



	<p>Portapinze con ghiera prebilanciate <i>Collet chucks with prebalanced nuts</i> Spannzangenhalter mit Vorausgewuchtete Spannmuttern <i>Mandrins à pinces avec écrous prééquilibrés</i></p>	<p>ERC Collets</p> <p>Pag. - Seite 2 ÷ 3</p>
	<p>Cassetta con mandrini portapinze <i>Collet chucks kit</i> Zangenspannfutter - Sätze <i>Coffrets de mandrins à pince</i></p>	<p>ERC Collets</p> <p>Pag. - Seite 4</p>
	<p>Portapinze con ghiera prebilanciate <i>Collet chucks with prebalanced nuts</i> Spannzangenhalter mit Vorausgewuchtete Spannmuttern <i>Mandrins à pinces avec écrous prééquilibrés</i></p>	<p>ERCD Collets</p> <p>Pag. - Seite 5</p>
	<p>Portapinze con ghiera prebilanciate <i>Collet chucks with prebalanced nuts</i> Spannzangenhalter mit Vorausgewuchtete Spannmuttern <i>Mandrins à pinces avec écrous prééquilibrés</i></p>	<p>ERICKSON Flange</p> <p>Pag. - Seite 5</p>
	<p>Portapinze <i>Collet chucks</i> Spannzangenhalter <i>Mandrins à pinces</i></p>	<p>EOC Collets</p> <p>Pag. - Seite 6</p>
	<p>Porta alesatore oscillante <i>Floating reamer holder</i> Pendelhalter <i>Mandrins flottants</i></p>	<p>Pag. - Seite 7</p>
	<p>Mandrini portapunte integrali con chiave <i>Integral shank drill chucks with spanner</i> Schnellspannbohrfutter mit Schlüssel <i>Mandrins de perçage intégral avec clé</i></p>	<p>Pag. - Seite 8 ÷ 9</p>
	<p>Attacchi per mandrini autoserranti <i>Drill chuck arbors</i> Bohrfütteraufnahme ohne Bohrfütter <i>Arbres pour mandrins de perçage</i></p>	<p>Pag. - Seite 10</p>



Mandrini per frese tipo Weldon
End mill holders
Flächenspannfütter
Mandrins porte-fraises à queue Weldon

Pag. - Seite

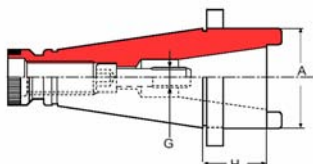
11 ÷ 12



Mandrini porta inserzioni registrabili
Automotive shank adapters
Stellhülsenaufnahmen
Mandrins pour douilles de réglage

Pag. - Seite

12



Mandrini di riduzione
Reduction sleeves
Zwischenhülsen SK-SK
Douilles de réduction

Pag. - Seite

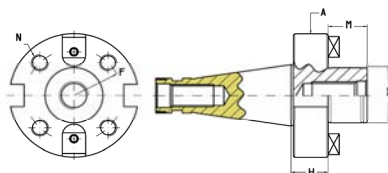
13



Portamaschi a cambio rapido
Quick change tapping chucks
Gewinde-Schnellwechselfütter
Mandrins de taraudage à changement rapide

Pag. - Seite

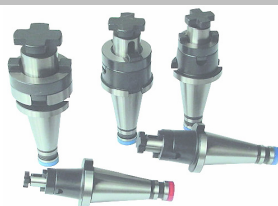
13 ÷ 15



Porta frese ad inserti
Face mill holders for face milling cutters
Aufsteckfräserdorne für Messerköpfe
Mandrins porte-fraises pour fraises à surface

Pag. - Seite

15



Portafrese combinato
Combi shell end mill holders
Kombi-Fräseraufsteckdorne
Mandrin porte-fraises combinés

Pag. - Seite

16



Porta frese fissi
Shell end mill holders
Aufsteckfräserdorne
Mandrins porte-fraises à trou lisse

Pag. - Seite

17



Riduzioni a cono morse per punte con tenone
Morse taper adaptors for drills with flat tang
Zwischenhülsen für Morsekegel mit Austreibklappen
Douilles pour cône morse à tenon

Pag. - Seite

18



Riduzioni a cono morse per frese (vite incorporata)
Morse taper adaptors for threaded mills
Zwischenhülsen für Morsekegel mit Anzugsgewinde
Douilles pour cône morse avec vis incorporée

Pag. - Seite

19

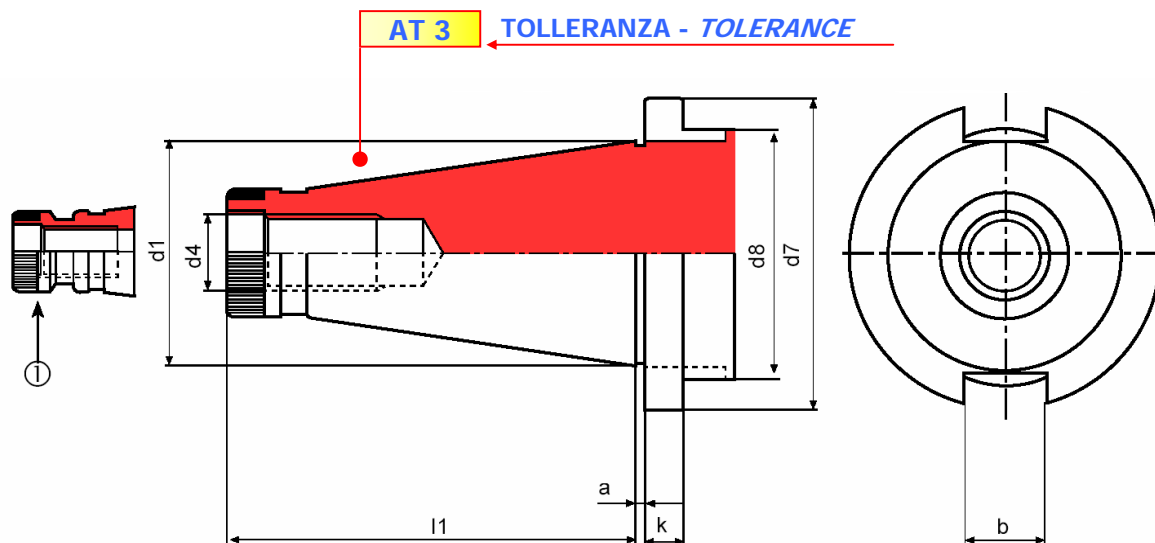


Mandrini a stelo lavorabile
Machinable blank arbors
Bohrsd tangen - Rohlinge
Ébauches de barre d'alésage

Pag. - Seite

19

Quote dei coni d'attacco
 Dimensional guide of the tapers shank
 Konstruktionsmerkm. - Anschlußmaße
 Cotes d'adaptation pour le cônes



CONO TAPER	d ₁	a	b	d ₄	d ₇	l ₁	k	d ₈
ISO30	31,75	1,6	16,1	M12	50	68,4	8	36
ISO40 ①	44,45	1,6	16,1	M16	63	93,4	10	50
ISO50	69,85	3,2	25,7	M24	97,5	126,8	12	78

① Con gola MAHO - OTT - With MAHO - OTT Groove
 Mit MAHO - OTT Ringnut - Avec rainure MAHO - OTT

CARATTERISTICHE TECNICHE DEI MANDRINI ISO

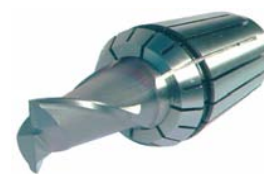
- Costruiti in Italia con acciai da cementazione certificati e legati al Ni.Cr.Mo.
- Cementati • Temperati • Rivenuti con durezza RC 58 ± 2 • Bruniti
- Rettificati sui coni ISO con tolleranza inferiore ad « AT3 » • Il massimo scostamento di eccentricità tra cono e sede pinza, è compreso tra 0,003 e 0,007 mm.
- Sono controllati ed identificati singolarmente con memorizzazione dei risultati

TECHNICAL FEATURES OF ISO TOOLING

- Our ISO holders are manufactured in Italy with Nickel Chrome Molybdenum Steel.
- The toolholders are carburized, hardened and tempered (RC 58 ± 2) black oxidized.
- Precision ground on the ISO tapers with a tolerance less than « AT3 ».
- The runout accuracy are guaranteed to be within 0,003/0,007 mm. at the tool seat.
- We grant the traceability of ISO Toolholders with classified testing report

Portapinze con ghiera prebilanciate
Collet chucks with prebalanced nuts
 Spannzangenhalter mit Vorausgewuchtete Spannmuttern
Mandrins à pinces avec écrous prééquilibrés

ERC Collets - DIN 6499



ISO 30 / 40

With MINI Nuts - SLIM LINE



Ref.	Order Nr.	A	D		Price
			min	max	
350-100	ISO40.H82.ERC16M	22	1	÷ 10	
	ISO40.H90.ERC20M	28	1	÷ 13	
	ISO40.H100.ERC25M	35	1	÷ 16	

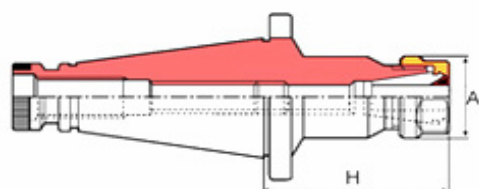


Fig. 1

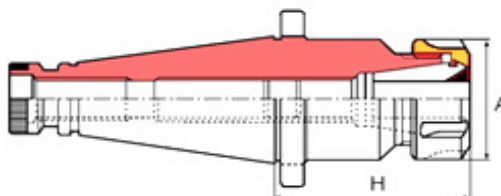


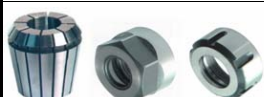
Fig. 2



With EXAG. and STANDARD Nuts ☹️

Ref.	Order Nr.	Fig.	A	Capacità Range	Price
350-102	ISO30.H75.ERC16	1	28	1 ÷ 10	
	ISO30.H100.ERC16	1	28	1 ÷ 10	
	ISO30.H75.ERC20	1	34	1 ÷ 13	
	ISO30.H50.ERC25	2	42	1 ÷ 16	
	ISO30.H75.ERC25	2	42	1 ÷ 16	
	ISO30.H50.ERC32	2	50	2 ÷ 20	
	ISO30.H60.ERC32	2	50	2 ÷ 20	
	ISO30.H70.ERC32	2	50	2 ÷ 20	
	ISO30.H80.ERC32	2	50	2 ÷ 20	
	ISO30.H90.ERC32	2	50	2 ÷ 20	
	ISO30.H100.ERC32	2	50	2 ÷ 20	
	ISO30.H110.ERC32	2	50	2 ÷ 20	
	ISO30.H120.ERC32	2	50	2 ÷ 20	
	ISO30.H70.ERC40	2	63	3 ÷ 30	
	ISO30.H84.ERC40	2	63	3 ÷ 30	

Ref.	Order Nr.	Fig.	A	Capacità Range	Price
350-102	ISO40.H80.ERC11	1	18	1 ÷ 7	
	ISO40.H47.ERC16	1	28	1 ÷ 10	
	ISO40.H100.ERC16	1	28	1 ÷ 10	
	ISO40.H130.ERC16	1	28	1 ÷ 10	
	ISO40.H150.ERC16	1	28	1 ÷ 10	
	ISO40.H47.ERC20	1	34	1 ÷ 13	
	ISO40.H90.ERC20	1	34	1 ÷ 13	
	ISO40.H130.ERC20	1	34	1 ÷ 13	
	ISO40.H47.ERC25	2	42	1 ÷ 16	
	ISO40.H70.ERC25	2	42	1 ÷ 16	
	ISO40.H100.ERC25	2	42	1 ÷ 16	
	ISO40.H130.ERC25	2	42	1 ÷ 16	
	ISO40.H160.ERC25	2	42	1 ÷ 16	
	ISO40.H49.ERC32	2	50	2 ÷ 20	
	ISO40.H70.ERC32	2	50	2 ÷ 20	
	ISO40.H90.ERC32	2	50	2 ÷ 20	
	ISO40.H100.ERC32	2	50	2 ÷ 20	
	ISO40.H130.ERC32	2	50	2 ÷ 20	
	ISO40.H160.ERC32	2	50	2 ÷ 20	
	ISO40.H56.ERC40	2	63	3 ÷ 30	
	ISO40.H70.ERC40	2	63	3 ÷ 30	
	ISO40.H100.ERC40	2	63	3 ÷ 30	
	ISO40.H130.ERC40	2	63	3 ÷ 30	
	ISO40.H160.ERC40	2	63	3 ÷ 30	
	ISO40.H200.ERC40	2	63	3 ÷ 30	
	ISO40.H103.ERC50	2	78	6 ÷ 34	



- Vedi pagg. 1.1 ÷ 1.43
- Refer to pag. 1.1 ÷ 1.43
- Sehen Seite 1.1 ÷ 1.43
- Voir pages 1.1 ÷ 1.43

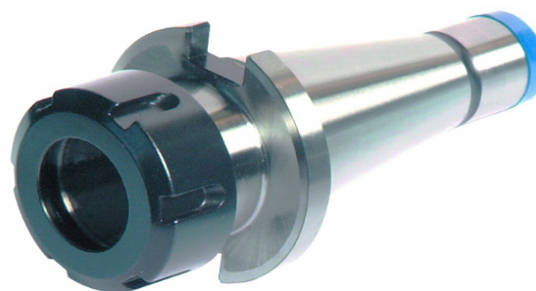
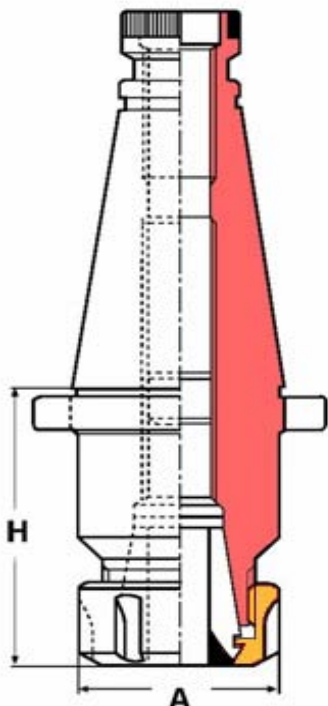


Fornibili a richiesta con ghiera rotante antifrizione pag. 1.32
On request, are supplied with sliding bearing nut pag. 1.32
 Option: Spannmuttern mit Gleitlager Seite 1.32
Livrabile avec écrous à palier lisse page 1.32

Portapinze con ghiera prebilanciata
Collet chucks with prebalanced nuts
 Spannzangenhalter mit Vorausgewuchtete Spannmuttern
Mandrins à pinces avec écrous prééquilibrés

ERC Collets - DIN 6499

ISO 50



With STANDARD Nuts ☺

Ref.	Order Nr.	A	Capacità Range	Price
350-102	ISO50.H80.ERC25	42	1 ÷ 16	
	ISO50.H100.ERC25	42	1 ÷ 16	
	ISO50.H130.ERC25	42	1 ÷ 16	
	ISO50.H160.ERC25	42	1 ÷ 16	
	ISO50.H69.ERC32	50	2 ÷ 20	
	ISO50.H100.ERC32	50	2 ÷ 20	
	ISO50.H130.ERC32	50	2 ÷ 20	
	ISO50.H160.ERC32	50	2 ÷ 20	
	ISO50.H63.ERC40	63	3 ÷ 30	
	ISO50.H100.ERC40	63	3 ÷ 30	
	ISO50.H130.ERC40	63	3 ÷ 30	
	ISO50.H160.ERC40	63	3 ÷ 30	
	ISO50.H67.ERC50	78	6 ÷ 34	
	ISO50.H83.ERC60	83	10 ÷ 40	



- Vedi pagg. 1.1 ÷ 1.43
- Refer to pag. 1.1 ÷ 1.43
- Sehen Seite 1.1 ÷ 1.43
- Voir pages 1.1 ÷ 1.43

Fornibili a richiesta con ghiera rotante antifrizione pag. 1.32

On request, are supplied with sliding bearing nut pag. 1.32

☺ Option: Spannmuttern mit Gleitlager Seite 1.32

Livrabile avec écrous à palier lisse page 1.32

Cassetta con mandrini portapinze
Collet chucks kit
 Zangenspannfutter - Sätze
Coffrets de mandrins à pince

ISO 30 / 40 / 50



Ref.	Order Nr.	Portapinze <i>Collet chuck</i>	Pinze nella serie <i>Collet size in the set</i>	Price
350-104	BX.ISO30.50/25-15	ISO30.H50.ERC25	ERC25: Ø 2 - 3 - 4 - 5 - 6 - 7 - 8 - 9 Ø 10 - 11 - 12 - 13 - 14 - 15 - 16	
	BX.ISO40.47/25-15	ISO40.H47.ERC25		
	BX.ISO30.50/32-6	ISO30.H50.ERC32	ERC32: Ø 6 - 8 - 10 - 12 - 16 - 20	
	BX.ISO40.49/32-6	ISO40.H49.ER3C2		
	BX.ISO30.50/32-11	ISO30.H50.ERC32	ERC32: Ø 3 - 4 - 5 - 6 - 7 - 8 Ø 10 - 12 - 16 - 20	
	BX.ISO40.49/32-11	ISO40.H49.ER3C2		
	BX.ISO50.69/32-11	ISO50.H69.ERC32		
	BX.ISO30.50/32-18	ISO30.H50.ERC32	ERC32: Ø 3 + 20 progress. 1,00 mm.	
	BX.ISO40.49/32-18	ISO40.H49.ER3C2		
	BX.ISO50.69/32-18	ISO50.H69.ERC32		
	BX.ISO30.84/40-7	ISO30.H84.ERC40	ERC40: Ø 6 - 8 - 10 - 12 - 16 - 20 Ø 25	
	BX.ISO40.56/40-7	ISO40.H56.ERC40		
	BX.ISO30.84/40-13	ISO30.H84.ERC40	ERC40: Ø 4 - 5 - 6 - 7 - 8 - 10 Ø 12 - 14 - 16 - 20 - 22 - 25	
	BX.ISO40.56/40-13	ISO40.H56.ERC40		
	BX.ISO50.63/40-13	ISO50.H63.ERC40		
	BX.ISO30.84/40-23	ISO30.H84.ERC40	ERC40: Ø 4 + 26 progress. 1,00 mm.	
	BX.ISO40.56/40-23	ISO40.H56.ERC40		
	BX.ISO50.63/40-23	ISO50.H63.ERC40		

Portapinze con ghiera prebilanciata
Collet chucks with prebalanced nuts
 Spannzangenhalter mit Vorausgewuchtete Spannmuttern
Mandrins à pinces avec écrous prééquilibrés

ISO 30 / 40 / 50



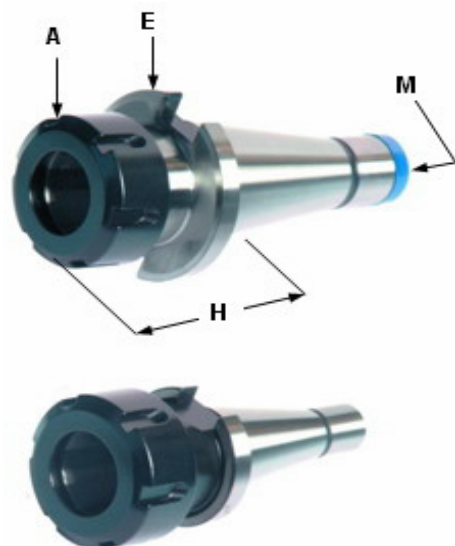
Pinze-Collets: ERCD-DIN 6499 Compatible

Ref.	Order Nr.	A	Capacità Range	Price
350-108	ISO30.H47.ERCD25	42	2 ÷ 16	
	ISO30.H49.ERCD32	50	3 ÷ 20	
	ISO30.H81.ERCD40	63	4 ÷ 26	
	ISO40.H44.ERCD16	32	1 ÷ 10	
	ISO40.H42.ERCD20	35	1 ÷ 13	
	ISO40.H44.ERCD25	42	2 ÷ 16	
	ISO40.H48.ERCD32	50	3 ÷ 20	
	ISO40.H53.ERCD40	63	4 ÷ 26	
	ISO50.H68.ERCD32	50	3 ÷ 20	
	ISO50.H60.ERCD40	63	4 ÷ 26	



- Vedi pagg. 2.1 ÷ 2.6
- Refer to pag. 2.1 ÷ 2.6
- Sehen Seite 2.1 ÷ 2.6
- Voir pages 2.1 ÷ 2.6

Portapinze con ghiera prebilanciata
Collet chucks with prebalanced nuts
 Spannzangenhalter mit Vorausgewuchtete Spannmuttern
Mandrins à pinces avec écrous prééquilibrés



ERICKSON QUICK CHANGE System DIN 6499 - ERC Collets

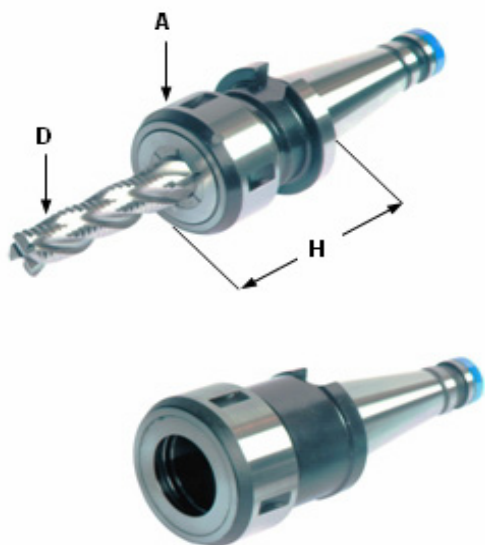
Ref.	Order Nr.	E	A	M	Capacità Range	Price
350-122	ISO30E.H70.ERC16	46	28	M12	1 ÷ 10	
	ISO30E.H70.ERC20	46	34	M12	1 ÷ 13	
	ISO30E.H55.ERC32	46	50	M12	2 ÷ 20	
	ISO30E.H84.ERC40	46	63	M12	3 ÷ 30	
	ISO40E.H55.ERC32	63,50	50	M16	2 ÷ 20	
	ISO40E.H56.ERC40	63,50	63	M16	3 ÷ 30	



- Vedi pagg. 1.1 ÷ 1.43
- Refer to pag. 1.1 ÷ 1.43
- Sehen Seite 1.1 ÷ 1.43
- Voir pages 1.1 ÷ 1.43

Portapinze
Collet chucks
Spannzangenhalter
Mandrins à pinces

ISO 30 / 40 / 50



EOC Collets - DIN 6388 B With antifriction Nuts

Ref.	Order Nr.	A	D		Price
			min.	max	
350-125	ISO30.H68.EOC25	60	2	25	
	ISO40.H53.EOC16	43	2	16	
	ISO40.H64.EOC25	60	2	25	
	ISO40.H86.EOC32	72	3	32	
ISO50.H68.EOC32	ISO50.H57.EOC25	60	2	25	
	ISO50.H150.EOC25	60	2	25	
	ISO50.H68.EOC32	72	3	32	



- Vedi pagg. 3.1 ÷ 3.10
- Refer to pag. 3.1 ÷ 3.10
- Sehen Seite 3.1 ÷ 3.10
- Voir pages 3.1 ÷ 3.10

Cassetta con mandrini portapinze
Collet chucks kit
Zangenspannfutter - Sätze
Coffrets de mandrins à pince



Ref.	Order Nr.	Portapinze Collet chuck	Pinze nella serie Collet size in the set	Price
350-127	BX.ISO30.68/25-12	ISO30.H68.EOC25	EOC25: Ø 3 - 4 - 5 - 6 - 8 - 10 Ø 12 - 14 - 16 - 18 - 20 - 25	
	BX.ISO40.64/25-12	ISO40.H64.EOC25		
	BX.ISO30.68/25-24	ISO30.H68.EOC25	EOC25: Ø 2 ÷ 25 progress. 1,00 mm.	
	BX.ISO40.64/25-24	ISO40.H64.EOC25		

Porta alesatore oscillante
 Floating reamer holder
 Pendelhalter
 Mandrins flottants

ISO 40 / 50



Ref.	Order Nr.	Alesatori Reamers	A	D ₁	Price
350-135	ISO40AL.H84.ERC20	D1 ÷ 13	34-G20SE	50	
	ISO40AL.H87.ERC25	D1 ÷ 16	42-G25S	65	
	ISO50AL.H96.ERC32	D2 ÷ 20	50-G32S	70	

CARATTERISTICHE:

- L'alesatore oscilla radialmente con un sistema flottante e autocentrante, regolabile
- E' garantito il perfetto allineamento tra l'alesatore ed il pre-foro del pezzo in lavorazione, anche alle alte velocità.
- **IL PORTAUTENSILE E' FORATO PER PERMETTERE IL PASSAGGIO DEL REFRIGERANTE SIA ATTRAVERSO I TAGLI DELLA PINZA CHE ATTRAVERSO I FORI DELL'ALESATORE**

FEATURES:

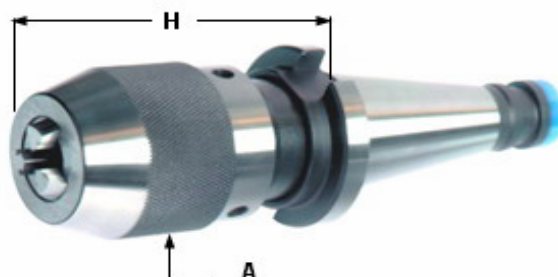
- *The holder is designed with full floating and selfcentering movement*
- *The alignment of the reamer with a previously drilled hole is granted also to the high speeds.*
- *The floating of the reamer is easy adjustable.*
- **THE HOLDER IS FULL DRILLED FOR COOLANT OR AIR SUPPLY THROUGH THE COLLET SLOTS OR THE REAMER HOLES.**



Mandrini portapunte integrali con chiave
Integral shank drill chucks with spanner
 Schnellspannbohrfütter mit Schlüssel
Mandrins de perçage intégral avec clé



ISO 40 / 50



Ref.	Order Nr.	A	Capacità Range	Price
350-141	ISO40.H88.DCK13	50	1 ÷ 13	
	ISO40.H99.DCK16	58	3 ÷ 16	
	ISO50.H85.DCK13	50	1 ÷ 13	
	ISO50.H89.DCK16	58	3 ÷ 16	

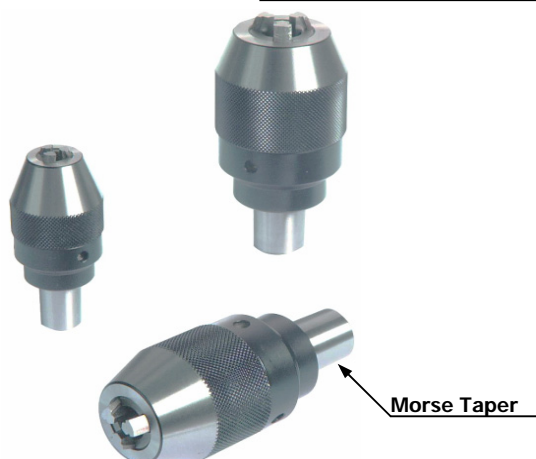
CARATTERISTICHE:

- Il mandrino autoserrante è unito con un accoppiamento conico e vite di bloccaggio all'attacco DIN 2080.
- I morsetti sono costruiti in acciaio Cr.Mo., temperati per garantire una lunga durata.
- **LA PRECISIONE ALLA ROTAZIONE E' DI 0,04 mm.**
- Per incrementare la forza di serraggio i mandrini sono forniti con chiave di bloccaggio
- **NON DEVONO ESSERE USATI PER LAVORAZIONI CON ROTAZIONE A SINISTRA.**

FEATURES:

- *The shank DIN 2080 and the chuck body are assembled through short MT Taper and socket screw.*
- *The jaws are made of chrome-molybdenum steel, with proper heat treatment for grant the precision for long time of usage.*
- **THE RUNOUT ACCURACY IS 0,04 mm. T.I.R.**
- *Supplied with spanner wrench to allow the application of supplementary gripping torque*
- **DO NOT USE IN REVOLUTION IN COUNTER-CLOCKWISE DIRECTION.**

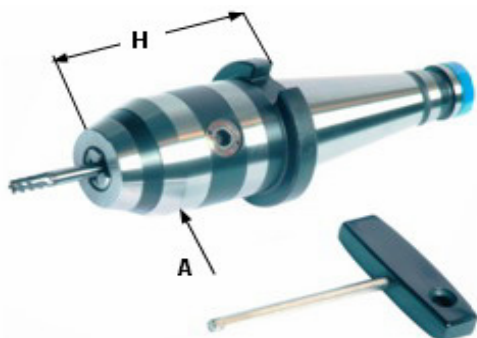
Mandrini autoserranti di ricambio
Replacement drill chuck heads
 Ersatzteile Bohrfütter
Mandrins de rechange



Ref.	Order Nr.	Capacità Range	Price
350-142	DCK13.MT3	1 ÷ 13	
	DCK16.MT3	3 ÷ 16	

Mandrini p/punte integrali con chiave esagonale
Integral shank drill chucks w/T-Handle wrench
 NC-Kurzbohrfutter mittels Sechskant-Schlüssel
Mandrins de sécurité a serrage par clé 6 pans

ISO 40 / 50



Ref.	Order Nr.	A	Capacità Range	Price
350-144	ISO40.H82.HD13	50	1 ÷ 13	
	ISO40.H82.HD16	50	3 ÷ 16	
	ISO50.H86.HD13	50	1 ÷ 13	
	ISO50.H86.HD16	50	3 ÷ 16	

CARATTERISTICHE:

- Utilizzati per operazioni di foratura, fresatura, alesatura e per la maschiatura rigida.
- Un moltiplicatore meccanico di forza, azionato con la chiave in dotazione, garantisce una chiusura molto elevata dell'utensile.
- Adatti per rotazione sia destra che sinistra, con velocità max di 7.000 g/min. o velocità fino a 15.000 g/min. sono ottenibili previa bilanciatura fine e con aumento di prezzo.
- **PRECISIONE DI ROTAZIONE 0,03 mm.**

FEATURES:

- *Used for drilling, milling, reaming and rigid tapping.*
- *The high gripping power is obtained through mechanical power increase. Clamping and releasing with the attached spanner.*
- *Suitable for right and left rotation up to 7000 rpm. or with fine balancing and extra price, they can run up to 15000 rpm.*
- **RUNOUT ACCURACY 0,03 mm. T.I.R.**

Mandrini autoserranti di ricambio
Replacement drill chuck heads
 Ersatzteile Bohrfutter
Mandrins de rechange



Ref.	Order Nr.	Capacità Range	Mounting Thread	Price
350-145	HD 13	1 ÷ 13	M 43,5 x 1	
	HD 16	3 ÷ 16	M 43,5 x 1	

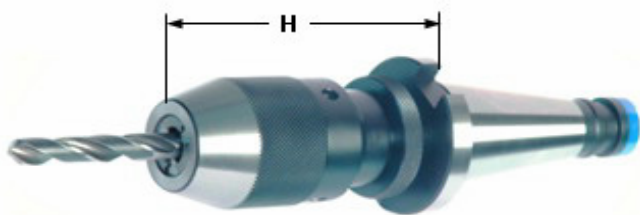
Attacchi per mandrini autoserranti
 Drill chuck arbors
 Bohrfütterraufnahme ohne Bohrfütter
 Arbres pour mandrins de perçage



ISO 30 / 40 / 50

Ref.	Order Nr.	Price
350-147	DIN 238	
	ISO30.H15.B12	
	ISO30.H15.B16	
	ISO40.H17.B12	
	ISO40.H17.B16	
	ISO40.H17.B18	
	ISO40.H35.B16W	Ⓢ
	ISO50.H20.B16	
	ISO50.H20.B18	
	JACOB TAPER	
	ISO30.H15.J2	
	ISO30.H23.J6	
	ISO40.H17.J6	
	Ⓢ Filetto - Draw bar = 5/8 - 11	

Mandrini portapunte assemblati
 Keyless drill chucks
 Bohrfütter
 Mandrins porte-forets



ISO 30 / 40 / 50

Ref.	Order Nr.	Autoserr. Chuck	Price
350-149	ISO30.H86.MPP8	DC8.B12	
	ISO40.H109.MPP13	DC13.B16	
	ISO50.H116.MPP16	DC16.B16	

ATTENZIONE:

- Non usare su macchine ad alta velocità e per lavorazioni con rotazione a sinistra.

WARNING:

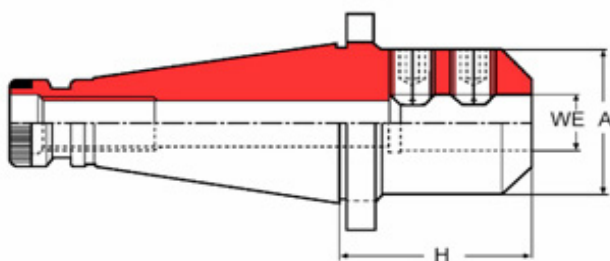
- These holders are not recommended for revolution in counter-clockwise direction, and for high spindle speeds



- Mandrini autoserranti vedi pag. 10.7
- Keyless drill chucks refer to pag. 10.7
- Schnellspannbohr futter Sehen Seite 10.7
- Mandrins porte-foret voir page 10.7

Mandrini per frese tipo Weldon
 End mill holders
 Flächenspannfütter
 Mandrins porte-fraises à queue Weldon

ISO 30 / 40 / 50
 according to DIN 6359 - 2



Ref.	Order Nr.	A	Price
350-200	ISO30.H40.WE6	25	
	ISO30.H40.WE8	28	
	ISO30.H40.WE10	35	
	ISO30.H40.WE12	42	
	ISO30.H40.WE14	44	
	ISO30.H50.WE16	48	
	ISO30.H50.WE18	50	
	ISO30.H63.WE20	52	
	ISO30.H87.WE25	65	
	ISO40.H50.WE6	25	
	ISO40.H50.WE8	28	
	ISO40.H50.WE10	35	
	ISO40.H50.WE12	42	
	ISO40.H50.WE14	44	
	ISO40.H60.WE16	48	
	ISO40.H65.WE18	50	
	ISO40.H65.WE20	52	
	ISO40.H80.WE25	65	
	ISO40.H80.WE32	72	
	ISO40.H90.WE40	90	
	ISO40.H100.WE6	25	
	ISO40.H100.WE8	28	
	ISO40.H100.WE10	35	
	ISO40.H100.WE12	42	
	ISO40.H100.WE14	44	
	ISO40.H100.WE16	48	
	ISO40.H100.WE18	50	
	ISO40.H100.WE20	52	
	ISO40.H100.WE25	65	
	ISO40.H100.WE32	72	

Ref.	Order Nr.	A	Price
350-200	ISO50.H63.WE6	25	
	ISO50.H63.WE8	28	
	ISO50.H63.WE10	35	
	ISO50.H63.WE12	42	
	ISO50.H63.WE14	44	
	ISO50.H63.WE16	48	
	ISO50.H63.WE18	50	
	ISO50.H63.WE20	52	
	ISO50.H80.WE25	65	
	ISO50.H80.WE32	72	
	ISO50.H90.WE40	90	
	ISO50.H110.WE50	100	
	ISO50.H100.WE6	25	
	ISO50.H100.WE8	28	
	ISO50.H100.WE10	35	
	ISO50.H100.WE12	42	
	ISO50.H100.WE14	44	
	ISO50.H100.WE16	48	
	ISO50.H100.WE18	50	
	ISO50.H100.WE20	52	
	ISO50.H125.WE25	65	
	ISO50.H125.WE32	72	



- Viti per mandrini Weldon vedi pag. 21.2
- End mill set screws see pag. 21.2
- Spansschrauben Weldon DIN 1835 B Sehen Seite 21.2
- Vis de serrage Weldon voir page 21.2

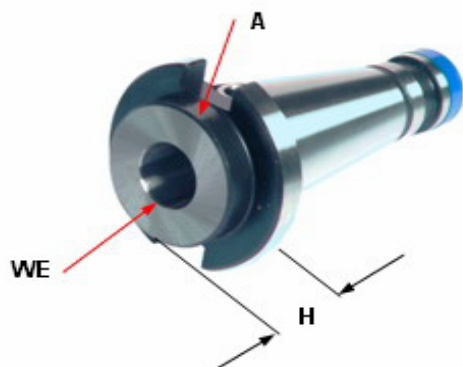
Serie di mandrini tipo WELDON
 End mill holder set
 Weldonfutter-Satze
 Jeux des mandrins type WELDON



Ref.	Order Nr.	Mandrini End Mill	Price
350-202	ISO30.SETWE.6	ISO30.H40.WE6 ISO30.H40.WE8 ISO30.H40.WE10 ISO30.H40.WE12 ISO30.H50.WE16 ISO30.H63.WE20	

Ref.	Order Nr.	Mandrini End Mill	Price
350-202	ISO40.SETWE.8	ISO40.H63.WE6 ISO40.H63.WE8 ISO40.H63.WE10 ISO40.H63.WE12 ISO40.H63.WE16 ISO40.H63.WE20 ISO40.H80.WE25 ISO40.H80.WE32	

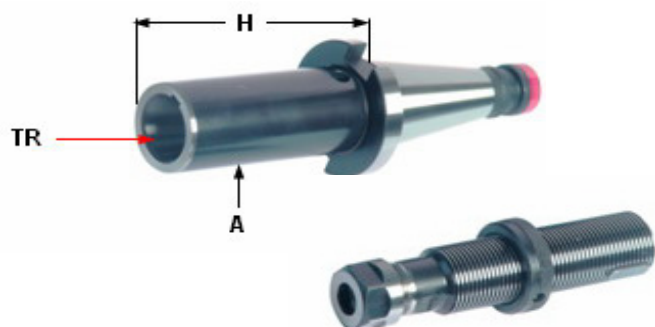
Mandrini extracorti per frese Weldon
 Stub end mill holders
 Extra-Kurzes Fräseraufn Weldon
 Mandrins Weldon extra-courts



ISO 40 / 50

Ref.	Order Nr.	A	Price
350-205	ISO40.H22.WE16	44	
	ISO40.H22.WE20	44	
	ISO40.H22.WE25	44	
	ISO50.H20.WE16	66	
	ISO50.H20.WE20	66	

Mandrini porta inserzioni registrabili
 Automotive shank adapters
 Stellhülseaufnahmen
 Mandrins pour douilles de réglage



ISO 40 / 50 according to DIN 6327

Ref.	Order Nr.	A	Price
350-220	ISO40.H100.TR28	40	
	ISO40.H120.TR36	50	
	ISO50.H100.TR28	40	
	ISO50.H100.TR36	50	
	ISO50.H100.TR48	67	

Mandrini di riduzione
 Reduction sleeves
 Zwischenhülsen SK-SK
 Douilles de réduction

ISO 40 / 50

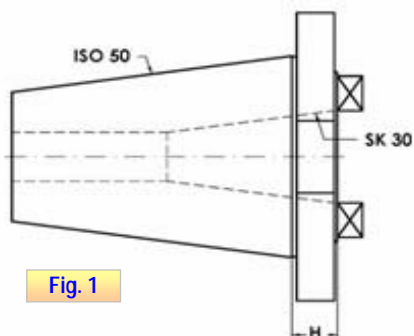


Fig. 1

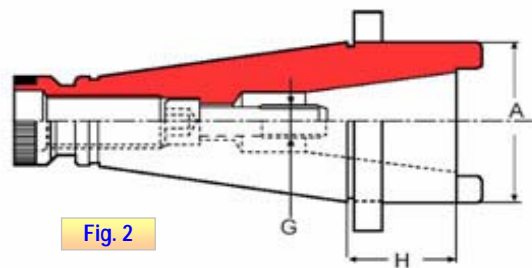
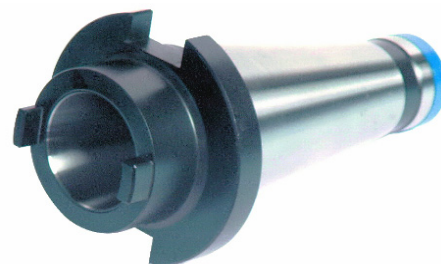


Fig. 2

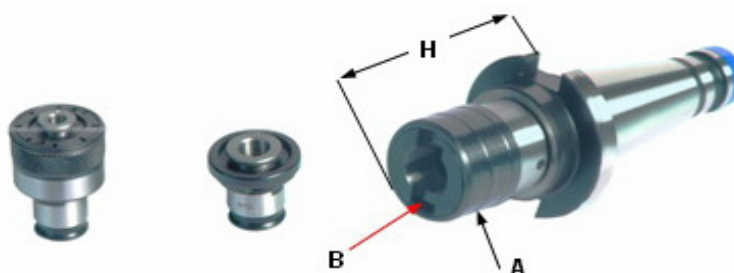
Ref.	Order Nr.	Fig.	A	G	Price
350-225	ISO40.H13.SK30	1	—	—	
	ISO40.H50.SK30	2	50	M12	
	ISO50.H16.SK30	1	—	—	
	ISO50.H16.SK40	1	—	—	
	ISO50.H38.SK40	2	63	M16	

- Sono completi di vite-tirante per il bloccaggio degli utensili
- Are supplied with mounted tightening bolt
- Komplett mit eingebauter Anzugsschraube
- Livré avec la vis-tirette pour la fixation de l'outil



Portamaschi a cambio rapido
 Quick change tapping chucks
 Gewinde-Schnellwechselfütter
 Mandrins de taraudage à changement rapide

ISO 40 / 50



Ref.	Order Nr.	Per maschi Tap capacity	H	A	B	Trazione Tension	Compress.	Price
350-230	ISO40.MCR1TC	M3 ÷ M12	53	38	19	9	9	
	ISO40.MCR2TC	M6 ÷ M20	77	55	31	15	15	
	ISO50.MCR1TC	M3 ÷ M12	57	38	19	9	9	
	ISO50.MCR2TC	M6 ÷ M20	79	55	31	15	15	
	ISO50.MCR3TC	M14 ÷ M33	125	55	48	24	24	

- Con compensazione assiale a trazione e compressione
- Tension and compression type for compensate the difference between spindle feed and the thread pitch
- Mit Langenausgleich auf Druck und Zug
- Avec compensation longitudinale en traction et compression

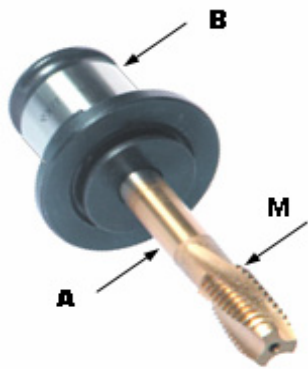


Fig. 1

Inserzioni portamaschi a cambio rapido
 Quick change adaptors for tapping
 Schnellwechsel-Einsätze
 Adapteurs porte-taraud à changement rapide

**PER MASCHI CON GAMBI SECONDO DIN
 DIN DIMENSIONS OF TAP SHANK**

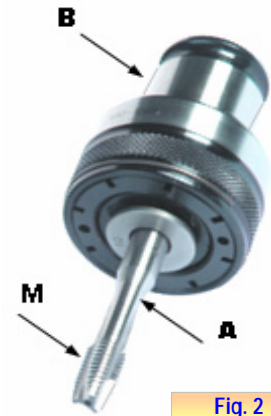


Fig. 2

SENZA FRIZIONE - WITHOUT SAFETY CLUTCH

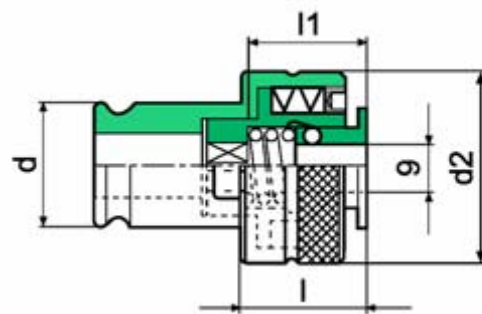
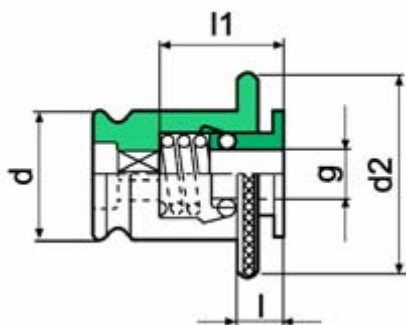
CON FRIZIONE REGISTRABILE - WITH SAFETY CLUTCH

Ref.	Order Nr.	M	Fig.	A	B	Price
201-451	B1.35 x 2,7	M3	1	3,5	19	
	B1.40 x 3	M3,5	1	4	19	
	B1.45 x 3,4	M4	1	4,5	19	
	B1.60 x 4,9	M5-6-8	1	6	19	
	B1.70 x 5,5	M10	1	7	19	
	B1.80 x 6,2	M8	1	8	19	
	B1.90 x 7	M12	1	9	19	
	B1.100 x 8	M10	1	10	19	
	B1.110 x 9	M14	1	11	19	
	B2.60 x 4,9	M5-6-8	1	6	31	
	B2.70 x 5,5	M10	1	7	31	
	B2.80 x 6,2	M8	1	8	31	
	B2.90 x 7	M12	1	9	31	
	B2.100 x 8	M10	1	10	31	
	B2.110 x 9	M14	1	11	31	
	B2.120 x 9	M16	1	12	31	
	B2.140 x 11	M18	1	14	31	
	B2.160 x 12	M20	1	16	31	
	B2.180 x 14,5	M22-24	1	18	31	
	B3.110 x 9	M14	1	11	48	
	B3.120 x 9	M16	1	12	48	
	B3.140 x 11	M18	1	14	48	
	B3.160 x 12	M20	1	16	48	
	B3.180 x 14,5	M22-24	1	18	48	
	B3.200 x 16	M27	1	20	48	
	B3.220 x 18	M30	1	22	48	
	B3.250 x 20	M33	1	25	48	
	B3.280 x 22	M36	1	28	48	

Ref.	Order Nr.	M	Fig.	A	B	Price
201-455	BF1.35 x 2,7	M3	2	3,5	19	
	BF1.40 x 3	M3,5	2	4	19	
	BF1.45 x 3,4	M4	2	4,5	19	
	BF1.60 x 4,9	M5-6-8	2	7	19	
	BF1.70 x 5,5	M10	2	8	19	
	BF1.80 x 6,2	M8	2	9	19	
	BF1.90 x 7	M12	2	10	19	
	BF1.100 x 8	M10	2	11	19	
	BF1.110 x 9	M14	2	12	19	
	BF2.60 x 4,9	M5-6-8	2	6	31	
	BF2.70 x 5,5	M10	2	7	31	
	BF2.80 x 6,2	M8	2	8	31	
	BF2.90 x 7	M12	2	9	31	
	BF2.100 x 8	M10	2	10	31	
	BF2.110 x 9	M14	2	11	31	
	BF2.120 x 9	M16	2	12	31	
	BF2.140 x 11	M18	2	14	31	
	BF2.160 x 12	M20	2	16	31	
	BF2.180 x 14,5	M22-24	2	18	31	
	BF3.110 x 9	M14	2	11	48	
	BF3.120 x 9	M16	2	12	48	
	BF3.140 x 11	M18	2	14	48	
	BF3.160 x 12	M20	2	16	48	
	BF3.180 x 14,5	M22-24	2	18	48	
	BF3.200 x 16	M27	2	20	48	
	BF3.220 x 18	M30	2	22	48	
	BF3.250 x 20	M33	2	25	48	
	BF3.280 x 22	M36	2	28	48	

DIN 6393

Le inserzioni con dimensioni adatte ai maschi ISO - JIS e ANSI, sono disponibili a richiesta
 On request we can supply the adaptors suitable for taps with ISO - JIS - ANSI shank dimensions



Serie di inserzioni portamaschi
Tap adaptors kits
 Satz Schnellwechsel-Einsätze
Jeux de Adapteurs porte tarauds



Ref.	Order Nr.	Per maschi <i>For Taps</i>	Inserzioni nella serie <i>Sizes in the Kit</i>	Price
201-465	BX.B1-6	M3 ÷ M12	B1.35 (M3) - .45 (M4) - .60 (M6) B1.80 (M8) - .90 (M12) - .100 (M10)	
	BX.B2-7	M6 ÷ M20	B2.80 (M8) - .90 (M12) - .100 (M10) B2.110 (M14) - .120 (M16) B2.140 (M18) - .160 (M20)	



Ref.	Order Nr.	Per maschi <i>For Taps</i>	Inserzioni nella serie <i>Sizes in the Kit</i>	Price
201-467	BX.BF1-6	M3 ÷ M12	BF1.35 (M3) - .45 (M4) - .60 (M6) BF1.80 (M8) - .90 (M12) - .100 (M10)	
	BX.BF2-7	M6 ÷ M20	BF2.80 (M8) - .90 (M12) - .100 (M10) BF2.110 (M14) - .120 (M16) BF2.140 (M18) - .160 (M20)	

Inserzioni portamaschi a cambio rapido
Quick change adaptors for tapping
 Schnellwechsel-Einsätze
Adapteurs porte-taraud à changement rapide

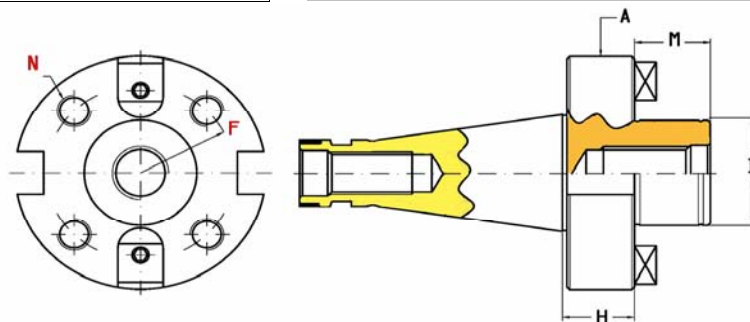


DIN 6499-B Collets

Ref.	Order Nr.	A	B	Price
201-460	B0.ERC11	19	13	
	B1.ERC16	28	19	
	B2.ERC25	42	31	
	B2.ERC32	50	31	
	B3.ERC32	50	48	
	B3.ERC40	63	48	

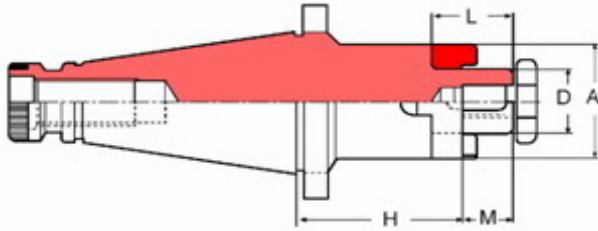
Porta frese ad inserti
Face mill holders for face milling cutters
 Aufsteckfräserdorne für Messerköpfe
Mandrins porte-fraises pour fraises à surface

ISO 40 / 50 according to DIN 6357



Ref.	Order Nr.	A	M	N	F	Price
350-255	ISO40.H20.D40FM	89	30	M12	66,7	
	ISO50.H30.D40FM	89	30	M12	66,7	
	ISO50.H30.D60FM	129	40	M16	101,6	

Portafrese combinato
 Combi shell end mill holders
 Kombi-Fräseraufsteckdorne
 Mandrin porte-fraises combinés



ISO 30 / 40 / 50
 according to DIN 6358



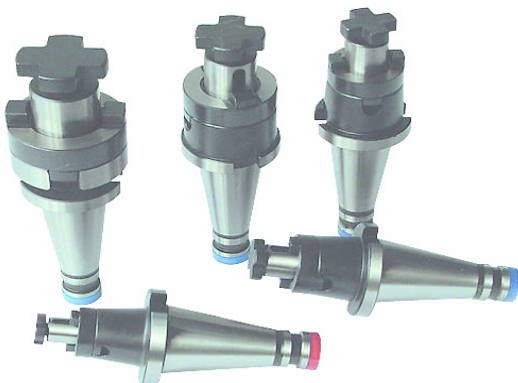
Ref.	Order Nr.	A	M	Price
350-257	ISO30.H35.D13C	28	12	
	ISO30.H50.D16C	32	17	
	ISO30.H50.D22C	40	19	
	ISO30.H50.D27C	48	21	
	ISO30.H50.D32C	58	24	
	ISO40.H52.D13C	28	12	
	ISO40.H52.D16C	32	17	
	ISO40.H90.D16C	32	17	
	ISO40.H52.D22C	40	19	
	ISO40.H90.D22C	40	19	
	ISO40.H52.D27C	48	21	
	ISO40.H90.D27C	48	21	
	ISO40.H52.D32C	58	24	
	ISO40.H100.D32C	58	24	
	ISO40.H52.D40C	70	27	
	ISO40.H100.D40C	70	27	

Ref.	Order Nr.	A	M	Price
350-257	ISO50.H55.D16C	32	17	
	ISO50.H100.D16C	32	17	
	ISO50.H125.D16C	32	17	
	ISO50.H55.D22C	40	19	
	ISO50.H100.D22C	40	19	
	ISO50.H125.D22C	40	19	
	ISO50.H55.D27C	48	21	
	ISO50.H100.D27C	48	21	
	ISO50.H125.D27C	48	21	
	ISO50.H55.D32C	58	24	
	ISO50.H100.D32C	58	24	
	ISO50.H125.D32C	58	24	
	ISO50.H55.D40C	70	27	
	ISO50.H100.D40C	70	27	
	ISO50.H125.D40C	70	27	
	ISO50.H55.D50C	90	30	



- Vedi pag. 21.1
- See pag. 21.1
- Sehen Seite 21.1
- Voir pag. 21.1

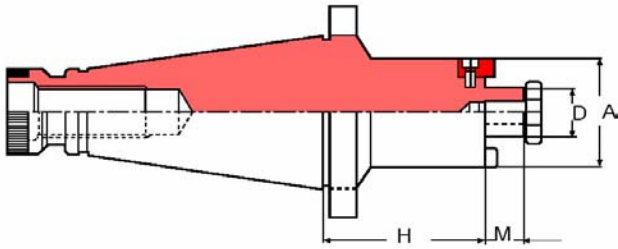
Serie di mandrini combinati
 Combi shell end mill holders set
 Kombi-Fräseraufsteckdorne Satze
 Jeux des mandrins combinés



Ref.	Order Nr.	Mandrini End Mill Holders	Price
350-259	ISO30.SETKOMBI.4	ISO30.H50.D16C	
		ISO30.H50.D22C	
		ISO30.H50.D27C	
		ISO30.H50.D32C	
	ISO40.SETKOMBI.5	ISO40.H52.D16C	
		ISO40.H52.D22C	
		ISO40.H52.D27C	
		ISO40.H52.D32C	
		ISO40.H52.D40C	



Porta frese fissi
 Shell end mill holders
 Aufsteckfräserdorne
 Mandrins porte-fraises à trou lisse



Ref.	Order Nr.	A	M	Price
350-261	ISO30.H35.D13S	30	15	
	ISO30.H35.D16S	32	17	
	ISO30.H35.D22S	40	19	
	ISO30.H35.D27S	48	21	
	ISO30.H35.D32S	58	24	
	ISO40.H30.D13S	30	15	
	ISO40.H30.D16S	38	17	
	ISO40.H90.D16S	38	17	
	ISO40.H35.D22S	48	19	
	ISO40.H90.D22S	48	19	
	ISO40.H35.D27S	58	21	
	ISO40.H90.D27S	58	21	
ISO40.H35.D32S	65	24		
ISO40.H90.D32S	65	24		
ISO40.H35.D40S	70	27		
ISO40.H90.D40S	70	27		

ISO 30 / 40 / 50
 similar to DIN 6357



Ref.	Order Nr.	A	M	Price
350-261	ISO50.H45.D16S	38	17	
	ISO50.H100.D16S	38	17	
	ISO50.H125.D16S	38	17	
	ISO50.H45.D22S	48	19	
	ISO50.H100.D22S	48	19	
	ISO50.H125.D22S	48	19	
	ISO50.H45.D27S	58	21	
	ISO50.H100.D27S	58	21	
	ISO50.H125.D27S	58	21	
	ISO50.H45.D32S	65	24	
	ISO50.H100.D32S	65	24	
	ISO50.H125.D32S	65	24	
ISO50.H45.D40S	80	27		
ISO50.H100.D40S	80	27		
ISO50.H125.D40S	80	27		



- Vedi pag. 21.1
- See pag. 21.1
- Sehen Seite 21.1
- Voir pag. 21.1

Serie di mandrini fissi
 Shell end mill holders set
 Aufsteckfräserdorne - Satze
 Jeux des mandrins à trou lisse

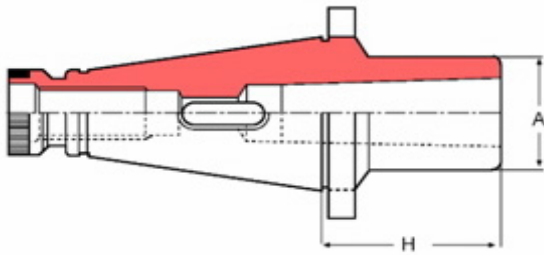


Ref.	Order Nr.	Mandrini End Mill Holders	Price
350-263	ISO30.SETFS.4	ISO30.H35.D16S ISO30.H35.D22S ISO30.H35.D27S ISO30.H35.D32S	
	ISO40.SETFS.5	ISO40.H30.D16S ISO40.H35.D22S ISO40.H35.D27S ISO40.H35.D32S ISO40.H35.D40S	



Riduzioni a cono morse per punte con tenone
 Morse taper adaptors for drills with flat tang
 Zwischenhülsen für Morsekegel mit Austreibblappen
 Douilles pour cône morse à tenon

ISO 30 / 40 / 50
 according to DIN 6383



Ref.	Order Nr.	A	Price
350-271	ISO30.H50.CM1PF	25	
	ISO30.H50.CM2P	32	
	ISO30.H72.CM3P	40	
	ISO40.H50.CM1PF	25	
	ISO40.H92.CM1PF	25	
	ISO40.H50.CM2PF	32	
	ISO40.H109.CM2PF	32	
	ISO40.H65.CM3P	40	
	ISO40.H129.CM3P	40	
	ISO40.H95.CM4P	48	
ISO40.H152.CM4P	48		

Ref.	Order Nr.	A	Price
350-271	ISO50.H45.CM1PF	25	
	ISO50.H60.CM2PF	32	
	ISO50.H113.CM2PF	32	
	ISO50.H65.CM3PF	40	
	ISO50.H133.CM3PF	40	
	ISO50.H70.CM4P	48	
	ISO50.H163.CM4P	48	
	ISO50.H105.CM5P	63	
	ISO50.H193.CM5P	63	

- Le riduzioni < PF > sono adatte anche per frese con filetto interno
- The adaptors < PF > are suitable for inside threaded mills.

Serie di riduzioni a cono morse per punte
 Drills Adaptors set
 Zwischenhülsen Satze
 Jeux des douilles à tenon

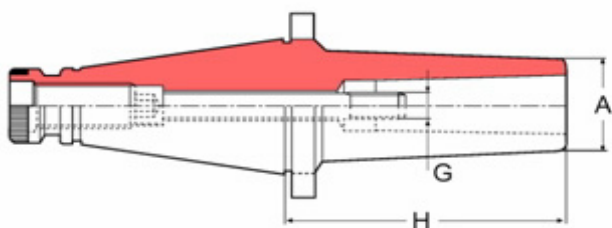


Ref.	Order Nr.	Riduzioni MT Adaptors	Price
350-272	ISO30.SETCMP.3	ISO30.H50.CM1PF ISO30.H50.CM2P ISO30.H72.CM3P	
	ISO40.SETCMP.4	ISO40.H50.CM1PF ISO40.H50.CM2PF ISO40.H65.CM3P ISO40.H95.CM4P	



Riduzioni a cono morse per frese (vite incorporata)
 Morse taper adaptors for threaded mills
 Zwischenhülsen für Morsekegel mit Anzugsgewinde
 Douilles pour cône morse avec vis incorporée

ISO 30 / 40 / 50
 according to DIN 6364



Ref.	Order Nr.	A	G	Price
350-275	ISO30.H50.CM1FV	25	M6	
	ISO30.H50.CM2FV	32	M10	
	ISO30.H78.CM3FV	40	M12	
	ISO40.H50.CM1FV	25	M6	
	ISO40.H50.CM2FV	32	M10	
	ISO40.H65.CM3FV	40	M12	
	ISO40.H95.CM4FV	48	M16	

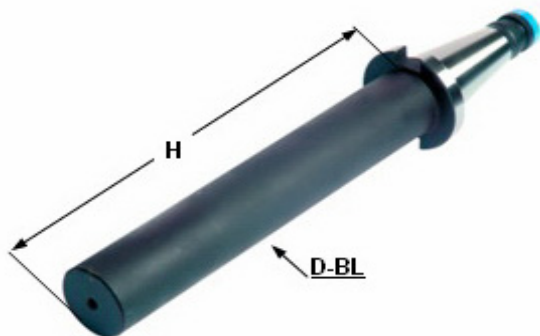
Ref.	Order Nr.	A	G	Price
350-275	ISO50.H60.CM1FV	25	M6	
	ISO50.H60.CM2FV	32	M10	
	ISO50.H115.CM2FV	25	M10	
	ISO50.H65.CM3FV	40	M12	
	ISO50.H115.CM3FV	32	M12	
	ISO50.H165.CM3FV	32	M12	
	ISO50.H65.CM4FV	48	M16	
	ISO50.H115.CM4FV	40	M16	
	ISO50.H165.CM4FV	40	M16	
	ISO50.H100.CM5FV	63	M20	



- Vedi pag. 21.2
- See pag. 21.2
- Sehen Seite 21.2
- Voir page 21.2

Mandrini a stelo lavorabile
 Machinable blank arbors
 Bohrsdtangen - Rohlinge
 Ebauches de barre d'alésage

ISO 40 / 50



Ref.	Order Nr.	Price
350-283	ISO40.H250.D40BL	
	ISO50.H315.D97BL	

- Costruiti con acciaio da cementazione.
- La durezza del cono ISO è HRC 56 ÷ 58.
- La durezza della parte lavorabile è HRC 28 ÷ 32
- Manufactured with top quality carburizing steel.
- The hardness of ISO stank is RC 56 ÷ 58 while the machinable arbor is RC 28 ÷ 32