 5 - 6 - 7 - 8 - 9 - 10 - 11 - 12	33	11	32	12	10	3	23	33	2 x M5 4 x M6 4 x M8	€ 80,00

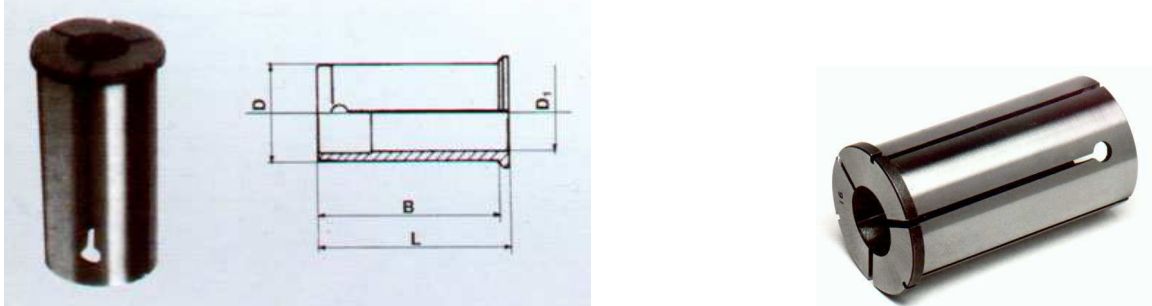
**PINZE ER 32 PER MASCHI CON QUADRO
ER32 TAPPING COLLETS WITH INTERNAL SQUARE**



ARTICOLO ARTICLE	MASCHI DIN 371	MASCHI DIN 374/376	DIAM. FORO PINZA	DIAM. QUADRO MASCHIO	PREZZO PRICE
ERM32/2,8	M 2 - M 2,5	M 4	2,8	2,1	€ 32,00
ERM32/3,5	M 3	M 5	3,5	2,7	€ 32,00
ERM32/4,5	M 4	M 6	4,5	3,4	€ 32,00
ERM32/5,5		M 7	5,5	4,5	€ 32,00
ERM32/6	M 5 - M 6	M 8	6	4,9	€ 32,00
ERM32/7	M 7	M 9 - M 10	7	5,5	€ 32,00
ERM32/8	M 8	M 11	8	6,2	€ 32,00
ERM32/9	M 9	M 12	9	7,0	€ 32,00
ERM32/10	M 10		10	8,0	€ 32,00
ERM32/11		M 14	11	9,0	€ 32,00
ERM32/12		M 16	12	9,0	€ 32,00
ERM32/14		M 18	14	11,0	€ 32,00
ERM32/16		M 20	16	12,0	€ 32,00

**PINZE CILINDRICHE
PER MANDRINI FORTE SERRAGGIO**

**CYLINDRICAL COLLETS
FOR MILLING CHUCKS**



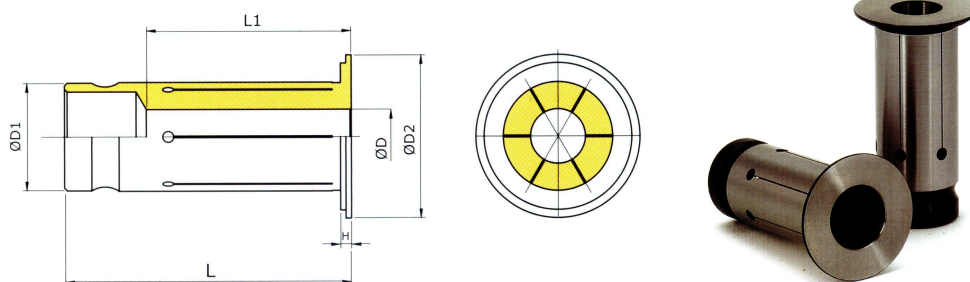
ARTICOLO ARTICLE	D	D1	B	L	PREZZO PRICE
100/20	20	3-18	50	54	€ 30,00
100/25	25	3-22	56	60	€ 33,00
100/32	32	3-28	60	64	€ 35,00

**PINZE CON MISURE DECIMALI PRONTE A MAGAZZINO, AUMENTO 20%.
COLLETS WITH THE DECIMAL MEASUREMENTS READY TO A WAREHOUSE, 20% INCREASE**

PINZE CILINDRICHE A TENUTA / CYLINDRICAL SEALED COLLETS

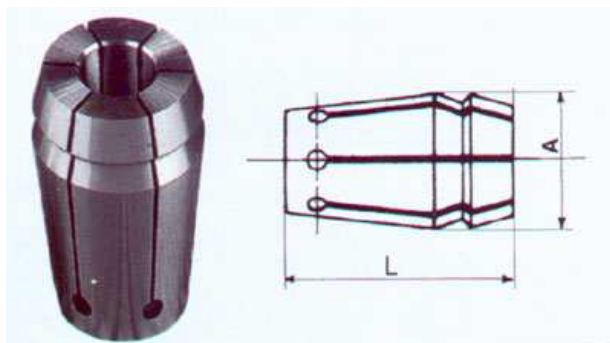
ARTICOLO ARTICLE	D	D1	B	L	PREZZO PRICE
100/20T	20	3-16	50	54	€ 55,00
100/32T	32	4-26	60	64	€ 65,00

**PINZE PER MANDRINI IDRAULICI
COLLETS FOR HYDRAULIC CHUCKS**



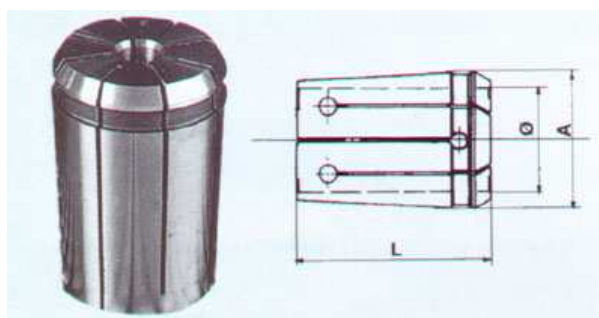
**A TENUTA MECCANICA DEL LIQUIDO DEL REFRIGERANTE
MECHANICAL SEALED TYPE FOR HIGH PRESSURE COOLANT FLOW.**

ARTICOLO ARTICOLO	D1	D	L1	L	PREZZO PRICE	
105/20	20	3-16	D.3	15	52,5	€ 74,00
			D.4 e 5	22		
			D.6 e 7	27		
			D.8-16	37,5		
			D.10	30		
			D.12 e 14	33		
			D.16	40		

PINZE GRIFO**GRIFO COLLETS**

CONICITA' 5°

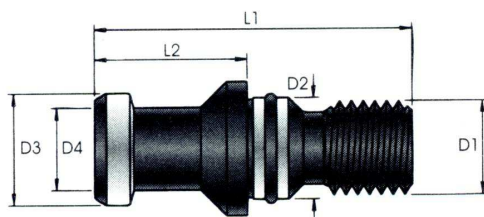
ARTICOLO ARTICLE	A	L	CAPACITA' CAPACITY	PREZZO PRICE
GRIFO/700	30	52	3-20	€ 26,00
GRIFO/800	44	65	6-32	€ 45,00

PINZE GRIFO PER ALTE VELOCITA' / GRIFO HIGH SPEED COLLETS

CONICITA' 3°

ARTICOLO ARTICLE	A	L	CAPACITA' CAPACITY	PREZZO PRICE
GRIFO/290	32	45	3-25	€ 23,00

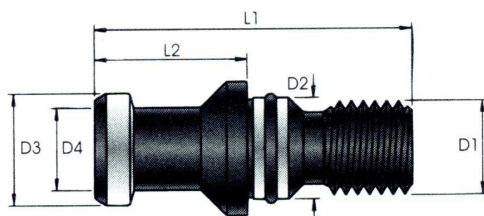
CODOLI **PULL STUDS**
DIN 69872/A **FORATO PER REFRIGERANTE / WITH HOLE**



ART.	ATTACCO ADAPT.	D1	D2	D3	D4	D5	L1	L2	PREZZO PRICE
70/M12FDIN	ISO 30	M12	13	13	9	4	44	24	€ 8,00
70/M16FDIN	ISO 40	M16	17	19	14	7	54	26	€ 8,00
70/M24FDIN	ISO 50	M24	25	28	21	11,5	74	34	€ 11,70

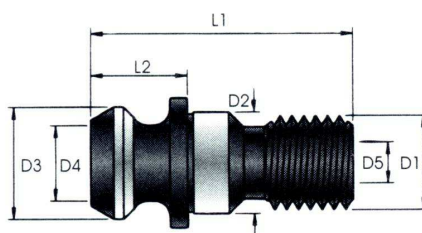
DISPONIBILE ANCHE TIPO CON SEDE BALLUFF - AVAILABLE ALSO WITH BALLUFF ID HOLE

DIN 69872/B **SENZA FORO / WITHOUT HOLE**



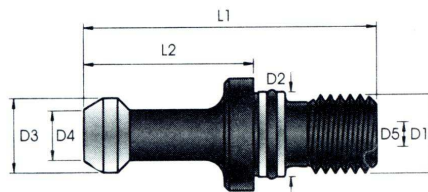
ART.	ATTACCO ADAPT.	D1	D2	D3	D4	D5	L1	L2	PREZZO PRICE
70/M12SFDIN	ISO 30	M12	13	13	9	-	44	24	€ 8,00
70/M16SFDIN	ISO 40	M16	17	19	14	-	54	26	€ 8,00
70/M24SFDIN	ISO 50	M24	25	28	21	-	74	34	€ 11,70

ISO 7388/2B **FORATO O SENZA FORO / WITH HOLE OR WITHOUT HOLE**

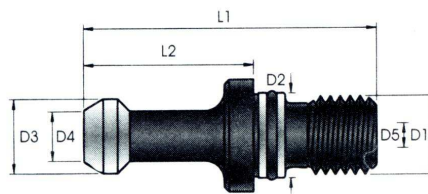


CON OR - WITH OR

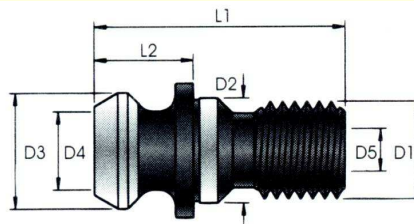
ART.	ATTACCO ADAPT.	D1	D2	D3	D4	D5	L1	L2	PREZZO PRICE
70/M16FISO	ISO 40 FORATO	M16	17	18,95	12,95	7,35	44,55	16,40	€ 8,00
70/M24FISO	ISO 50 FORATO	M24	25	29,10	19,60	11,5	65,50	25,60	€ 11,70
70/M16SFISO	ISO 40 NON FOR.	M16	17	18,95	12,95	-	44,55	16,40	€ 8,00
70/M24SFISO	ISO 50 NON FOR.	M24	25	29,10	19,60	-	65,50	25,60	€ 11,70

CODOLI**PULLS STUDS****MAS-BT****SENZA FORO / WITHOUT HOLE**

ART.	ATTACCO ADAPT.	D1	D2	D3	D4	D5	L1	L2	PREZZO PRICE
70/M12SFBT45	BT 30 - 45°	M12	12,5	11	7	-	43	23	€ 8,00
70/M16SFBT45	BT 40 - 45°	M16	17	15	10	-	60	35	€ 8,00
70/M16SFBT60	BT 40 - 60°	M16	17	15	10	-	60	35	€ 9,00
70/M16SFBT90	BT 40 - 90°	M16	17	15	10	-	60	35	€ 9,00
70/M24SFBT45	BT 50 - 45°	M24	25	23	17	-	85	45	€ 12,00

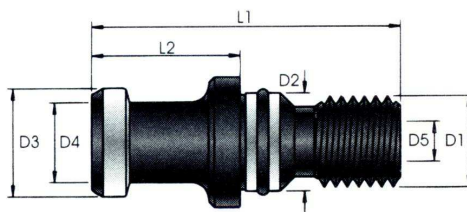
MAS-BT**FORATO / WITH HOLE**

ART.	ATTACCO ADAPT.	D1	D2	D3	D4	D5	L1	L2	PREZZO PRICE
70/M16FBT45	BT 40 - 45°	M16	17	15	10	5	60	35	€ 8,00
70/M16FBT90	BT 40 - 90°	M16	17	15	10	5	60	35	€ 9,00
70/M24FBT45	BT 50 - 45°	M24	25	23	17	6	85	45	€ 12,00
70/M24FBT90	BT 50 - 90°	M24	25	23	17	6	85	45	€ 13,00

TIPO MAZAK CON FORO / MAZAK TYPE WITH HOLE

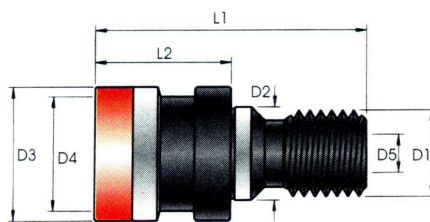
ART.	ATTACCO ADAPT.	D1	D2	D3	D4	D5	L1	L2	PREZZO PRICE
70/M16MAZ	ISO40	M16	17	18,80	12,45	7	41,26	16,26	€ 8,00

CODOLI	PULLS STUDS
JIS B 6339	WITH HOLE
FORATO O SENZA FORO	WITH HOLE OR WITHOUT HOLE



ART.	ATTACCO ADAPT.	D1	D2	D3	D4	D5	L1	L2	PREZZO PRICE
70/M16FJIS	ISO 40	M16	17	19	14	5,5	54	29	€ 9,00
70/M16SFJIS	ISO40	M16	17	19	14	-	54	29	€ 9,00

TIPO OTT	FORATO CON FILETTO INTERNO
OTT SYSTEM	WITH HOLE AND INSIDE THREADED



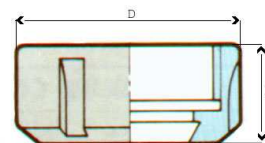
ART.	ATTACCO ADAPT.	D1	D2	D3	D4	D5	L1	L2	PREZZO PRICE
70/M16OTT	ISO40 DIN 2080	M16	17	25	21	7	53	25	€ 9,50

A RICHIESTA SI COSTRUISCONO TIRANTI DI VERSIONI DIVERSE SU DISEGNO O CAMPIONE

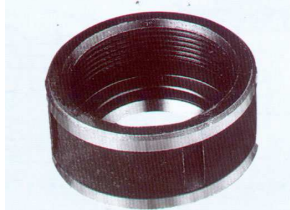
ON REQUEST WE MANUFACTURE OTHER VERSIONS OF PULL STUDS WITH DRAWING OR SAMPLE

ATTENZIONE: Assicurarsi che il tirante sia avvitato completamente sul mandrino per evitare la caduta del portautensili che può causare seri danni alla macchina e all'operatore.

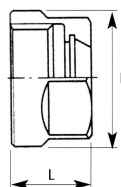
ATTENTION: Be sure to fully tighten the pull stud, for to avoid the serious injuries to the worker or damage to the machine.

GHIERE**NUTS****GHIERE PER PINZE ER / NUTS FOR ER COLLETS****GHIERE CON ESTRAZIONE ECCENTRICA DELLA PINZA (STANDARD)
NUTS WITH ECCENTRIC COLLET EXTRACTOR (STANDARD)**

ARTICOLO ARTICLE	D	FILETTO DX RIGHT THREAD	L	PINZA COLLET	PREZZO PRICE
80/ER8M MINI	12	M 10 x 0,75	10,8	ER8	€ 11,00
80/ER11M MINI	16	M 13 x 0,75	12	ER11	€ 11,00
80/ER16M MINI	22	M 19 x 1,00	18	ER16	€ 11,00
80/ER20M MINI	28	M 24 x 1,00	19	ER20	€ 11,00
80/ER25M MINI	35	M 30 x 1,00	20	ER25	€ 11,00
80/ER16 STANDARD	32	M 22 x 1,50	17	ER16	€ 10,00
80/ER20 STANDARD	35	M 25 x 1,50	18,5	ER20	€ 10,00
80/ER25 STANDARD	42	M 32 x 1,50	20	ER25	€ 10,00
80/ER32 STANDARD	50	M 40 x 1,50	22,5	ER32	€ 10,00
80/ER40 STANDARD	63	M 50 x 1,50	25,5	ER40	€ 13,00

**GHIERE CON ESTRAZIONE CONCENTRICA DELLA PINZA ADATTE PER MANDRINI BILANCIATI
NUTS WITH CONCENTRIC COLLET EXTRACTOR FOR BALANCED CHUCKS**

ARTICOLO ARTICLE	D	FILETTO DX RIGHT THREAD	L	PINZA COLLET	PREZZO PRICE
80/ER25C	42	M 32 x 1,50	20	ER25	€ 12,00
80/ER32C	50	M 40 x 1,50	22,5	ER32	€ 12,00
80/ER40C	63	M 50 x 1,50	25,5	ER40	€ 16,00
80/290	50	M 40 x 1,50	24	GRIFO/290	€ 17,00

GHIERE ESAGONALI**EXAGONAL NUTS**

ARTICOLO ARTICLE	D	FILETTO DX RIGHT THREAD	L	PINZA COLLET	PREZZO PRICE
80/ER11E	19	M14 x 0,75	11,3	ER11	€ 11,00
80/ER16E	28	M22 x 1,5	17	ER16	€ 11,00
80/ER20E	34	M25 x 1,5	19	ER20	€ 11,00

CHIAVI PER GHIERE ER STANDARD E MINI WRENCH FOR STANDARD AND MINI ER NUTS



STANDARD



MINI

ARTICOLO CHIAVE WRENCH ARTICLE	TIPO GHIERA NUT TYPE	PREZZO PRICE	ARTICOLO CHIAVE WRENCH ARTICLE	TIPO GHIERA NUT TYPE	PREZZO PRICE
90/ER16	ER16 STANDARD	€ 8,50	90/ER8M	ER8 MINI	€ 12,00
90/ER20	ER20 STANDARD	€ 8,50	90/ER11M	ER11 MINI	€ 12,00
90/ER25	ER25 STANDARD	€ 9,00	90/ER16M	ER16 MINI	€ 12,00
90/ER32	ER32 STANDARD	€ 9,50	90/ER20M	ER20 MINI	€ 14,00
90/ER40	ER40 STANDARD	€ 14,00	90/ER25M	ER25 MINI	€ 15,00

CHIAVI PER GHIERE ER ESAGONALI WRENCH WITH EXAGONAL ER NUTS



ARTICOLO CHIAVE WRENCH ARTICLE	TIPO GHIERA NUT TYPE	PREZZO PRICE
90/ER11E	ER11 ESAG.	€ 12,00
90/ER16E	ER16 ESAG.	€ 13,00
90/ER20E	ER20 ESAG.	€ 14,00

CHIAVI PER GHIERE ALTA VELOCITA' E PER FORTE SERRAGGIO WRENCH FOR HIGH SPEED NUTS AND FOR MILLING CHUCKS



ARTICOLO CHIAVE KEY ARTICLE	PER FOR	PREZZO PRICE
90/ER32C	GHIERA/NUT art.80/ER32C	€ 10,00
90/20FS	MANDRINO/CHUCK DIAM.20	€ 10,00
90/32FS	MANDRINO/CHUCK DIAM.32	€ 14,00

CHIAVI DINAMOMETRICHE / TORQUE WRENCH



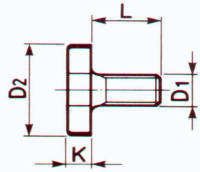
ARTICOLO ARTICLE	Diam.	max Ma	Diam.	max Ma	Diam.	max Ma	PREZZO PRICE
90/ER25D	3,5 – 6,5	30-40 Nm	7,0 – 10,0	50-60 Nm	10,5 – 16,0	80-90 Nm	A RICHIESTA ON REQUEST
90/ER32D	3,5 – 6,5	40-50 Nm	7,0 – 15,5	110-120 Nm	16,0 – 20,0	130-140 Nm	
90/ER40D	3,5 – 6,5	40-50 Nm	7,0 – 15,5	110-120 Nm	16,0 – 20,0	150-160 Nm	

Brusa & C. s.r.l. Tooling

Telefono 0374/350031 Fax 0374/353854

**VITI A CROCE
PER MANDRINI PORTAFRESE**

**CROSS SCREWS
FOR MILL HOLDER SPINDLES**



ARTICOLO ARTICLE	D1	D2	L	K	PREZZO PRICE
120/PFR/M8	M8	20	16	6	€ 4,00
120/PFR/M10	M10	28	18	7	€ 4,00
120/PFR/M12	M12	35	22	8	€ 5,50
120/PFR/M16	M16	41	26	9	€ 7,00
120/PFR/M20	M20	51	30	10	€ 13,00
120/PFR/M24	M24	62	35	12	€ 18,00

CHIAVI PER VITI A CROCE

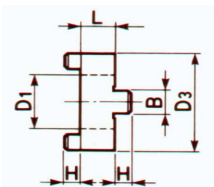
WRENCH FOR CROSS SCREW



ARTICOLO ARTICLE	H	PREZZO PRICE	ARTICOLO ARTICLE	H	PREZZO PRICE
80/PFR/16	16	€ 14,00	80/PFR/32	32	€ 25,00
80/PFR/22	22	€ 16,00	80/PFR/40	40	€ 30,00
80/PFR/27	27	€ 20,00			

**ANELLI DI TRASCINAMENTO
PER MANDRINI PORTAFRESE**

**CLUTCH DRIVE RINGS
FOR MILL HOLDER SPINDLES**



ARTICOLO ARTICLE	L	H	D1	D3	PREZZO PRICE
120/16	10	5	16	32	€ 10,00
120/22	12	5,6	22	40	€ 12,50
120/27	12	6,3	27	48	€ 13,00
120/32	14	7	32	58	€ 16,50
120/40	14	8	40	70	€ 21,00

SMONTACONI ORIENTABILE INDEXABLE ASSEMBLY SUPPORTS



ARTICOLO / ARTICLE	CONI / TAPERS	PREZZO / PRICE
150/30	ISO/BT30	€ 135,00
150/40	ISO/BT40/HSK63A	€ 135,00
150/50	ISO/BT50	€ 155,00

SMONTACONI FISSO ASSEMBLY SUPPORTS



ARTICOLO / ARTICLE	CONI / TAPERS	PREZZO / PRICE
155/30	ISO30 DIN69871	€ 145,00
155/31	BT30 - HSK50	€ 145,00
155/40	ISO/BT40 - HSK63	€ 145,00
155/50	ISO50 DIN69871	€ 250,00
155/51	BT50 - HSK100	€ 250,00

ALTRE VERSIONI DISPONIBILI A RICHIESTA / OTHER VERSION AVAILABLE ON REQUEST