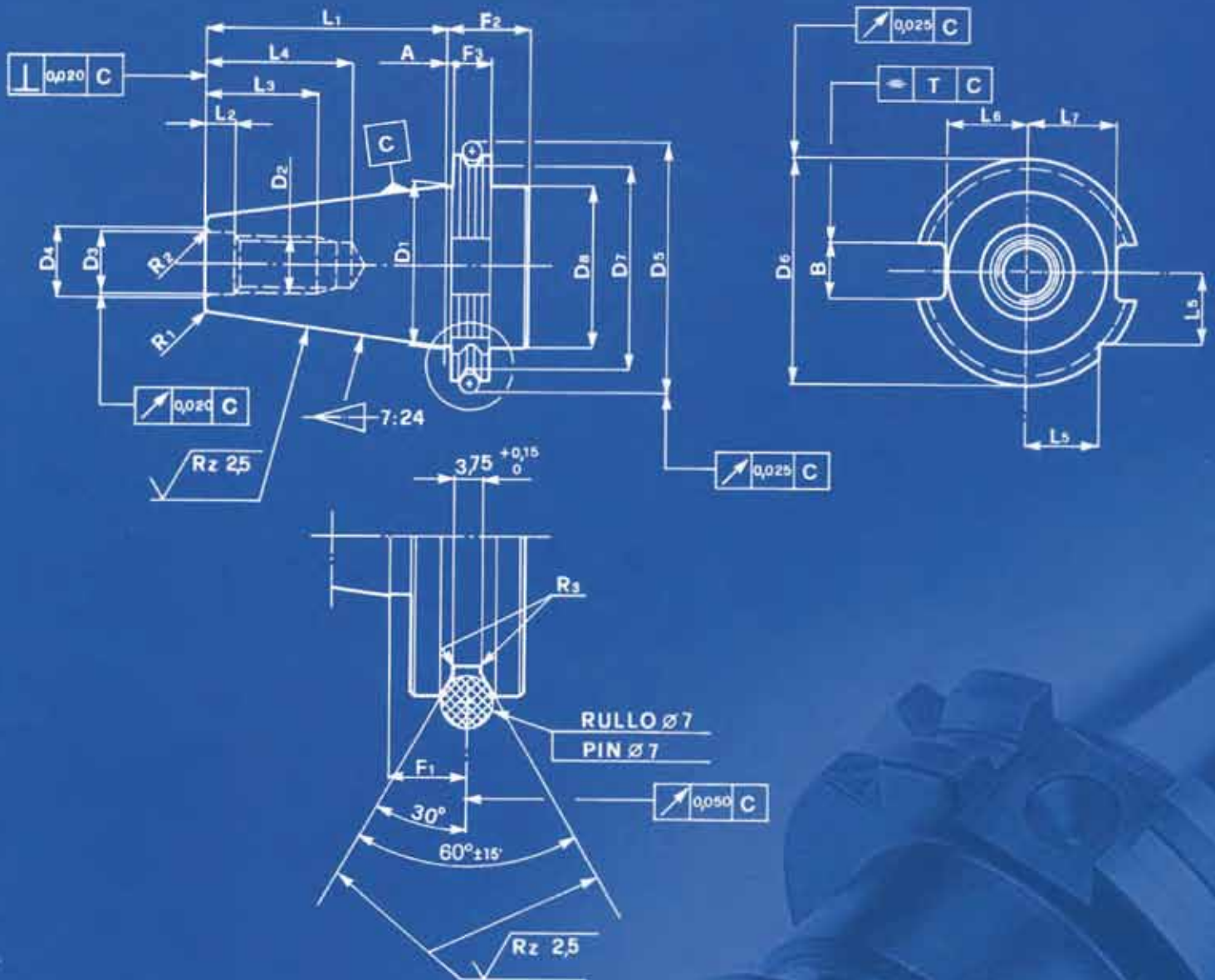


DIN 69871



Cono - Size 40 50

A $\pm 0,1$		3,2
B H12	18,1	25,7
D1	44,45	69,85
D2	M16	M24
D3 H7	17	25
D4 max	19	28
D5 $\pm 0,05$	72,3	107,25
D6 $\pm 0,1$	63,55	97,50
D7 $\pm 0,5$	56,25	91,25
D8 max	50	80
F1 $\pm 0,1$		11,7

Cono - Size 40 50

F2 min		35
F3 $\pm 0,1$		16,9
L1 $\pm 0,1$	68,4	101,75
L2 $\pm 0$	8,2	11,5
L3 min	32	47
L4 min	42,5	61,5
L5 $\pm 0,1$	18,5	30
L6 $\pm 0,4$	22,8	35,5
L7 $\pm 0,4$	25	37,7
R1 $\pm 0,5$	1,2	2,5
R2 $\pm 0,5$	1	1,5
T	0,12	0,20

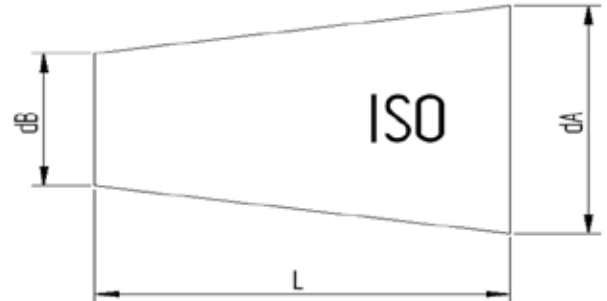


TUTTI I MANDRINI PORTAUTENSILI PAGNONI VENGONO PRODOTTI SECONDO LE NORMATIVE DIN

**TOLLERANZA DEL CONO**

PRODOTTI IN CLASSE AT3

ISO	L	dA - dB	AT3
30	42	12.250	+ 0.002
40	59	17.208	+ 0.003
50	92	26.833	+ 0.004



**COASSIALITÀ PORTAPINZE**

La norma DIN6391 ammette un'errore massimo di 0.016 sia per i portapinze DIN6499 che per DIN 6388.

La nostra produzione normalmente presenta uno scostamento massimo di eccentricità tra cono ISO e sede pinza compreso tra i 0,003 e 0,010 mm.

**COASSIALITÀ PORTAFRESE FISSI E COMBINATI**

I portafrese fissi e combinati di nostra produzione rispondono ai criteri prescritti dalla norma DIN 6358, la quale prevede un errore massimo di coassialità tra cono ISO 30 e ISO 40 ed i diametri 16-22-27-32-40, di 0,01.

Mentre per ISO 50 è ammesso un errore massimo di 0,015 mm.

**COASSIALITÀ PORTAFRESE WELDON - WHISTLE NOTCH**

Rispettando la normativa DIN 6359-1 i portafrese WELDON devono rispondere ai seguenti requisiti :

Foro: tolleranza H5

coassialità: scostamento massimo consentito tra cono e sede Weldon <0.01 (per ISO 40)

Garantiamo la tolleranza prescritta sul foro e un valore di coassialità mediamente di 0,005.

**EQUILIBRATURA**

La maggior parte dei portautensili presenti in questa categoria sono prebilanciati in classe G 6,3 8000 rpm min -1. o bilanciati a 12000 giri rpm min-1.

**DATI COSTRUTTIVI**

- Costruiti in acciaio da cementazione legato.
- Cementati con profondità 0,4-0,5 mm
- Temprati-rinvenuti
- Durezza HRC 58 +-2 resistenza 800-1000 N/mm2
- Bruniti
- Finitura di rettifica interna, esterna e nelle filettature delle ghiera chiudipinza

**EQUILIBRATURA MANDRINI PER ALTE VELOCITÀ**

Eventuali bilanciature supplementari sui nostri mandrini vengono eseguite su richiesta cliente, con una classe massima di bilanciatura di G 2,5 a 25000 rpm.

**DATI COSTRUTTIVI MANDRINI PER ALTE VELOCITÀ**

- Costruiti in acciaio da cementazione legato.
- Cementati con profondità 0,4 - 0,5 mm
- Temprati-rinvenuti
- Durezza HRC 58 +-2 resistenza 800-1000 N/ mm2
- Bruniti
- Finitura di rettifica interna, esterna del cono
- Rettifica parte anteriore e nelle filettature delle ghiera chiudipinza.
- Collaudati 100% con strumenti di misura certificati e forniti con certificato di bilanciatura.

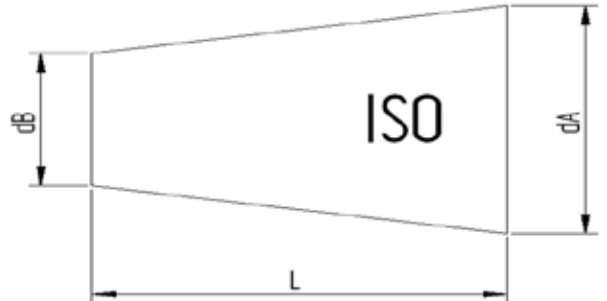


ALL PAGNONI TOOLHOLDERS ARE MANUFACTURED ACCORDING TO DIN NORM.

**CONE'S TOLERANCE**

ACCORDING TO THE CLASS AT3.

ISO	L	dA - dB	AT3
30	42	12.250	+ 0.002
40	59	17.208	+ 0.003
50	92	26.833	+ 0.004



**COLLET CHUCK'S RUNOUT ACCURACY**

The norm DIN6391 permits a runout error between external cone and internal cone / collet seat of 0.016. Our production has a runout accuracy which is guaranteed to be within 0,003 / 0,010 m at the tool seat.

**SHELL END MILL ADAPTOR'S RUNOUT ACCURACY**

Our shell end mill adaptors meet the requirements of the norm DIN6358, which prescribes for diameters 16-22-27-32-40 a runout accuracy of:0,01 for SK 30/40 0,015 for SK 50.

**WELDON END MILL HOLDER'S RUNOUT ACCURACY**

According to the norm DIN6359-1 Weldon end mill holders have to meet the following requirements:

Bore: H5 tolerance

Runout accuracy: <0.01 (for SK 40)

Our end mill adaptors ensure the prescribed holes' tolerance and have a runout accuracy which is normally 0.005

**BALANCING**

The major part of toolholders of this category can run up to 8000 rpm grade G 6,3 or 12000 rpm.

**CONSTRUCTIVE FEATURES**

- Manufactured with Casehardening Steel.
- Casehardened with depth 0,4 - 0,5 mm
- Hardened-Tempered
- Hardness HRC 58+-2, Strength 800-1000 N/mm2
- Black oxidized
- Internal and external grinding finished.

**HIGH-SPEED BALANCING TOOLHOLDERS**

Any additional balancing on our toolholders are carried out on client request, with a class maximum of balancing of 25.000 rpm grade g 2,5.

**CONSTRUCTIVE FEATURES FOR HIGH-SPEED TOOLHOLDERS**

- Manufactured with casehardening Steel.
- Casehardened with depth 0,4 - 0,5 mm
- Hardened-Tempered
- Hardness HRC 58+-2, Strength 800-1000 N/mm2
- Black oxidized
- Internal and external grinding finish of the cone
- Grinding finish on the front side and on the thread of collet nuts.
- Tested 100% with certified measuring instruments and supplied with balancing certificate

**PAGNONI-STEILKEGELAUFNAHMEN**

**TECHNISCHE DATEN**

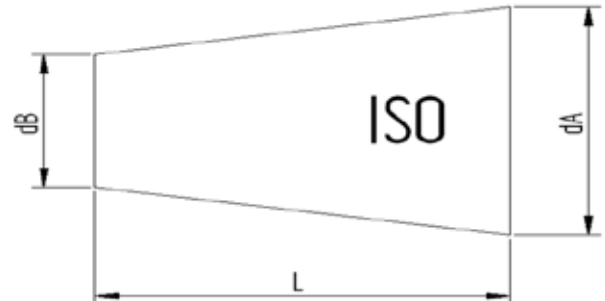


Alle Pagnoni-Steilkegelaufnahmen werden nach den DIN-Normen angefertigt.

**KEGELSCHAFTTOLERANZ**

In Klasse AT3 angefertigt.

ISO	L	dA - dB	AT3
30	42	12.250	+ 0.002
40	59	17.208	+ 0.003
50	92	26.833	+ 0.004



**RUNDLAUFGENAUIGKEIT DER SPANNZANGENAUFNAHME**

Die DIN 6391- Norm schreibt eine Rundlaufgenauigkeit zwischen Aussenkegel und Innenkegel / Spannzangensitz vom 0,016 vor. Unsere Spannzangenfutter weisen einen Rundlauffehler zwischen ISO-Kegelaufnahme und Spannzangensitz, der zwischen 0,003 und 0,010 mm liegt.

**AUFSTECKFRÄSDORNE - RUNDLAUFGENAUIGKEIT**

Pagnoni- Aufsteckfräsdorne entsprechen der DIN 6358- Norm, die einen höchsten Rundlauffehler zwischen ISO 30- und ISO40-Kegel und den Durchmessern 16-22-27-32-40 vom 0,01 vorsieht.

Der mögliche höchste Rundlauffehler für ISO 50 ist 0,015 mm.

**WELDON AUFSTECKFRÄSDORNE-RUNDLAUFGENAUIGKEIT**

Nach der DIN 6359-1-Norm müssen die Weldon- Aufsteckfräsdorne die folgenden Forderungen aufweisen:

Bohrung: Toleranz H5

Rundlaufgenauigkeit: höchster möglicher Rundlauffehler zwischen Kegel und Weldonsitz < 0,01 (für ISO 40)

Die vorgeschriebene Toleranz der Bohrung und eine durchschnittliche Rundlaufgenauigkeit von 0,005 sind verichert.

**WUCHTUNG**

Die meisten Werkzeughalter dieser Gruppe sind in Klasse G6,3 auf 8.000 U/Min -1 vorgewuchtet oder auf 12.000 U/Min -1 gewuchtet.

**KONSTRUKTIONSDATEN**

- aus legiertem Einsatzstahl angefertigt
- in der Einsatzhärte tiefe von 0,4-0,5 mm
- gehärtet, angelassen
- Härte HRC 58 +-2, Festigkeit 800-1000 N-mm2
- brüniert
- inneres, äußeres Schleifen und am Gewinde der Spannzangenmutter

**WUCHTUNG MIT HOCHGESCHWINDIGKEIT**

Auf Anfrage können wir die Werkzeughalter auf maximal G2,5 25.000 U/min. gegen Aufpreis auswuchten.

**KONSTRUKTIONSDATEN**

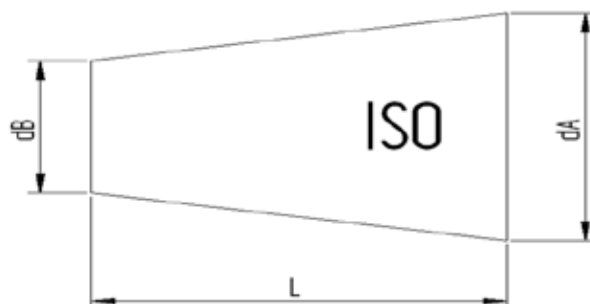
- aus legiertem Einsatzstahl angefertigt
- in der Einsatzhärte tiefe von 0,4-0,5 mm
- gehärtet, angelassen
- Härte HRC 58+-2, Festigkeit 800-1000 N/mm2
- brüniert
- inneres, äußeres Schleifen des Kegels
- Schleifen der Vorderseite und am Gewinde der Spannzangenmutter
- 100% durch zertifizierte Meßinstrumente geprüft und mit Wuchtungsprotokoll geliefert

TOUS LES MANDRINS PORTE-OUTILS PAGNONI SONT PRODUITS SUIVANT LES SPÉCIFICATIONS DIN

### TOLLERANCE DU CONE

EN CLASSE AT3.

ISO	L	dA - dB	AT3
30	42	12.250	+ 0.002
40	59	17.208	+ 0.003
50	92	26.833	+ 0.004



### COAXIALITÉ PORTE-PINCE

La norme DIN6391 admet une erreur maximum du 0.016 soit pour les porte-pinces DIN6499 soit pour DIN6388.

Dans notre production l'écart d'excentricité maximum entre cône ISO et logement de la pince est compris entre:0,003 et 0,0010 mm.

### COAXIALITÉ PORTE-FRAISES FIXES ET COMBINÉS

Les porte-fraises fixes et combinés de notre production suivent la spécification de la norme DIN6358, qui prévoit pour les diamètres 16-22-27-32-40 une concentricité de 0,01 pour ISO 30 et ISO 40 0,015 pour ISO 50.

### COAXIALITÉ PORTE-FRAISES WELDON

Suivant les spécifications DIN 6359-1 les porte-fraises WELDON doivent suivre les conditions suivantes :

Trou: tolérance H5

Coaxialité: écart maximum toléré entre cône et logement du Weldon <0.01 (pour ISO 40)

Nous assurons la tolérance prévue sur le trou et une coaxialité en moyenne de 0.005.

### EQUILIBRAGE

La plupart des porte-outils sont pré-équilibrés en classe G 6,3 8000 Tr/Min -1. ou équilibrés à 12000 Tr/Min- 1.

### ELEMENTS DE CONSTRUCTION

- Produits en acier cémenté allié.
- Cémentés avec une profondeur 0,4 -0,5 mm
- Trempé - Revenu
- Dureté HRC 58 +/- 2 résistance 800-1000 N/mm<sup>2</sup>
- Brunis
- Rectification du cône intérieur, extérieur et dans le filetage des écrous qui serrent la pince.

### EQUILIBRAGE MANDRINS POUR HAUTE VITESSE

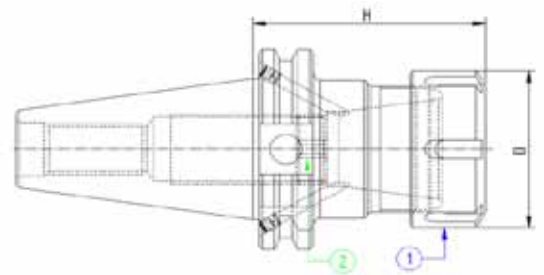
Équilibrage éventuels sur nos mandrins sont exécutés sur demande du client, avec une maximum classe de équilibrage de G 2,5 à 25.000 rpm.

### ELEMENTS DE CONSTRUCTION POUR MANDRINS HAUTE VITESSE

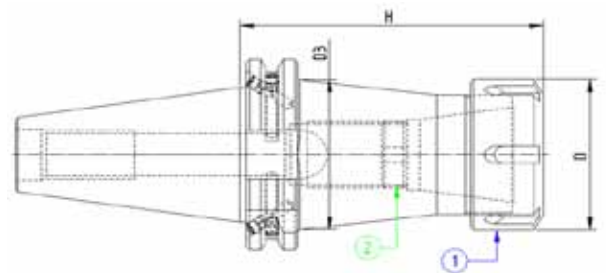
- Produits en acier cémenté allié.
- Cémentés avec une profondeur 0,4 - 0,5 mm
- Trempé - Revenu
- Dureté HRC 58+-2, résistance 800-1000 N/mm<sup>2</sup>
- Brunis
- Finition de rectification intérieure, extérieure et du cône
- Rectification du cône intérieur et dans le filetage des écrous qui serrent la pince.
- Contrôlés à 100 % avec des instruments de mesure certifiés et livrés avec un certificat d'équilibrage.



**FIG. 1**



**FIG. 2**

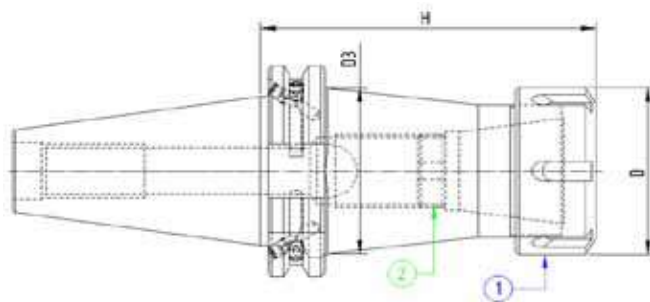


Codice	ISO	Descrizione	H	D	D3	FIG.	G6.3 12000
140PP110	40	ISO40 DIN69871 P/P H.70 ER16	70	32	-	1	●
140PP113	40	ISO40 DIN69871 P/P H.70 ER20	70	35	-	1	●
140PP116	40	ISO40 DIN69871 P/P H.70 ER25	70	42	-	1	●
140PP120	40	ISO40 DIN69871 P/P H.70 ER32	70	50	-	1	●
140PP126	40	ISO40 DIN69871 P/P H.70 ER40	70	63	-	1	●
140PP210	40	ISO40 DIN69871 P/P H.100 ER16	100	32	28	2	●
140PP213	40	ISO40 DIN69871 P/P H.100 ER20	100	35	30	2	●
140PP216	40	ISO40 DIN69871 P/P H.100 ER25	100	42	45	2	●
140PP220	40	ISO40 DIN69871 P/P H.100 ER32	100	50	48	2	●
140PP226	40	ISO40 DIN69871 P/P H.100 ER40	100	63	50	2	●

**COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE**

ER	Ghiera	Q.tà	Grano Int.	Q.tà
				
	<b>1</b>		<b>2</b>	
16	916GHREQ	1	101001601	1
20	920GHREQ	1	101001601	1
25	925GHREQ	1	101815801	1
32	932GHREQ	1	102215901	1
40	940GHREQ	1	103015901	1





Codice	ISO	Descrizione	H	D	D3
140PP310	40	ISO40 DIN69871 P/P H.130 ER16	130	32	28
140PP313	40	ISO40 DIN69871 P/P H.130 ER20	130	35	30
140PP316	40	ISO40 DIN69871 P/P H.130 ER25	130	42	45
140PP320	40	ISO40 DIN69871 P/P H.130 ER32	130	50	50
140PP326	40	ISO40 DIN69871 P/P H.130 ER40	130	63	50
140PP410	40	ISO40 DIN69871 P/P H.160 ER16	160	32	31
140PP413	40	ISO40 DIN69871 P/P H.160 ER20	160	35	32
140PP416	40	ISO40 DIN69871 P/P H.160 ER25	160	42	45
140PP420	40	ISO40 DIN69871 P/P H.160 ER32	160	50	50
140PP426	40	ISO40 DIN69871 P/P H.160 ER40	160	63	50
140PP510	40	ISO40 DIN69871 P/P H.200 ER16	200	32	32
140PP513	40	ISO40 DIN69871 P/P H.200 ER20	200	35	35
140PP516	40	ISO40 DIN69871 P/P H.200 ER25	200	42	42
140PP520	40	ISO40 DIN69871 P/P H.200 ER32	200	50	50
140PP526	40	ISO40 DIN69871 P/P H.200 ER40	200	63	50

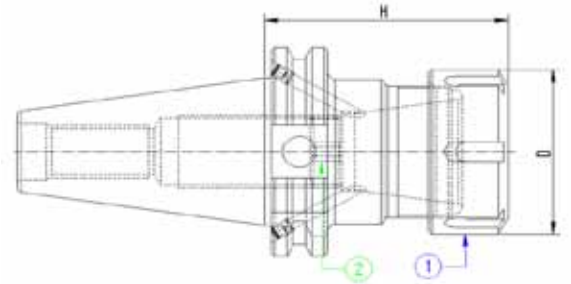
**COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE**

ER	Ghiera	Q.tà	Grano Int.	Q.tà
				
16	916GHREQ	1	101001601	1
20	920GHREQ	1	101001601	1
25	925GHREQ	1	101815801	1
32	932GHREQ	1	102215901	1
40	940GHREQ	1	103015901	1

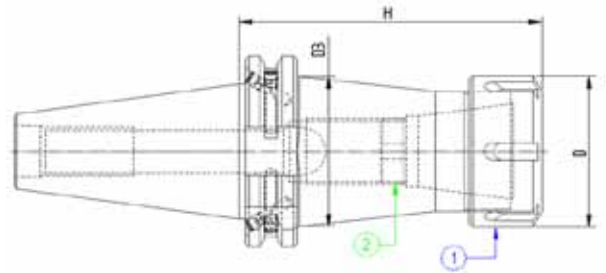




**FIG. 1**



**FIG. 2**



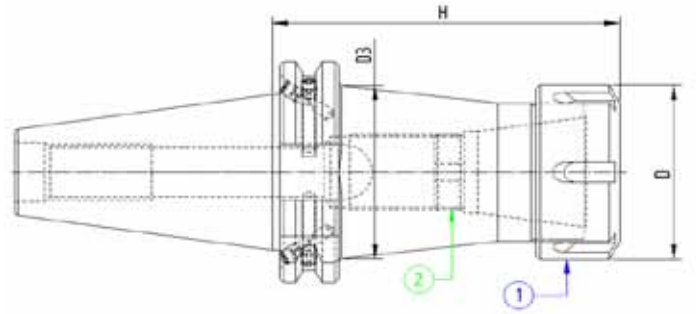
Codice	ISO	Descrizione	H	D	D3	FIG.	G6.3 12000
150PP110	50	ISO50 DIN69871 P/P H70 ER16	70	32	-	1	●
150PP113	50	ISO50 DIN69871 P/P H70 ER20	70	35	-	1	●
150PP116	50	ISO50 DIN69871 P/P H70 ER25	70	42	-	1	●
150PP120	50	ISO50 DIN69871 P/P H70 ER32	70	50	-	1	●
150PP126	50	ISO50 DIN69871 P/P H80 ER40	80	63	-	1	●
150PP210	50	ISO50 DIN69871 P/P H100 ER16	100	32	32	2	●
150PP213	50	ISO50 DIN69871 P/P H100 ER20	100	35	38	2	●
150PP216	50	ISO50 DIN69871 P/P H100 ER25	100	42	45	2	●
150PP220	50	ISO50 DIN69871 P/P H100 ER32	100	50	48	2	●
150PP226	50	ISO50 DIN69871 P/P H100 ER40	100	63	60	2	●
150PP234	50	ISO50 DIN69871 P/P H100 ER50	100	78	75	2	●

**COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE**

ER	Ghiera	Q.tà	Grano Int.	Q.tà
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16	916GHREQ	1	101001601	1
20	920GHREQ	1	101001601	1
25	925GHREQ	1	101815801	1
32	932GHREQ	1	102215901	1
40	940GHREQ	1	103015901	1
50	950GHREQ	1	103015901	1



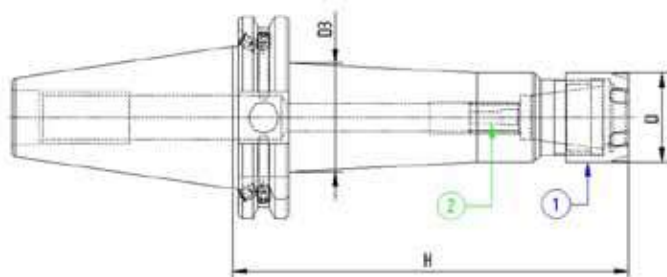
Codice	ISO	Descrizione	H	D	D3
150PP310	50	ISO50 DIN69871 P/P H130 ER16	130	32	32
150PP313	50	ISO50 DIN69871 P/P H130 ER20	130	35	38
150PP316	50	ISO50 DIN69871 P/P H130 ER25	130	42	45
150PP320	50	ISO50 DIN69871 P/P H130 ER32	130	50	48
150PP326	50	ISO50 DIN69871 P/P H130 ER40	130	63	60
150PP334	50	ISO50 DIN69871 P/P H130 ER50	130	78	75
150PP410	50	ISO50 DIN69871 P/P H160 ER16	160	32	32
150PP413	50	ISO50 DIN69871 P/P H160 ER20	160	35	40
150PP416	50	ISO50 DIN69871 P/P H160 ER25	160	42	55
150PP420	50	ISO50 DIN69871 P/P H160 ER32	160	50	50
150PP426	50	ISO50 DIN69871 P/P H160 ER40	160	63	60
150PP434	50	ISO50 DIN69871 P/P H160 ER50	160	78	75
150PP510	50	ISO50 DIN69871 P/P H200 ER16	200	32	32
150PP513	50	ISO50 DIN69871 P/P H200 ER20	200	35	40
150PP516	50	ISO50 DIN69871 P/P H200 ER25	200	42	42
150PP520	50	ISO50 DIN69871 P/P H200 ER32	200	50	50
150PP526	50	ISO50 DIN69871 P/P H200 ER40	200	63	63

**COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE**

ER	Ghiera	Q.tà	Grano Int.	Q.tà
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16	916GHREQ	1	101001601	1
20	920GHREQ	1	101001601	1
25	925GHREQ	1	101815801	1
32	932GHREQ	1	102215901	1
40	940GHREQ	1	103015901	1
50	950GHREQ	1	103015901	1



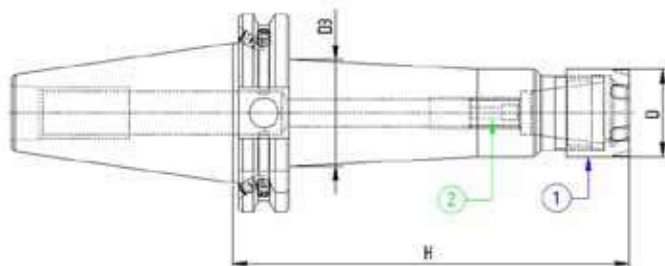
Codice	ISO	Descrizione	H	D	D3	G6.3 12000
140PM107	40	ISO40 DIN69871 P/P H70 ER11MINI	70	16	20	●
140PM110	40	ISO40 DIN69871 P/P H70 ER16MINI	70	22	26	●
140PM207	40	ISO40 DIN69871 P/P H100 ER11MINI	100	16	21	●
140PM210	40	ISO40 DIN69871 P/P H100 ER16MINI	100	22	27	●
140PM213	40	ISO40 DIN69871 P/P H100 ER20MINI	100	28	32	●
140PM216	40	ISO40 DIN69871 P/P H100 ER25MINI	100	35	33	●
140PM307	40	ISO40 DIN69871 P/P H130 ER11MINI	130	16	27	
140PM310	40	ISO40 DIN69871 P/P H130 ER16MINI	130	22	27	
140PM313	40	ISO40 DIN69871 P/P H130 ER20MINI	130	28	32	
140PM316	40	ISO40 DIN69871 P/P H130 ER25MINI	130	35	33	
140PM410	40	ISO40 DIN69871 P/P H160 ER16MINI	160	22	27	●
140PM413	40	ISO40 DIN69871 P/P H160 ER20MINI	160	28	32	●
140PM416	40	ISO40 DIN69871 P/P H160 ER25MINI	160	35	33	●
140PM510	40	ISO40 DIN69871 P/P H200 ER16MINI	200	22	35	
140PM513	40	ISO40 DIN69871 P/P H200 ER20MINI	200	28	38	
140PM516	40	ISO40 DIN69871 P/P H200 ER25MINI	200	35	42	

**COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE**

**ER MINI** | **Ghiera** | **Q.tà** | **Grano Int.** | **Q.tà**



11	911GHRMN	1	100601001	1
16	916GHRMN	1	101001601	1
20	920GHRMN	1	101001601	1
25	925GHRMN	1	101815801	1



Codice	ISO	Descrizione	H	D	D3	G6.3 12000
150PM210	50	ISO50 DIN69871 P/P H100 ER16MINI	100	22	28	●
150PM213	50	ISO50 DIN69871 P/P H100 ER20MINI	100	28	32	●
150PM216	50	ISO50 DIN69871 P/P H100 ER25MINI	100	35	35	●
150PM310	50	ISO50 DIN69871 P/P H130 ER16MINI	130	22	28	
150PM313	50	ISO50 DIN69871 P/P H130 ER20MINI	130	28	33	
150PM316	50	ISO50 DIN69871 P/P H130 ER25MINI	130	35	42	
150PM405	50	ISO50 DIN69871 P/P H160 ER08MINI	160	12	23	●
150PM407	50	ISO50 DIN69871 P/P H160 ER11MINI	160	16	29	●
150PM410	50	ISO50 DIN69871 P/P H160 ER16MINI	160	22	28	●
150PM413	50	ISO50 DIN69871 P/P H160 ER20MINI	160	28	32	●
150PM416	50	ISO50 DIN69871 P/P H160 ER25MINI	160	35	42	●
150PM510	50	ISO50 DIN69871 P/P H200 ER16MINI	200	22	29	
150PM513	50	ISO50 DIN69871 P/P H200 ER20MINI	200	28	32	
150PM516	50	ISO50 DIN69871 P/P H200 ER25MINI	200	35	42	

### COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

**ER MINI**    **Ghiera**    **Q.tà**    **Grano Int.**    **Q.tà**



8	908GHRMN	1	-	-
11	911GHRMN	1	100601001	1
16	916GHRMN	1	101001601	1
20	920GHRMN	1	101001601	1
25	925GHRMN	1	101815801	1



MANDRINI PORTAPINZA TIPO EOC  
EOC COLLET CHUCK  
MANDRINS A PINCES TYPE EOC  
SPANNZANGENFUTTER EOC TYPE



**DIN 69871 AD/B**

**DIN 6388**



FIG. 1

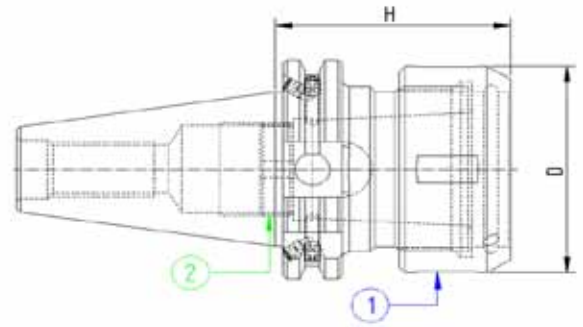
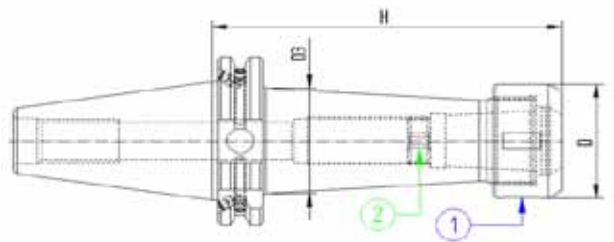


FIG. 2



Codice	ISO	Descrizione	H	D	D3	FIG.	G6.3 12000
140PO116	40	ISO40 DIN69871 P/P H70 EOC16	70	43	33	1	●
140PO125	40	ISO40 DIN69871 P/P H70 EOC25	70	60	48	1	●
140PO132	40	ISO40 DIN69871 P/P H80 EOC32	80	72	50	1	●
140PO216	40	ISO40 DIN69871 P/P H100 EOC16	100	43	40	1	
140PO225	40	ISO40 DIN69871 P/P H100 EOC25	100	60	49	1	
140PO232	40	ISO40 DIN69871 P/P H100 EOC32	100	72	50	1	
140PO316	40	ISO40 DIN69871 P/P H130 EOC16	130	43	40	2	
140PO325	40	ISO40 DIN69871 P/P H130 EOC25	130	60	49	2	

**COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE**

EOC	Ghiera	Q.tà	Grano Int.	Q.tà
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1



2



16	916GHROS	1	101815801	1
25	925GHROS	1	102715901	1
32	932GHROS	1	102715901	1



MANDRINI PORTAPINZA TIPO EOC  
EOC COLLET CHUCK  
MANDRINS A PINCES TYPE EOC  
SPANNZANGENFUTTER EOC



**DIN 69871 AD/B**

**DIN 6388**



FIG. 1

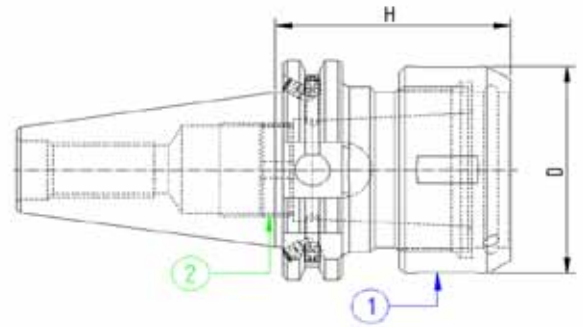
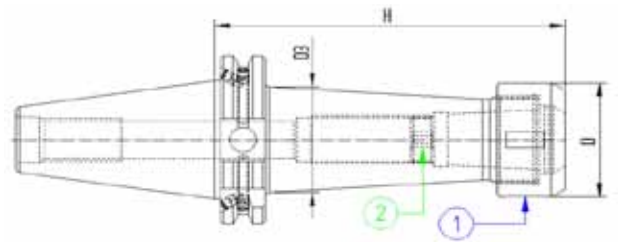


FIG. 2



Codice	ISO	Descrizione	H	D	D3	FIG.	G6.3 12000
150PO116	50	ISO50 DIN69871 P/P H70 EOC16	70	43	33	1	●
150PO125	50	ISO50 DIN69871 P/P H70 EOC25	70	60	48	1	●
150PO132	50	ISO50 DIN69871 P/P H80 EOC32	80	72	60	1	●
150PO216	50	ISO50 DIN69871 P/P H100 EOC16	100	43	40	1	
150PO225	50	ISO50 DIN69871 P/P H100 EOC25	100	60	49	1	
150PO232	50	ISO50 DIN69871 P/P H100 EOC32	100	72	56	1	
150PO316	50	ISO50 DIN69871 P/P H130 EOC16	130	43	40	2	
150PO325	50	ISO50 DIN69871 P/P H130 EOC25	130	60	49	2	
150PO332	50	ISO50 DIN69871 P/P H130 EOC32	130	72	56	2	

**COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE**

EOC	Ghiera	Q.tà	Grano Int.	Q.tà
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16	916GHROS	1	101815801	1
25	925GHROS	1	102715901	1
32	932GHROS	1	102715901	1



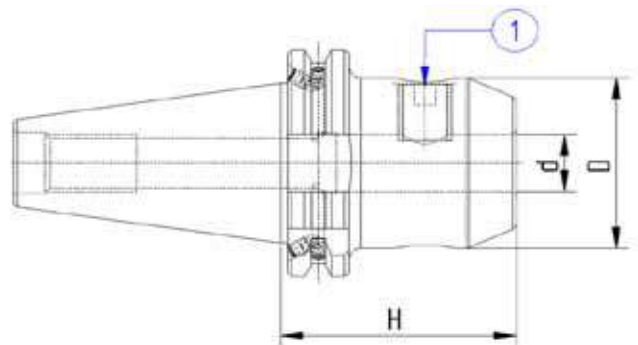




MANDRINI PORTAFRESE TIPO WELDON  
 END MILL HOLDERS WELDON  
 MANDRINS POUR OUTILS TYPE WELDON  
 ZYLINDERSCHAFTAUFNAHME WELDON



**DIN 69871 AD/B**



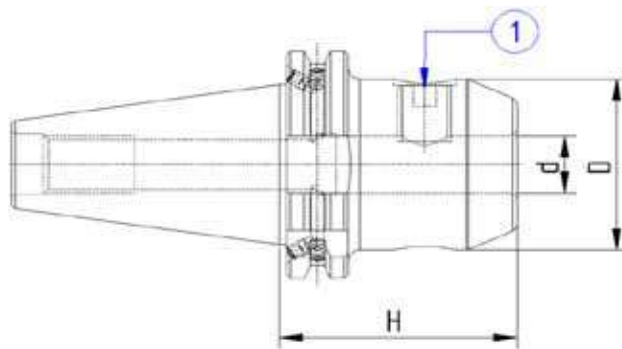
Codice	ISO	Descrizione	H	d	D	G6.3 12000
140WLD06	40	ISO40 DIN69871 WELDON H50 D.06	50	6	25	●
140WLD08	40	ISO40 DIN69871 WELDON H50 D.08	50	8	28	●
140WLD10	40	ISO40 DIN69871 WELDON H50 D.10	50	10	35	●
140WLD12	40	ISO40 DIN69871 WELDON H50 D.12	50	12	42	●
140WLD14	40	ISO40 DIN69871 WELDON H50 D.14	50	14	44	●
140WLD16	40	ISO40 DIN69871 WELDON H63 D.16	63	16	48	●
140WLD18	40	ISO40 DIN69871 WELDON H63 D.18	63	18	50	●
140WLD20	40	ISO40 DIN69871 WELDON H63 D.20	63	20	52	●
140WLD25	40	ISO40 DIN69871 WELDON H100 D.25	100	25	65	●
140WLD32	40	ISO40 DIN69871 WELDON H100 D.32	100	32	72	●
140WLD40	40	ISO40 DIN69871 WELDON H115 D.40	115	40	80	●

**COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE**

D	Grano	Q.tà
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6	100601002	1
8	100801002	1
10	101001202	1
12	101201602	1
14	101201602	1
16	101401602	1
18	101401602	1
20	101601602	1
25	101802002	2
32	102002002	2
40	102002002	2



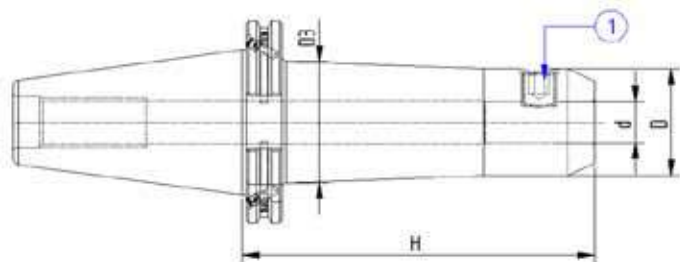
Codice	ISO	Descrizione	H	d	D	G6.3 12000
150WLD06	50	ISO50 DIN69871 WELDON H63 D.06	63	6	25	●
150WLD08	50	ISO50 DIN69871 WELDON H63 D.08	63	8	28	●
150WLD10	50	ISO50 DIN69871 WELDON H63 D.10	63	10	35	●
150WLD12	50	ISO50 DIN69871 WELDON H63 D.12	63	12	42	●
150WLD14	50	ISO50 DIN69871 WELDON H63 D.14	63	14	44	●
150WLD16	50	ISO50 DIN69871 WELDON H63 D.16	63	16	48	●
150WLD18	50	ISO50 DIN69871 WELDON H63 D.18	63	18	50	●
150WLD20	50	ISO50 DIN69871 WELDON H63 D.20	63	20	52	●
150WLD25	50	ISO50 DIN69871 WELDON H80 D.25	80	25	65	●
150WLD32	50	ISO50 DIN69871 WELDON H100 D.32	100	32	72	●
150WLD40	50	ISO50 DIN69871 WELDON H120 D.40	120	40	80	●
150WLD50	50	ISO50 DIN69871 WELDON H120 D.50	120	50	100	●

**COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE**

D	Grano	Q.tà
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6	100601002	1
8	100801002	1
10	101001202	1
12	101201602	1
14	101201602	1
16	101401602	1
18	101401602	1
20	101601602	1
25	101802002	2
32	102002002	2
40	102002002	2
50	102422504	2



Codice	ISO	Descrizione	H	d	D	D3	G6.3 12000
140WE206	40	ISO40 DIN69871 WELDON H100 D.6	100	6	25	35	●
140WE208	40	ISO40 DIN69871 WELDON H100 D.8	100	8	28	38	●
140WE210	40	ISO40 DIN69871 WELDON H100 D.10	100	10	35	40	●
140WE212	40	ISO40 DIN69871 WELDON H100 D.12	100	12	42	-	●
140WE214	40	ISO40 DIN69871 WELDON H100 D.14	100	14	44	-	●
140WE216	40	ISO40 DIN69871 WELDON H100 D.16	100	16	48	-	●
140WE218	40	ISO40 DIN69871 WELDON H100 D.18	100	18	50	-	●
140WE220	40	ISO40 DIN69871 WELDON H100 D.20	100	20	50	-	●

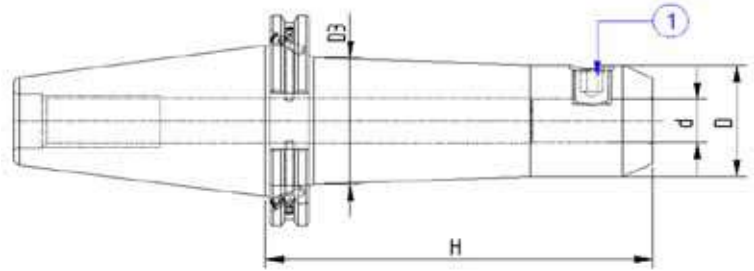
Codice	ISO	Descrizione	H	d	D	D3
140WE306	40	ISO40 DIN69871 WELDON H130 D.6	130	6	25	35
140WE308	40	ISO40 DIN69871 WELDON H130 D.8	130	8	28	38
140WE310	40	ISO40 DIN69871 WELDON H130 D.10	130	10	35	40
140WE312	40	ISO40 DIN69871 WELDON H130 D.12	130	12	42	-
140WE314	40	ISO40 DIN69871 WELDON H130 D.14	130	14	44	-
140WE316	40	ISO40 DIN69871 WELDON H130 D.16	130	16	48	-
140WE318	40	ISO40 DIN69871 WELDON H130 D.18	130	18	50	-
140WE320	40	ISO40 DIN69871 WELDON H130 D.20	130	20	50	-
140WE325	40	ISO40 DIN69871 WELDON H130 D.25	130	25	65	-

**COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE**

D	Grano	Q.tà
---	-------	------



6	100601002	1
8	100801002	1
10	101001202	1
12	101201602	1
14	101201602	1
16	101401602	1
18	101401602	1
20	101601602	1
25	101802002	2



Codice	ISO	Descrizione	H	d	D	D3	G6.3 12000
140WE406	40	ISO40 DIN69871 WELDON H160 D.6	160	6	25	25	●
140WE408	40	ISO40 DIN69871 WELDON H160 D.8	160	8	27.5	38	●
140WE410	40	ISO40 DIN69871 WELDON H160 D.10	160	10	34.5	40	●
140WE412	40	ISO40 DIN69871 WELDON H160 D.12	160	12	41.5	-	●
140WE414	40	ISO40 DIN69871 WELDON H160 D.14	160	14	44	-	●
140WE416	40	ISO40 DIN69871 WELDON H160 D.16	160	16	48	-	●
140WE418	40	ISO40 DIN69871 WELDON H160 D.18	160	18	50	-	●
140WE420	40	ISO40 DIN69871 WELDON H160 D.20	160	20	50	-	●
140WE425	40	ISO40 DIN69871 WELDON H160 D.25	160	25	65	-	●
140WE432	40	ISO40 DIN69871 WELDON H160 D.32	160	32	72	-	●

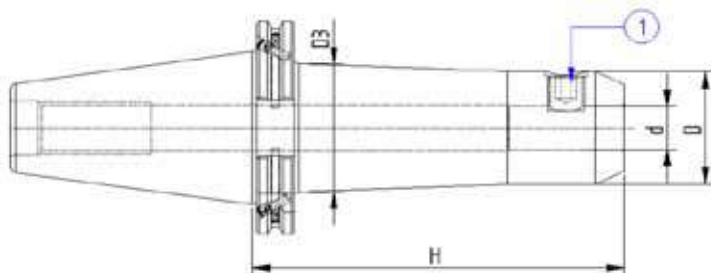
Codice	ISO	Descrizione	H	d	D	D3
140WE506	40	ISO40 DIN69871 WELDON H200 D.6	200	6	25	38
140WE508	40	ISO40 DIN69871 WELDON H200 D.8	200	8	28	41
140WE510	40	ISO40 DIN69871 WELDON H200 D.10	200	10	35	43
140WE512	40	ISO40 DIN69871 WELDON H200 D.12	200	12	42	48
140WE514	40	ISO40 DIN69871 WELDON H200 D.14	200	14	44	48
140WE516	40	ISO40 DIN69871 WELDON H200 D.16	200	16	48	-
140WE518	40	ISO40 DIN69871 WELDON H200 D.18	200	18	50	-
140WE520	40	ISO40 DIN69871 WELDON H200 D.20	200	20	50	-
140WE525	40	ISO40 DIN69871 WELDON H200 D.25	200	25	65	-
140WE532	40	ISO40 DIN69871 WELDON H200 D.32	200	32	72	-

**COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE**

D	Grano	Q.tà	D	Grano	Q.tà
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6	100601002	1	16	101401602	1
8	100801002	1	18	101401602	1
10	101001202	1	20	101601602	1
12	101201602	1	25	101802002	2
14	101201602	1	32	102002002	2

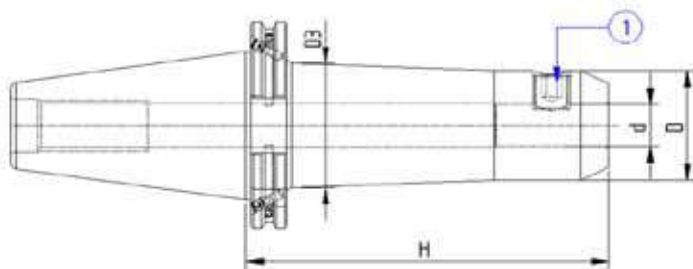


Codice	ISO	Descrizione	H	d	D	D3
150WE206	50	ISO50 DIN69871 WELDON H.100 D.06	100	6	25	35
150WE208	50	ISO50 DIN69871 WELDON H.100 D.08	100	8	28	38
150WE210	50	ISO50 DIN69871 WELDON H.100 D.10	100	10	35	42
150WE212	50	ISO50 DIN69871 WELDON H.100 D.12	100	12	42	48
150WE214	50	ISO50 DIN69871 WELDON H.100 D.14	100	14	44	50
150WE216	50	ISO50 DIN69871 WELDON H.100 D.16	100	16	48	54
150WE218	50	ISO50 DIN69871 WELDON H.100 D.18	100	18	50	56
150WE220	50	ISO50 DIN69871 WELDON H.100 D.20	100	20	52	59
150WE225	50	ISO50 DIN69871 WELDON H.100 D.25	100	25	65	-

Codice	ISO	Descrizione	H	d	D	D3
150WE306	50	ISO50 DIN69871 WELDON H.130 D.6	130	6	25	35
150WE308	50	ISO50 DIN69871 WELDON H.130 D.8	130	8	28	38
150WE310	50	ISO50 DIN69871 WELDON H.130 D.10	130	10	35	42
150WE312	50	ISO50 DIN69871 WELDON H.130 D.12	130	12	42	48
150WE314	50	ISO50 DIN69871 WELDON H.130 D.14	130	14	44	50
150WE316	50	ISO50 DIN69871 WELDON H.130 D.16	130	16	48	54
150WE318	50	ISO50 DIN69871 WELDON H.130 D.18	130	18	50	56
150WE320	50	ISO50 DIN69871 WELDON H.130 D.20	130	20	52	59
150WE325	50	ISO50 DIN69871 WELDON H.130 D.25	130	25	65	-
150WE332	50	ISO50 DIN69871 WELDON H.130 D.32	130	32	72	-

### COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

D	Grano	Q.tà	D	Grano	Q.tà
 					
6	100601002	1	16	101401602	1
8	100801002	1	18	101401602	1
10	101001202	1	20	101601602	1
12	101201602	1	25	101802002	2
14	101201602	1	32	102002002	2



Codice	ISO	Descrizione	H	d	D	D3
150WE406	50	ISO50 DIN69871 WELDON H160 D.6	160	6	25	35
150WE408	50	ISO50 DIN69871 WELDON H160 D.8	160	8	28	38
150WE410	50	ISO50 DIN69871 WELDON H160 D.10	160	10	34.5	42
150WE412	50	ISO50 DIN69871 WELDON H160 D.12	160	12	42	48
150WE414	50	ISO50 DIN69871 WELDON H160 D.14	160	14	44	50
150WE416	50	ISO50 DIN69871 WELDON H160 D.16	160	16	47.5	54
150WE418	50	ISO50 DIN69871 WELDON H160 D.18	160	18	50	56
150WE420	50	ISO50 DIN69871 WELDON H160 D.20	160	20	51.5	59
150WE425	50	ISO50 DIN69871 WELDON H160 D.25	160	25	65	70
150WE432	50	ISO50 DIN69871 WELDON H160 D.32	160	32	65	-
150WE440	50	ISO50 DIN69871 WELDON H160 D.40	160	40	80	-
150WE450	50	ISO50 DIN69871 WELDON H160 D.50	160	50	95	-

Codice	ISO	Descrizione	H	d	D	D3
150WE506	50	ISO50 DIN69871 WELDON H200 D.6	200	6	25	38
150WE508	50	ISO50 DIN69871 WELDON H200 D.8	200	8	28	41
150WE510	50	ISO50 DIN69871 WELDON H200 D.10	200	10	35	45
150WE512	50	ISO50 DIN69871 WELDON H200 D.12	200	12	42	51
150WE514	50	ISO50 DIN69871 WELDON H200 D.14	200	14	44	53
150WE516	50	ISO50 DIN69871 WELDON H200 D.16	200	16	48	57
150WE518	50	ISO50 DIN69871 WELDON H200 D.18	200	18	50	59
150WE520	50	ISO50 DIN69871 WELDON H200 D.20	200	20	52	61
150WE525	50	ISO50 DIN69871 WELDON H200 D.25	200	25	65	72
150WE532	50	ISO50 DIN69871 WELDON H200 D.32	200	32	72	-
150WE540	50	ISO50 DIN69871 WELDON H200 D.40	200	40	80	-

### COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

D	Grano	Q.tà	D	Grano	Q.tà
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6	100601002	1	18	101401602	1
8	100801002	1	20	101601602	1
10	101001202	1	25	101802002	2
12	101201602	1	32	102002002	2
14	101201602	1	40	102002002	2
16	101401602	1	50	102422504	2

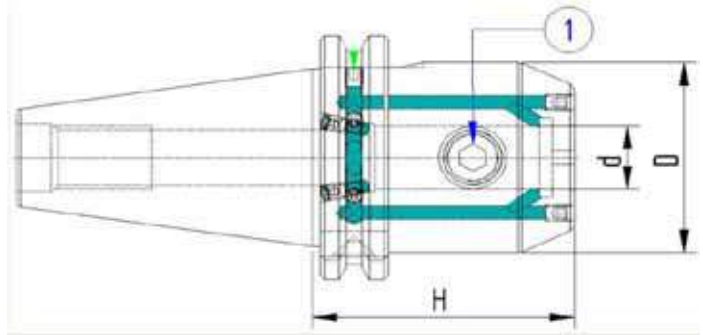


MANDRINI PORTAFRESE WELDON CON CANALI DI LUBRIFICAZIONE  
 END MILL HOLDERS WELDON WITH COOLANT CHANNELS  
 MANDRINS POUR OUTIL TYPE WELDON AVEC CANAL D'ARROSAGE  
 ZYLINDERSCHAFTAUFNAHME WELDON MIT KÜHLKANAL



**DIN69871 AD/B**

**DIN1835 B**



Codice	ISO	Descrizione	H	d	D	G6.3 12000
140WLK06	40	ISO40 DIN69871 WELDON H50 D.6	50	6	25	●
140WLK08	40	ISO40 DIN69871 WELDON H50 D.8	50	8	28	●
140WLK10	40	ISO40 DIN69871 WELDON H50 D.10	50	10	35	●
140WLK12	40	ISO40 DIN69871 WELDON H50 D.12	50	12	42	●
140WLK14	40	ISO40 DIN69871 WELDON H50 D.14	50	14	44	●
140WLK16	40	ISO40 DIN69871 WELDON H63 D.16	63	16	48	●
140WLK18	40	ISO40 DIN69871 WELDON H63 D.18	63	18	50	●
140WLK20	40	ISO40 DIN69871 WELDON H63 D.20	63	20	52	●
140WLK25	40	ISO40 DIN69871 WELDON H100 D.25	100	25	63	●
140WLK32	40	ISO40 DIN69871 WELDON H100 D.32	100	32	72	●

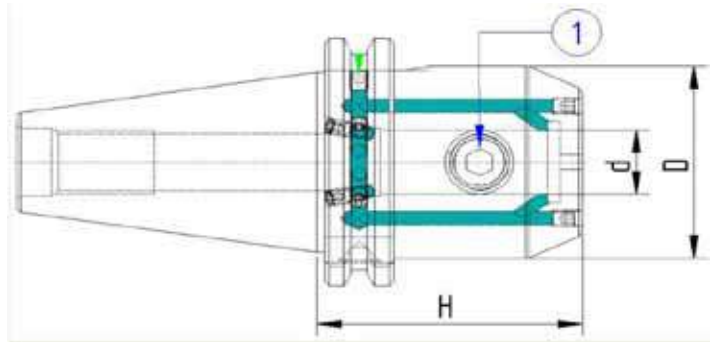
**COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE**

D	Grano	Q.tà
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6	100601002	1
8	100801002	1
10	101001202	1
12	101201602	1
14	101201602	1
16	101401602	1
18	101401602	1
20	101601602	1
25	101802002	2
32	102002002	2





Codice	ISO	Descrizione	H	d	D	G6.3 12000
150WLK06	50	ISO50 DIN69871 WELDON H63 D.6	63	6	25	●
150WLK08	50	ISO50 DIN69871 WELDON H63 D.8	63	8	28	●
150WLK10	50	ISO50 DIN69871 WELDON H63 D.10	63	10	35	●
150WLK12	50	ISO50 DIN69871 WELDON H63 D.12	63	12	42	●
150WLK14	50	ISO50 DIN69871 WELDON H63 D.14	63	14	44	●
150WLK16	50	ISO50 DIN69871 WELDON H63 D.16	63	16	48	●
150WLK18	50	ISO50 DIN69871 WELDON H63 D.18	63	18	50	●
150WLK20	50	ISO50 DIN69871 WELDON H63 D.20	63	20	52	●
150WLK25	50	ISO50 DIN69871 WELDON H80 D.25	80	25	65	●
150WLK32	50	ISO50 DIN69871 WELDON H100 D.32	100	32	72	●
150WLK40	50	ISO50 DIN69871 WELDON H120 D.40	120	40	80	●

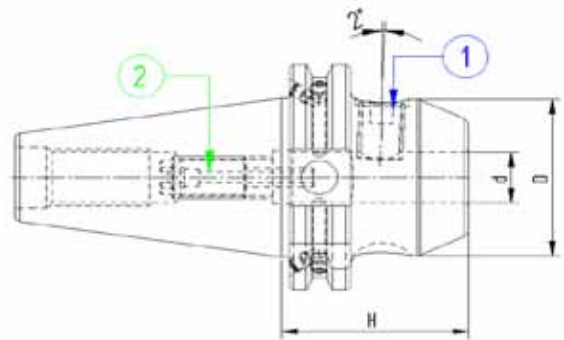
**COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE**

D	Grano	Q.tà
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6	100601002	1
8	100801002	1
10	101001202	1
12	101201602	1
14	101201602	1
16	101401602	1
18	101401602	1
20	101601602	1
25	101802002	2
32	102002002	2
40	102002002	2

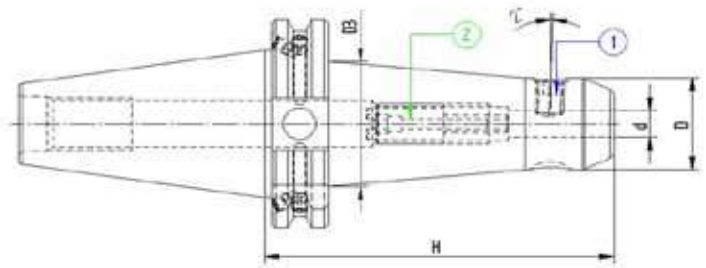




Codice	ISO	Descrizione	H	d	D	G6.3 12000
150WHN06	50	ISO50 DIN69871 W/NOTCH H63 D.06	63	6	25	●
150WHN08	50	ISO50 DIN69871 W/NOTCH H63 D.08	63	8	28	●
150WHN10	50	ISO50 DIN69871 W/NOTCH H63 D.10	63	10	35	●
150WHN12	50	ISO50 DIN69871 W/NOTCH H63 D.12	63	12	42	●
150WHN14	50	ISO50 DIN69871 W/NOTCH H63 D.14	63	14	44	●
150WHN16	50	ISO50 DIN69871 W/NOTCH H63 D.16	63	16	48	●
150WHN18	50	ISO50 DIN69871 W/NOTCH H63 D.18	63	18	50	●
150WHN20	50	ISO50 DIN69871 W/NOTCH H63 D.20	63	20	52	●
150WHN25	50	ISO50 DIN69871 W/NOTCH H80 D.25	80	25	65	●
150WHN32	50	ISO50 DIN69871 W/NOTCH H100 D.32	100	32	72	●
150WHN40	50	ISO50 DIN69871 W/NOTCH H120 D.40	120	40	80	●

**COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE**

D	Grano	Q.tà	Grano Int.	Q.tà
				
6	100601002	1	100501601	1
8	100801002	1	100601601	1
10	101001202	1	100801601	1
12	101201602	1	101002501	1
14	101201602	1	101002501	1
16	101401602	1	101204001	1
18	101401602	1	101204001	1
20	101601602	1	101603501	1
25	101802002	2	102002001	1
32	102002002	2	102002001	1
40	102002002	2	102002001	1



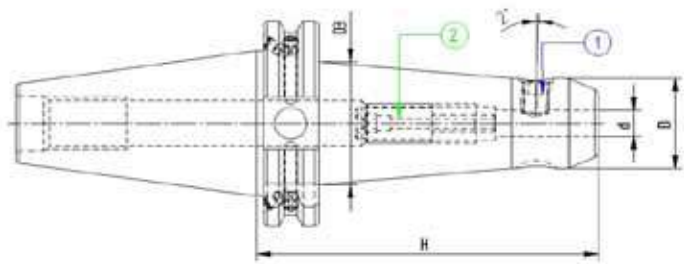
Codice	ISO	Descrizione	H	d	D	D3
140WN206	40	ISO40 DIN69871 W/NOTCH H100 D.06	100	6	25	35
140WN208	40	ISO40 DIN69871 W/NOTCH H100 D.08	100	8	28	38
140WN210	40	ISO40 DIN69871 W/NOTCH H100 D.10	100	10	35	40
140WN212	40	ISO40 DIN69871 W/NOTCH H100 D.12	100	12	42	-
140WN214	40	ISO40 DIN69871 W/NOTCH H100 D.14	100	14	44	-
140WN216	40	ISO40 DIN69871 W/NOTCH H100 D.16	100	16	48	-
140WN218	40	ISO40 DIN69871 W/NOTCH H100 D.18	100	18	50	-
140WN220	40	ISO40 DIN69871 W/NOTCH H100 D.20	100	20	50	-

**COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE**

D	Grano	Q.tà	Grano Int.	Q.tà
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6	100601002	1	100501601	1
8	100801002	1	100601601	1
10	101001202	1	100801601	1
12	101201602	1	101002501	1
14	101201602	1	101002501	1
16	101401602	1	101204001	1
18	101401602	1	101204001	1
20	101601602	1	101603501	1



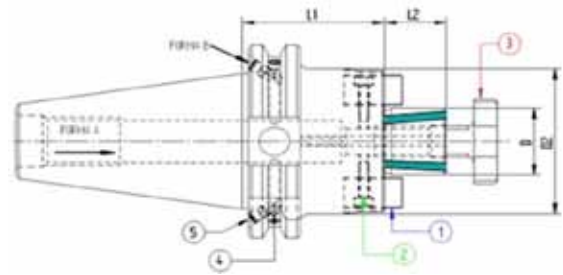
Codice	ISO	Descrizione	H	d	D	D3
150WN206	50	ISO50 DIN69871 W/NOTCH H100 D.06	100	6	25	35
150WN208	50	ISO50 DIN69871 W/NOTCH H100 D.08	100	8	28	38
150WN210	50	ISO50 DIN69871 W/NOTCH H100 D.10	100	10	35	42
150WN212	50	ISO50 DIN69871 W/NOTCH H100 D.12	100	12	42	48
150WN214	50	ISO50 DIN69871 W/NOTCH H100 D.14	100	14	44	50
150WN216	50	ISO50 DIN69871 W/NOTCH H100 D.16	100	16	48	54
150WN218	50	ISO50 DIN69871 W/NOTCH H100 D.18	100	18	50	56
150WN220	50	ISO50 DIN69871 W/NOTCH H100 D.20	100	20	52	59
150WN225	50	ISO50 DIN69871 W/NOTCH H100 D.25	100	25	65	-

**COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE**

D	Grano	Q.tà	Grano Int.	Q.tà
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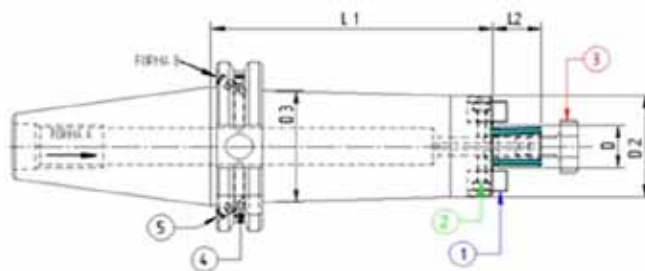
6	100601002	1	100501601	1
8	100801002	1	100601601	1
10	101001202	1	100801601	1
12	101201602	1	101002501	1
14	101201602	1	101002501	1
16	101401602	1	101204001	1
18	101401602	1	101204001	1
20	101601602	1	101603501	1
25	101802002	2	102002001	1



Codice	ISO	Descrizione	L1	L2	D	D2
140PF016	40	ISO40 DIN69871 P/F FISSO H35 D.16	35	17	16	38
140PF022	40	ISO40 DIN69871 P/F FISSO H35 D.22	35	19	22	48
140PF027	40	ISO40 DIN69871 P/F FISSO H35 D.27	35	21	27	50
140PF032	40	ISO40 DIN69871 P/F FISSO H35 D.32	35	24	32	50
140PF116	40	ISO40 DIN69871 P/F FISSO H45 D.16	45	17	16	38
140PF122	40	ISO40 DIN69871 P/F FISSO H45 D.22	45	19	22	48
140PF127	40	ISO40 DIN69871 P/F FISSO H50 D.27	50	21	27	58
140PF132	40	ISO40 DIN69871 P/F FISSO H55 D.32	55	24	32	78
140PF140	40	ISO40 DIN69871 P/F FISSO H55 D.40	55	27	40	88

**COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE**

D / D2	Tassello	Q.tà	Vite	Q.tà	Vite Croce	Q.tà
						
16 / 38	916TSL11	2	110301201	2	916VTC02	1
22 / 48	922TSL11	2	110401201	2	922VTC02	1
27 / 50	927TSL10	2	110501201	2	927VTC02	1
27 / 58	927TSL11	2	110501601	2	927VTC02	1
32 / 50	932TSL04	2	110601201	2	932VTC02	1
32 / 78	932TSL12	2	110602001	2	932VTC02	1
40 / 88	940TSL11	2	110602001	2	940VTC02	1

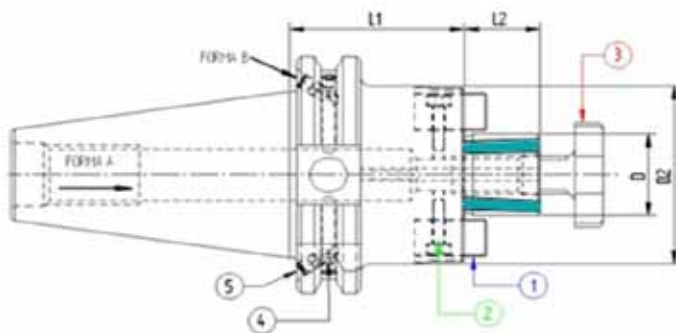


Codice	ISO	Descrizione	L1	L2	D	D2	D3
140PF216	40	ISO40 DIN69871 P/F FISSO H100 D.16	100	17	16	32	42
140PF222	40	ISO40 DIN69871 P/F FISSO H100 D.22	100	19	22	40	49
140PF227	40	ISO40 DIN69871 P/F FISSO H100 D.27	100	21	27	48	-
140PF232	40	ISO40 DIN69871 P/F FISSO H100 D.32	100	24	32	58	-
140PF240	40	ISO40 DIN69871 P/F FISSO H100 D.40	100	27	40	70	-
140PF316	40	ISO40 DIN69871 P/F FISSO H130 D.16	130	17	16	38	-
140PF322	40	ISO40 DIN69871 P/F FISSO H130 D.22	130	19	22	46	48
140PF327	40	ISO40 DIN69871 P/F FISSO H130 D.27	130	21	27	58	50
140PF332	40	ISO40 DIN69871 P/F FISSO H130 D.32	130	24	32	78	50
140PF340	40	ISO40 DIN69871 P/F FISSO H130 D.40	130	27	40	88	50
140PF416	40	ISO40 DIN69871 P/F FISSO H160 D.16	160	17	16	39	-
140PF422	40	ISO40 DIN69871 P/F FISSO H160 D.22	160	19	22	46	48
140PF427	40	ISO40 DIN69871 P/F FISSO H160 D.27	160	21	27	58	50
140PF432	40	ISO40 DIN69871 P/F FISSO H160 D.32	160	24	32	78	50
140PF440	40	ISO40 DIN69871 P/F FISSO H160 D.40	160	27	40	80	50
140PF516	40	ISO40 DIN69871 P/F FISSO H200 D.16	200	17	16	39	-
140PF522	40	ISO40 DIN69871 P/F FISSO H200 D.22	200	19	22	46	48
140PF527	40	ISO40 DIN69871 P/F FISSO H200 D.27	200	21	27	58	50
140PF532	40	ISO40 DIN69871 P/F FISSO H200 D.32	200	24	32	78	50
140PF540	40	ISO40 DIN69871 P/F FISSO H200 D.40	200	27	40	88	50

### COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE




D / D2	Tassello	Q.tà	Vite	Q.tà	Vite Croce	Q.tà
						
16 / 32	916TSL10	2	110300801	2	916VTC02	1
16 / 38	916TSL11	2	110301201	2	916VTC02	1
22 / 40	922TSL10	2	110401001	2	922VTC02	1
22 / 46	922TSL11	2	110401201	2	922VTC02	1
27 / 48	927TSL10	2	110501201	2	927VTC02	1
27 / 58	927TSL11	2	110501601	2	927VTC02	1
32 / 58	932TSL10	2	110601201	2	932VTC02	1
32 / 78	932TSL12	2	110602001	2	932VTC02	1
40 / 70	940TSL10	2	110602001	2	940VTC02	1
40 / 88	940TSL11	2	110602001	2	940VTC02	1

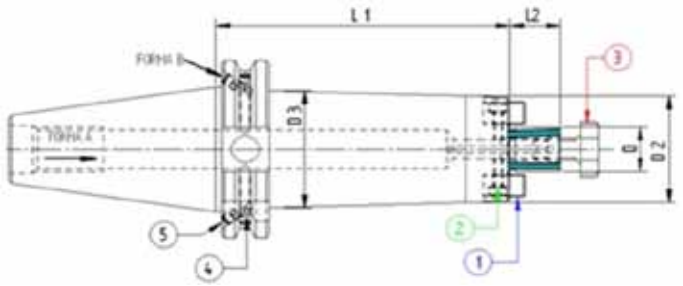




Codice	ISO	Descrizione	L1	L2	D	D2
150PF016	50	ISO50 DIN69871 P/F FISSO H.35 D.16	35	17	16	38
150PF022	50	ISO50 DIN69871 P/F FISSO H.35 D.22	35	19	22	48
150PF027	50	ISO50 DIN69871 P/F FISSO H.35 D.27	35	21	27	58
150PF032	50	ISO50 DIN69871 P/F FISSO H.35 D.32	35	24	32	78
150PF040	50	ISO50 DIN69871 P/F FISSO H.35 D.40	35	27	40	80
150PF116	50	ISO50 DIN69871 P/F FISSO H.45 D.16	45	17	16	38
150PF122	50	ISO50 DIN69871 P/F FISSO H.45 D.22	45	19	22	48
150PF127	50	ISO50 DIN69871 P/F FISSO H.45 D.27	45	21	27	58
150PF132	50	ISO50 DIN69871 P/F FISSO H.55 D.32	55	24	32	78
150PF140	50	ISO50 DIN69871 P/F FISSO H.55 D.40	55	27	40	88

**COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE**

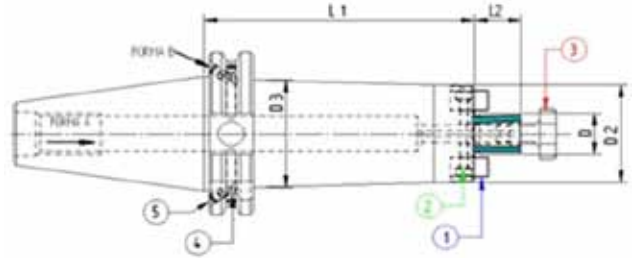
D / D2	Tassello	Q.tà	Vite	Q.tà	Vite Croce	Q.tà
						
16 / 38	916TSL11	2	110301201	2	916VTC02	1
22 / 48	922TSL11	2	110401201	2	922VTC02	1
27 / 58	927TSL11	2	110501601	2	927VTC02	1
32 / 78	932TSL12	2	110602001	2	932VTC02	1
40 / 80	940TSL05	2	110601601	2	940VTC02	1
40 / 88	940TSL11	2	110602001	2	940VTC02	1



Codice	ISO	Descrizione	L1	L2	D	D2	D3
150PF216	50	ISO50 DIN69871 P/F FISSO H.100 D.16	100	17	16	32	42
150PF222	50	ISO50 DIN69871 P/F FISSO H.100 D.22	100	19	22	40	55
150PF227	50	ISO50 DIN69871 P/F FISSO H.100 D.27	100	21	27	48	60
150PF232	50	ISO50 DIN69871 P/F FISSO H.100 D.32	100	24	32	58	68
150PF240	50	ISO50 DIN69871 P/F FISSO H.100 D.40	100	27	40	70	-
150PF316	50	ISO50 DIN69871 P/F FISSO H.130 D.16	130	17	16	38	-
150PF322	50	ISO50 DIN69871 P/F FISSO H.130 D.22	130	19	22	46	60
150PF327	50	ISO50 DIN69871 P/F FISSO H.130 D.27	130	21	27	55	78
150PF332	50	ISO50 DIN69871 P/F FISSO H.130 D.32	130	24	32	66	78
150PF340	50	ISO50 DIN69871 P/F FISSO H.130 D.40	130	27	40	70	78
150PF416	50	ISO50 DIN69871 P/F FISSO H.160 D.16	160	17	16	38	-
150PF422	50	ISO50 DIN69871 P/F FISSO H.160 D.22	160	19	22	46	48
150PF427	50	ISO50 DIN69871 P/F FISSO H.160 D.27	160	21	27	55	78
150PF432	50	ISO50 DIN69871 P/F FISSO H.160 D.32	160	24	32	66	78
150PF440	50	ISO50 DIN69871 P/F FISSO H.160 D.40	160	27	40	70	78
150PF516	50	ISO50 DIN69871 P/F FISSO H.200 D.16	200	17	16	39	-
150PF522	50	ISO50 DIN69871 P/F FISSO H.200 D.22	200	19	22	46	48
150PF527	50	ISO50 DIN69871 P/F FISSO H.200 D.27	200	21	27	55	78
150PF532	50	ISO50 DIN69871 P/F FISSO H.200 D.32	200	24	32	66	78
150PF540	50	ISO50 DIN69871 P/F FISSO H.200 D.40	200	27	40	70	78




**COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE**

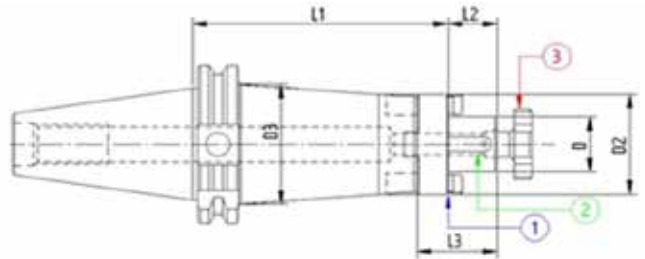
D / D2	Tassello	Q.tà	Vite	Q.tà	Vite Croce	Q.tà
						
16 / 32	916TSL10	2	110300801	2	916VTC02	1
16 / 38	916TSL11	2	110301201	2	916VTC02	1
22 / 40	922TSL10	2	110401001	2	922VTC02	1
22 / 46	922TSL11	2	110401201	2	922VTC02	1
27 / 48	927TSL10	2	110501201	2	927VTC02	1
27 / 55	927TSL11	2	110501601	2	927VTC02	1
32 / 58	932TSL10	2	110601201	2	932VTC02	1
32 / 66	932TSL11	2	110602001	2	932VTC02	1
40 / 70	940TSL10	2	110602001	2	940VTC02	1



Codice	ISO	Descrizione	L1	L2	D	D2	D3	Fig.
150PF616	50	ISO50 DIN69871 P/F FISSO H.250 D.16	250	17	16	38	52	1
150PF622	50	ISO50 DIN69871 P/F FISSO H.250 D.22	250	19	22	48	60	1
150PF627	50	ISO50 DIN69871 P/F FISSO H.250 D.27	250	21	27	55	78	1
150PF632	50	ISO50 DIN69871 P/F FISSO H.250 D.32	250	24	32	66	78	2
150PF640	50	ISO50 DIN69871 P/F FISSO H.250 D.40	250	27	40	80	80	2
150PF716	50	ISO50 DIN69871 P/F FISSO H.300 D.16	300	17	16	38	52	1
150PF722	50	ISO50 DIN69871 P/F FISSO H.300 D.22	300	19	22	48	60	1
150PF727	50	ISO50 DIN69871 P/F FISSO H.300 D.27	300	21	27	55	78	1
150PF732	50	ISO50 DIN69871 P/F FISSO H.300 D.32	300	24	32	66	66	2
150PF740	50	ISO50 DIN69871 P/F FISSO H.300 D.40	300	27	40	80	80	2
150PF816	50	ISO50 DIN69871 P/F FISSO H.350 D.16	350	17	16	38	52	1
150PF822	50	ISO50 DIN69871 P/F FISSO H.350 D.22	350	19	22	48	60	1
150PF827	50	ISO50 DIN69871 P/F FISSO H.350 D.27	350	21	27	55	78	1
150PF832	50	ISO50 DIN69871 P/F FISSO H.350 D.32	350	24	32	66	66	2




**COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE**

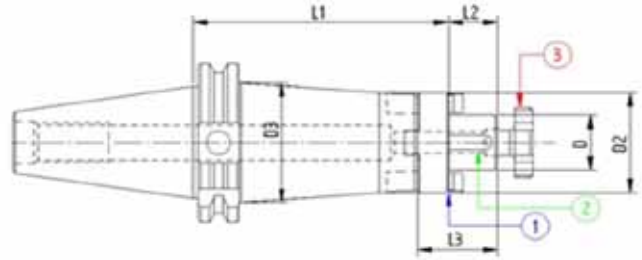
D / D2	Tassello	Q.tà	Vite	Q.tà	Vite Croce	Q.tà
						
	<b>1</b>		<b>2</b>		<b>3</b>	
16 / 38	916TSL01	2	110301001	2	916VTC02	1
22 / 48	922TSL01	2	110301201	2	922VTC02	1
27 / 55	927TSL01	2	110401601	2	927VTC02	1
32 / 66	932TSL01	2	110601601	2	932VTC02	1
40 / 80	940TSL01	2	110601601	2	940VTC02	1



Codice	ISO	Descrizione	L1	L2	L3	D	D2	D3
140PU116	40	ISO40 DIN69871 P/F UNIVERS.H55 D.16	55	17	27	16	32	-
140PU122	40	ISO40 DIN69871 P/F UNIVERS.H55 D.22	55	19	31	22	40	-
140PU127	40	ISO40 DIN69871 P/F UNIVERS.H55 D.27	55	21	33	27	48	-
140PU132	40	ISO40 DIN69871 P/F UNIVERS.H60 D.32	60	24	38	32	58	-
140PU140	40	ISO40 DIN69871 P/F UNIVERS.H60 D.40	60	27	41	40	70	-
140PU216	40	ISO40 DIN69871 P/F UNIVERS.H100 D.16	100	17	27	16	32	44
140PU222	40	ISO40 DIN69871 P/F UNIVERS.H100 D.22	100	19	31	22	40	-
140PU227	40	ISO40 DIN69871 P/F UNIVERS.H100 D.27	100	21	33	27	48	-
140PU232	40	ISO40 DIN69871 P/F UNIVERS.H100 D.32	100	24	38	32	58	-
140PU240	40	ISO40 DIN69871 P/F UNIVERS.H100 D.40	100	27	41	40	70	-
140PU316	40	ISO40 DIN69871 P/F UNIVERS.H130 D.16	130	17	27	16	32	44
140PU322	40	ISO40 DIN69871 P/F UNIVERS.H130 D.22	130	19	31	22	40	-
140PU327	40	ISO40 DIN69871 P/F UNIVERS.H130 D.27	130	21	33	27	48	-
140PU332	40	ISO40 DIN69871 P/F UNIVERS.H130 D.32	130	24	38	32	58	-
140PU340	40	ISO40 DIN69871 P/F UNIVERS.H130 D.40	130	27	41	40	70	-
140PU416	40	ISO40 DIN69871 P/F UNIVERS.H160 D.16	160	17	27	16	32	44
140PU422	40	ISO40 DIN69871 P/F UNIVERS.H160 D.22	160	19	31	22	40	-
140PU427	40	ISO40 DIN69871 P/F UNIVERS.H160 D.27	160	21	33	27	48	-
140PU432	40	ISO40 DIN69871 P/F UNIVERS.H160 D.32	160	24	38	32	58	-
140PU440	40	ISO40 DIN69871 P/F UNIVERS.H160 D.40	160	27	41	40	70	-
140PU516	40	ISO40 DIN69871 P/F UNIVERS.H200 D.16	200	17	27	16	32	44
140PU522	40	ISO40 DIN69871 P/F UNIVERS.H200 D.22	200	19	31	22	40	-
140PU527	40	ISO40 DIN69871 P/F UNIVERS.H200 D.27	200	21	33	27	48	-
140PU532	40	ISO40 DIN69871 P/F UNIVERS.H200 D.32	200	24	38	32	58	-
140PU540	40	ISO40 DIN69871 P/F UNIVERS.H200 D.40	200	27	41	40	70	-




**COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE**

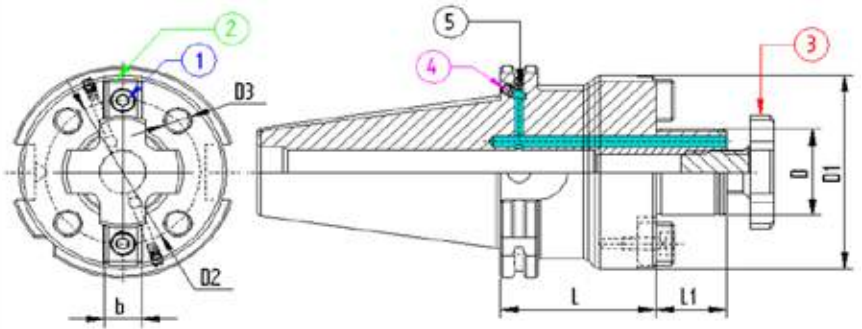
D	Giunto	Q.tà	Linguetta	Q.tà	Vite Croce	Q.tà
						
16	916GNT01	1	170402004	1	916VTC02	1
22	922GNT01	1	170602506	1	922VTC02	1
27	927GNT01	1	170702507	1	927VTC02	1
32	932GNT01	1	170802807	1	932VTC02	1
40	940GNT01	1	171003208	1	940VTC02	1



Codice	ISO	Descrizione	L1	L2	L3	D	D2	D3
150PU116	50	ISO50 DIN69871 P/F UNIVERS.H55 D.16	55	17	27	16	32	-
150PU122	50	ISO50 DIN69871 P/F UNIVERS.H55 D.22	55	19	31	22	40	-
150PU127	50	ISO50 DIN69871 P/F UNIVERS.H55 D.27	55	21	33	27	48	-
150PU132	50	ISO50 DIN69871 P/F UNIVERS.H55 D.32	55	24	38	32	58	-
150PU140	50	ISO50 DIN69871 P/F UNIVERS.H55 D.40	55	27	41	40	70	-
150PU216	50	ISO50 DIN69871 P/F UNIVERS.H100 D.16	100	17	27	16	32	50
150PU222	50	ISO50 DIN69871 P/F UNIVERS.H100 D.22	100	19	31	22	40	60
150PU227	50	ISO50 DIN69871 P/F UNIVERS.H100 D.27	100	21	33	27	48	60
150PU232	50	ISO50 DIN69871 P/F UNIVERS.H100 D.32	100	24	38	32	58	-
150PU240	50	ISO50 DIN69871 P/F UNIVERS.H100 D.40	100	27	41	40	70	-
150PU316	50	ISO50 DIN69871 P/F UNIVERS.H130 D.16	130	17	27	16	32	50
150PU322	50	ISO50 DIN69871 P/F UNIVERS.H130 D.22	130	19	31	22	40	60
150PU327	50	ISO50 DIN69871 P/F UNIVERS.H130 D.27	130	21	33	27	48	60
150PU332	50	ISO50 DIN69871 P/F UNIVERS.H130 D.32	130	24	38	32	58	66
150PU340	50	ISO50 DIN69871 P/F UNIVERS.H130 D.40	130	27	41	40	70	-
150PU416	50	ISO50 DIN69871 P/F UNIVERS.H160 D.16	160	17	27	16	32	50
150PU422	50	ISO50 DIN69871 P/F UNIVERS.H160 D.22	160	19	31	22	40	60
150PU427	50	ISO50 DIN69871 P/F UNIVERS.H160 D.27	160	21	33	27	48	60
150PU432	50	ISO50 DIN69871 P/F UNIVERS.H160 D.32	160	24	38	32	58	68
150PU440	50	ISO50 DIN69871 P/F UNIVERS.H160 D.40	160	27	41	40	70	-
150PU516	50	ISO50 DIN69871 P/F UNIVERS.H200 D.16	200	17	27	16	32	50
150PU522	50	ISO50 DIN69871 P/F UNIVERS.H200 D.22	200	19	31	22	40	60
150PU527	50	ISO50 DIN69871 P/F UNIVERS.H200 D.27	200	21	33	27	48	60
150PU532	50	ISO50 DIN69871 P/F UNIVERS.H200 D.32	200	24	38	32	58	-
150PU540	50	ISO50 DIN69871 P/F UNIVERS.H200 D.40	200	27	41	40	70	-




**COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE**

D	Giunto	Q.tà	Linguetta	Q.tà	Vite Croce	Q.tà
						
16	916GNT01	1	170402004	1	916VTC02	1
22	922GNT01	1	170602506	1	922VTC02	1
27	927GNT01	1	170702507	1	927VTC02	1
32	932GNT01	1	170802807	1	932VTC02	1
40	940GNT01	1	171003208	1	940VTC02	1

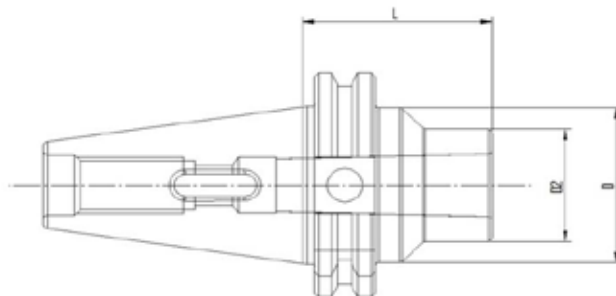


Codice	ISO	Descrizione	L	L1	D	D1	b	D2	D3
140PI140	40	ISO40 DIN69871 P/F TRA.FR.H60 D40FM	60	30	40	89	15,9	66,7	M12
150PI140	50	ISO50 DIN69871 P/F TRA.FR.H70 D40FM	70	30	40	89	15,9	66,7	M12
150PI160	50	ISO50 DIN69871 P/F TRA.FR.H70 D60FM	70	40	60	129	25,4	101,6	M16

### COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

Codice	Vite	Q.tà	Tassello	Q.tà	Vite Croce	Q.tà
						
	<b>1</b>		<b>2</b>		<b>3</b>	
140PI140	110601601	2	940TSL04	2	940VTC02	1
150PI140	110601601	2	940TSL04	2	940VTC02	1
150PI160	111202501	2	960TSL04	2	-	-





Codice	ISO	Descrizione	L	D	D2
140MP201	40	ISO40 DIN69871 H120 CM1 PUNTE	120	25	18
140MP202	40	ISO40 DIN69871 H120 CM2 PUNTE	120	32	25
140MP203	40	ISO40 DIN69871 H135 CM3 PUNTE	135	40	33
140MP204	40	ISO40 DIN69871 H165 CM4 PUNTE	165	48	-

Codice	ISO	Descrizione	L	D	D2
150MP201	50	ISO50 DIN69871 H120 CM1 PUNTE	120	25	18
150MP202	50	ISO50 DIN69871 H140 CM2 PUNTE	140	32	25
150MP203	50	ISO50 DIN69871 H150 CM3 PUNTE	150	40	33
150MP204	50	ISO50 DIN69871 H180 CM4 PUNTE	180	48	40
150MP205	50	ISO50 DIN69871 H220 CM5 PUNTE	220	63	55

### COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

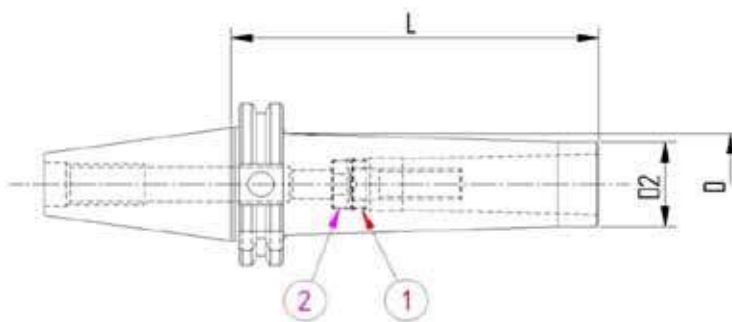
ISO	MORSE	Vite	Q.tà	GHIERA	Q.tà
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40	1	110604501	1	-	-
40	2	111006014	1	-	-
50	1	110603501	1	-	-
50	2	111004501	1	-	-
50	3	101205001	1	-	-
50	4	111606015	1	-	-
50	5	111209001	1	122004312	1

**VITI FORNITE  
SOLO NEL  
CASO DI  
MANDRINO  
COMBINATO**





Codice	ISO	Descrizione	L	D	D2
140MF201	40	ISO40 DIN69871 H120 CM1 FRESE	120	25	18
140MF202	40	ISO40 DIN69871 H120 CM2 FRESE	120	32	25
140MF203	40	ISO40 DIN69871 H135 CM3 FRESE	135	40	33
140MF204	40	ISO40 DIN69871 H165 CM4 FRESE	165	48	40

Codice	ISO	Descrizione	L	D	D2
150MF201	50	ISO50 DIN69871 H170 CM1 FRESE	170	-	25
150MF202	50	ISO50 DIN69871 H170 CM2 FRESE	170	32	25
150MF203	50	ISO50 DIN69871 H170 CM3 FRESE	170	40	33
150MF204	50	ISO50 DIN69871 H170 CM4 FRESE	170	48	40
150MF205	50	ISO50 DIN69871 H220 CM5 FRESE	220	63	55

### COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

CM	Ghiera	Q.tà	Vite	Q.tà
----	--------	------	------	------



1	121206502	1	110603501	1
2	121500802	1	111003014	1
3	122000603	1	111204003	1
4	122400903	1	111604514	1
5	123301205	1	112005003	1

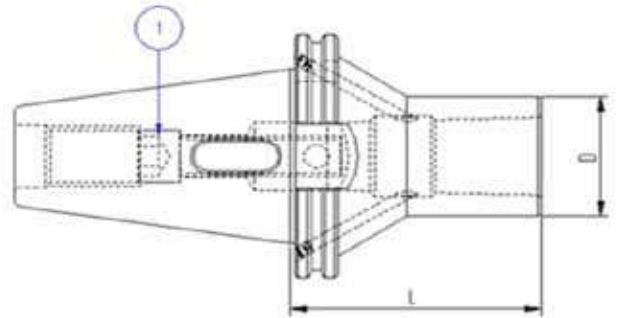


MANDRINI ATTACCO CONO MORSE PUNTE  
 MORSE TAPER ADAPTORS FOR DRILL  
 DOUILLES POUR CONE MORSE A TENON  
 ZWISCHENULSEN FUER MORSEKEGEL MIT AUSTREIBLAPPEN



**DIN 69871 AD-B**

**DIN 228-2**



Codice	ISO	Descrizione	L	D
140MP101	40	ISO40 DIN69871 H.50 CM1 PUNTE	50	25
140MP102	40	ISO40 DIN69871 H.50 CM2 PUNTE	50	32
140MP103	40	ISO40 DIN69871 H.76 CM3 PUNTE	76	40
140MP104	40	ISO40 DIN69871 H.95 CM4 PUNTE	95	48

Codice	ISO	Descrizione	L	D
150MP101	50	ISO50 DIN69871 H.45 CM1 PUNTE	45	25
150MP102	50	ISO50 DIN69871 H.60 CM2 PUNTE	60	32
150MP103	50	ISO50 DIN69871 H.65 CM3 PUNTE	65	40
150MP104	50	ISO50 DIN69871 H.95 CM4 PUNTE	95	48
150MP105	50	ISO50 DIN69871 H.105 CM5 PUNTE	105	63

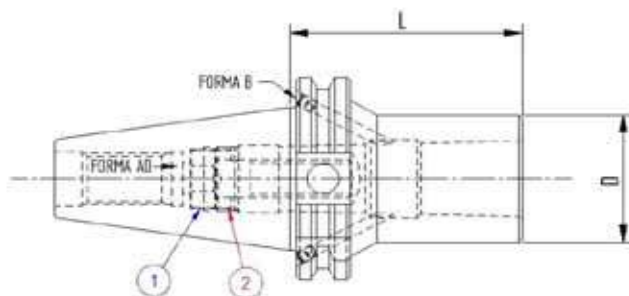
**COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE**

ISO	CM	Vite	Q.tà
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40	1	110604501	1
40	2	111004014	1
40	3	-	-
40	4	-	-
50	1	110603501	1
50	2	111004001	1
50	3	111205001	1
50	4	111606015	1
50	5	-	-



**VITI FORNITE  
 SOLO NEL  
 CASO DI  
 MANDRINO  
 COMBINATO**



Codice	ISO	Descrizione	L	D
140MF101	40	ISO40 DIN69871 H50 CM1 FRESE	50	25
140MF102	40	ISO40 DIN69871 H50 CM2 FRESE	50	32
140MF103	40	ISO40 DIN69871 H70 CM3 FRESE	70	40
140MF104	40	ISO40 DIN69871 H95 CM4 FRESE	95	48

Codice	ISO	Descrizione	L	D
150MF101	50	ISO50 DIN69871 H50 CM1 FRESE	50	25
150MF102	50	ISO50 DIN69871 H50 CM2 FRESE	50	32
150MF103	50	ISO50 DIN69871 H65 CM3 FRESE	65	40
150MF104	50	ISO50 DIN69871 H95 CM4 FRESE	95	48
150MF105	50	ISO50 DIN69871 H120 CM5 FRESE	120	63

### COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

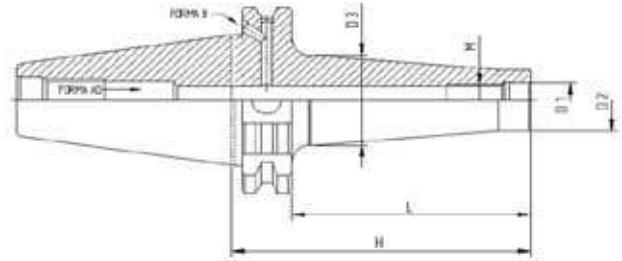
CM	Vite	Q.tà	Ghiera	Q.tà
				
1	110603501	1	121206502	1
2	111003014	1	121500802	1
3	111204003	1	122000603	1
4	111604514	1	122400903	1
5	112005003	1	123601104	1



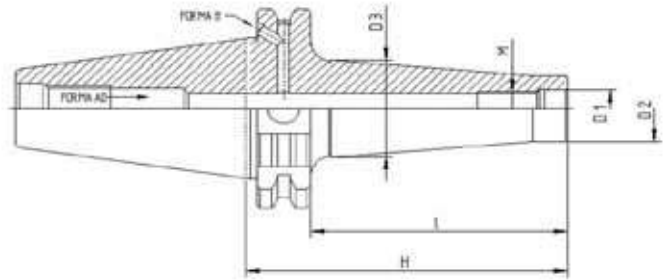
MANDRINI PER FRESE CON ATTACCO FILETTATO  
MILLING CUTTER ARBORS FOR SCREW-ON TYPE MILLING CUTTERS  
MANDRINS POUR FRAISER A VISSER  
SPANFUTTER FUER EINSCHRAUBFRAESER



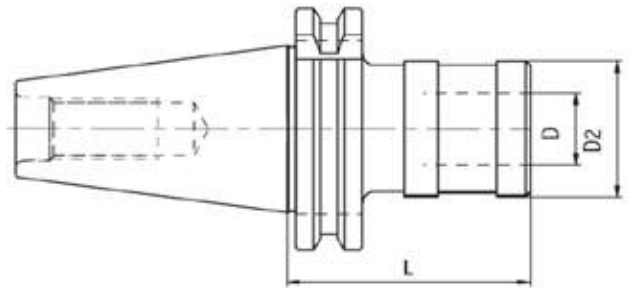
**DIN 69871 AD/B**



Codice	ISO	Descrizione	H	L	D3	M	D1	D2	G2.5 20000
140AF108	40	ISO40 DIN69871 P/F ATT.FILET. M8X55	55	36	15	M8	8,5	13	●
140AF110	40	ISO40 DIN69871 P/F ATT.FILET. M10x55	55	36	20	M10	10,5	18	●
140AF112	40	ISO40 DIN69871 P/F ATT.FILET. M12x55	55	36	24	M12	12,5	21	●
140AF116	40	ISO40 DIN69871 P/F ATT.FILET. M16X55	55	36	34	M16	17	29	●
140AF208	40	ISO40 DIN69871 P/F ATT.FILET. M8x75	75	56	23	M8	8,5	13	●
140AF210	40	ISO40 DIN69871 P/F ATT.FILET. M10x75	75	56	25	M10	10,5	18	●
140AF212	40	ISO40 DIN69871 P/F ATT.FILET. M12x75	75	56	24	M12	12,5	21	●
140AF216	40	ISO40 DIN69871 P/F ATT.FILET. M16x75	75	56	34	M16	17	29	●
140AF308	40	ISO40 DIN69871 P/F ATT.FILET. M8x95	95	76	23	M8	8,5	13	●
140AF310	40	ISO40 DIN69871 P/F ATT.FILET. M10x95	95	76	28	M10	10,5	18	●
140AF312	40	ISO40 DIN69871 P/F ATT.FILET. M12x95	95	76	31	M12	12,5	21	●
140AF316	40	ISO40 DIN69871 P/F ATT.FILET. M16x95	95	76	34	M16	17	29	●
140AF408	40	ISO40 DIN69871 P/F ATT.FILET. M8x115	115	96	25	M8	8,5	13	●
140AF410	40	ISO40 DIN69871 P/F ATT.FILET. M10x115	115	96	28	M10	10,5	18	●
140AF412	40	ISO40 DIN69871 P/F ATT.FILET. M12x115	115	96	31	M12	12,5	21	●
140AF416	40	ISO40 DIN69871 P/F ATT.FILET. M16x115	115	96	39	M16	17	29	●
140AF510	40	ISO40 DIN69871 P/F ATT.FILET. M10x145	145	126	34	M10	10,5	18	●
140AF512	40	ISO40 DIN69871 P/F ATT.FILET. M12x145	145	126	38	M12	12,5	21	●
140AF516	40	ISO40 DIN69871 P/F ATT.FILET. M16x145	145	126	39	M16	17	29	●



Codice	ISO	Descrizione	H	L	D3	M	D1	D2	G2.5 20000
150AF110	50	ISO50 DIN69871 P/F ATT.FILET. M10X65	65	46	19,5	M10	10,5	18	●
150AF112	50	ISO50 DIN69871 P/F ATT.FILET. M12X65	65	46	24	M12	12,5	21	●
150AF116	50	ISO50 DIN69871 P/F ATT.FILET. M16X65	65	46	34	M16	17	29	●
150AF210	50	ISO50 DIN69871 P/F ATT.FILET. M10x85	85	66	28	M10	10,5	18	●
150AF212	50	ISO50 DIN69871 P/F ATT.FILET. M12x85	85	66	32	M12	12,5	21	●
150AF216	50	ISO50 DIN69871 P/F ATT.FILET. M16x85	85	66	36	M16	17	29	●
150AF310	50	ISO50 DIN69871 P/F ATT.FILET. M10x135	135	116	28	M10	10,5	18	●
150AF312	50	ISO50 DIN69871 P/F ATT.FILET. M12x135	135	116	32	M12	12,5	21	●
150AF316	50	ISO50 DIN69871 P/F ATT.FILET. M16x135	135	116	36	M16	17	29	●
150AF410	50	ISO50 DIN69871 P/F ATT.FILET. M10x185	185	166	32	M10	10,5	18	●
150AF412	50	ISO50 DIN69871 P/F ATT.FILET. M12x185	185	166	36	M12	12,5	21	●
150AF416	50	ISO50 DIN69871 P/F ATT.FILET. M16x185	185	166	42	M16	17	29	●
150AF512	50	ISO50 DIN69871 P/F ATT.FILET. M12x235	235	216	42	M12	12,5	21	●
150AF516	50	ISO50 DIN69871 P/F ATT.FILET. M16x235	235	216	44	M16	17	29	●



<b>Codice</b>	<b>ISO</b>	<b>Descrizione</b>	<b>L</b>	<b>D2</b>	<b>D</b>
140PCRM1	40	ISO40 DIN69871 M/PORTAM/C/R H.60 GR.1	60	38	19
140PCRM2	40	ISO40 DIN69871 M/PORTAM/C/R H.92 GR.2	92	53	31
150PCRM1	50	ISO50 DIN69871 M/PORTAM/C/R H.62 GR.1	62	38	19
150PCRM2	50	ISO50 DIN69871 M/PORTAM/C/R H.83 GR.2	83	53	31

**ACCESSORI - ACCESSORIES - ACCESSOIRES - ZUBEHÖR**



RIF. PAGINA **312**



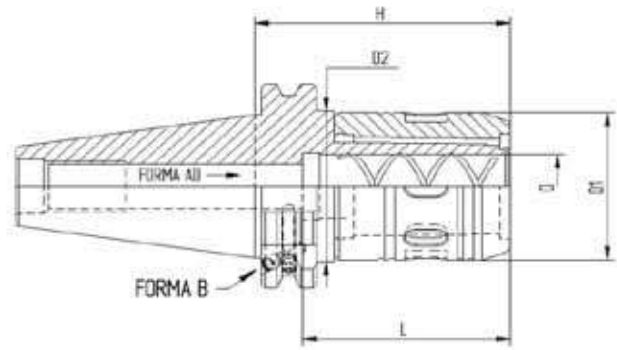
RIF. PAGINA **313**



MANDRINI A FORTE SERRAGGIO  
MILLING CHUCK  
MANDRINS A FORT SERRAGE  
KRAFTSPANNFUTTER



**DIN 69871 AD/B**




Codice	ISO	Descrizione	H	L	D	D1	D2	G6.3 12000
140FS120	40	ISO40 DIN69871 F. SERR. Ø20 H75	75	60	20	46	47	●
140FS132	40	ISO40 DIN69871 F. SERR. Ø32 H95	95	80	32	62	63	●
140FS332	40	ISO40 DIN69871 F. SERR. Ø32 H135	135	80	32	62	63	●
150FS120	50	ISO50 DIN69871 F. SERR. Ø20 H85	85	60	20	46	47	●
150FS132	50	ISO50 DIN69871 F. SERR. Ø32 H85	85	80	32	62	63	●
150FS332	50	ISO50 DIN69871 F. SERR. Ø32 H135	135	80	32	62	63	●

**ACCESSORI - ACCESSORIES - ACCESSOIRES - ZUBEHÖR**



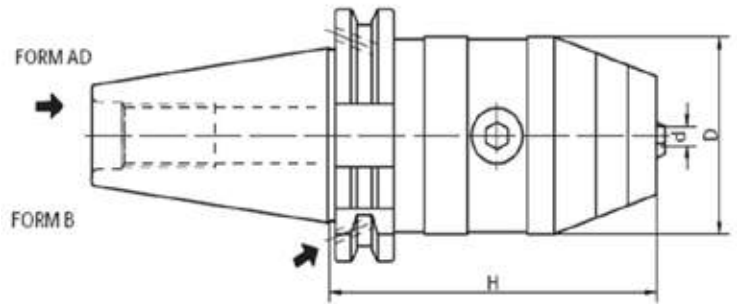
RIF. PAGINA **315**



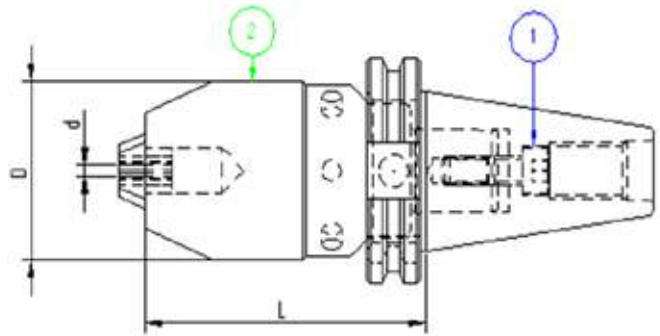

 PORTAPUNTE INTEGRALI PER ROTAZIONE DX E SX  
 NC DRILL CHUCK FOR LEFT AND RIGHT ROTATION  
 MANDRIN DE PERCAGE CNC POUR ROTATION GAUCHE-DROITE  
 NC-BOHRFUTTER-FUER RECHTS UND LINKSLAUF



**DIN 69871 AD/B**

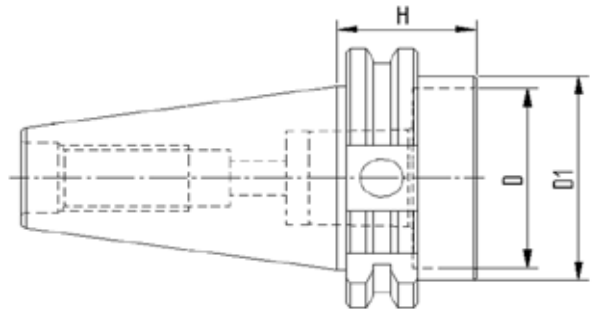


<b>Codice</b>	<b>ISO</b>	<b>Descrizione</b>	<b>H</b>	<b>D</b>	<b>d</b>
140MAZ13	40	ISO40 DIN69871 M/AUTOS./FORI H.88 D.13	88	50	1-13
140MAZ16	40	ISO40 DIN69871 M/AUTOS./FORI H.93 D.16	93	50	3-16
150MAZ13	50	ISO50 DIN69871 M/AUTOS./FORI H.88 D.13	88	50	1-13
150MAZ16	50	ISO50 DIN69871 M/AUTOS./FORI H.97 D.16	97	50	3-16



Codice	ISO	Descrizione	L	D	d
140MPI13	40	ISO40 DIN69871 P/PUNTA INT.H85 DC13	85	50	1-13
140MPI16	40	ISO40 DIN69871 P/PUNTA INT.H106 DC16	106	57	3-16
150MPI13	50	ISO50 DIN69871 P/PUNTA INT.H87 DC13	87	50	1-13
150MPI16	50	ISO50 DIN69871 P/PUNTA INT.H106 DC16	106	57	3-16

**MANDRINI DI RICAMBIO - REPLACEMENT DRILL CHUCK HEADS - MANDRINS DE RECHANGE - ERSATZTEILE BOHRFÜTTER**



Codice	ISO	Descrizione	D	D1	H
140CPI13	40	ISO40 DIN69871 SOLO MANDRINO 1-13	40	-	19
140CPI16	40	ISO40 DIN69871 SOLO MANDRINO 3-16	44	50	32
150CPI13	50	ISO50 DIN69871 SOLO MANDRINO 1-13	40	-	19
150CPI16	50	ISO50 DIN69871 SOLO MANDRINO 3-16	44	50	32

**COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE**

Codice	Mandrino	Q.tà	Vite	Q.tà
--------	----------	------	------	------



2



1

140MPI13	913INS01	1	110802501	1
140MPI16	916INS01	1	110803501	1
150MPI13	913INS01	1	110803501	1
150MPI16	916INS01	1	110803501	1

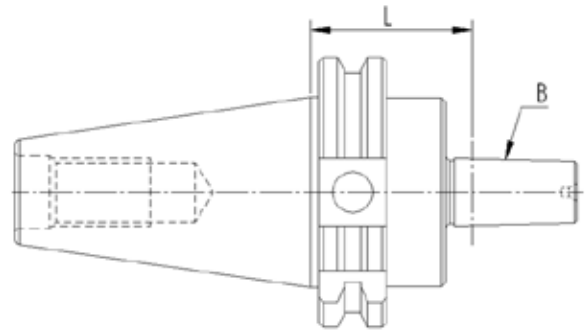


ATTACCO PER MANDRINI PORTAPUNTE  
ARBORS FOR DRILL CHUCKS  
ARBRES POUR MANDRINS DE PERÇAGE  
BOHRFUTTERAUFNAHMEN

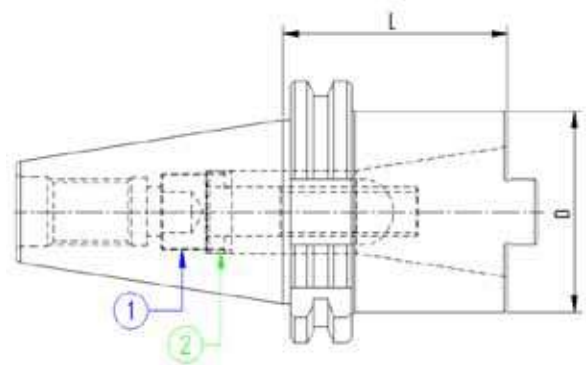


**DIN 69871 A**

**DIN 238**



<b>Codice</b>	<b>ISO</b>	<b>Descrizione</b>	<b>L</b>	<b>B</b>
140MPP12	40	ISO40 DIN69871 P/PUNTE H.40 B12	40	12
140MPP16	40	ISO40 DIN69871 P/PUNTE H.40 B16	40	16
140MPP18	40	ISO40 DIN69871 P/PUNTE H.40 B18	40	18
150MPP12	50	ISO50 DIN69871 P/PUNTE H.40 B12	40	12
150MPP16	50	ISO50 DIN69871 P/PUNTE H.40 B16	40	16
150MPP18	50	ISO50 DIN69871 P/PUNTE H.40 B18	40	18






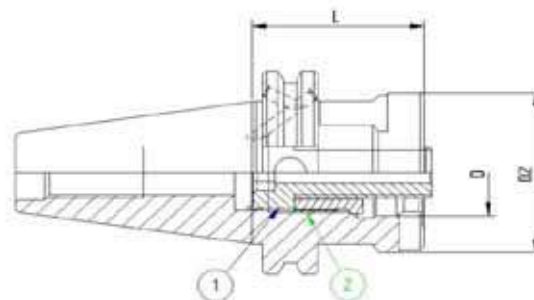
Codice	ISO	Descrizione	L	D
140ISO30	40-30	ISO40 DIN69871 RIDUZIONE H60 ISO30	60	49
140ISO40	40-40	ISO40 DIN69871 RIDUZIONE H100 ISO40	100	68

Codice	ISO	Descrizione	L	D
150ISO40	50-40	ISO50 DIN69871 RIDUZIONE H70 ISO40	70	68
150ISO50	50-50	ISO50 DIN69871 RIDUZIONE H120 ISO50	120	100



**COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE**

ISO	Vite per TC-BT	Q.tà	Vite per DIN2080	Q.tà	Ghiera	Q.tà
						
	<b>1</b>		<b>1</b>		<b>2</b>	
40-30	111205501	1	111203001	1	122000603	1
40-40	111606514	1	111604514	1	122400903	1
50-40	111606514	1	111604514	1	122400903	1
50-50	112409004	1	112406004	1	124020002	1





Codice	ISO	Descrizione	L	D	D2
140VL050	40	ISO40 DIN69871 MODULARE H27 D50	27	27	50
140VL063	40	ISO40 DIN69871 MODULARE H27 D63	27	32	63
140VL150	40	ISO40 DIN69871 MODULARE H50 D50	50	27	50
140VL163	40	ISO40 DIN69871 MODULARE H50 D63	50	32	63

### COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

Codice	Vite	Q.tà	Ghiera	Q.tà
				
	<b>1</b>		<b>2</b>	
140VL050	111604011	1	122502007	1
140VL063	112004014	1	123001708	1
140VL150	111604011	1	122502007	1
140VL163	112005011	1	123002408	1

Codice	ISO	Descrizione	L	D	D2
150VL050	50	ISO50 DIN69871 MODULARE H27 D.50	27	27	50
150VL063	50	ISO50 DIN69871 MODULARE H27 D.63	27	32	63
150VL080	50	ISO50 DIN69871 MODULARE H27 D.80	27	32	80
150VL150	50	ISO50 DIN69871 MODULARE H50 D.50	50	27	50
150VL163	50	ISO50 DIN69871 MODULARE H50 D.63	50	32	63
150VL180	50	ISO50 DIN69871 MODULARE H50 D.80	50	32	80

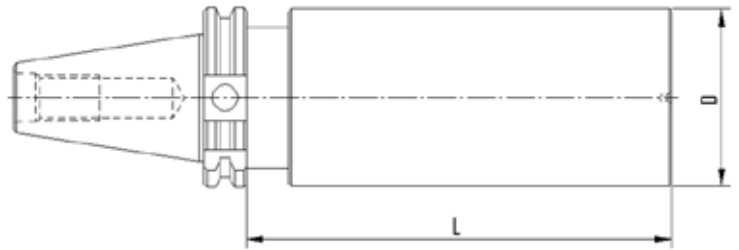
### COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

Diametro	Vite	Q.tà	Ghiera	Q.tà
				
	<b>1</b>		<b>2</b>	
50	111604011	1	122502007	1
63	112005012	1	123002408	1
80	112005012	1	123002408	1

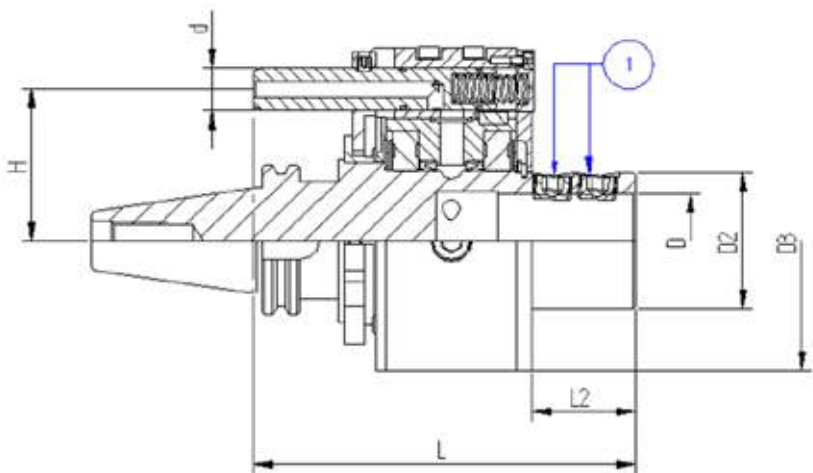

**MANDRINI SEMILAVORATI A STELO TENERO**  
**BLANK TOOLHOLDER WITH SOFT SHANK**  
**BARRES D'ALEPAGE SEMI-FINIES**  
**ROHLINGE MIT WEICHEM SCHAFT**



**DIN 69871 .A**





<b>Codice</b>	<b>ISO</b>	<b>Descrizione</b>	<b>D</b>	<b>L</b>
140ST263	40	ISO40 DIN69871 ST.TENERO D.63X250	63	250
150ST397	50	ISO50 DIN69871 ST.TENERO D.97x315	97	315



Codice	ISO	Descrizione	H	d	L	L2	D	D2	D3
140DRC32	40	ISO40 DIN69871 DISTRIB.ROTANTE D.32	65	18	150	33.8	32	48	95

Codice	ISO	Descrizione	H	d	L	L2	D	D2	D3
150DRC40	50	ISO50 DIN69871 DISTRIB.ROTANTE D.40	80	18	165	49	40	58	110

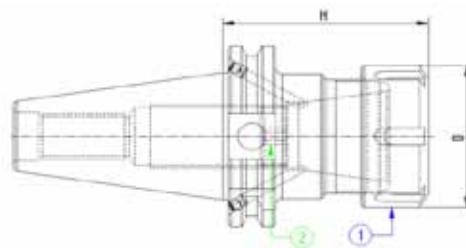
**COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE**

ISO40	Grano	Q.tà	ISO50	Grano	Q.tà
					
32	101400804	1	32	-	-
40	-	-	40	101601604	2

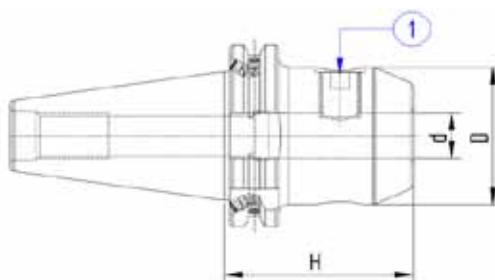




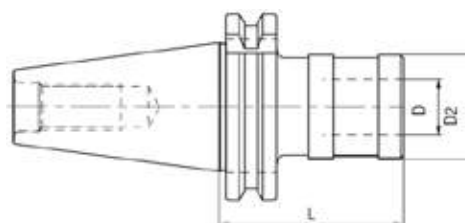
**FIG. 1**



**FIG. 2**



**FIG. 3**



Codice	ISO	Descrizione Portapinzza	FIG.	H	D	ER	G6.3 12000
130PP110	30	ISO30 DIN69871 P/P H.59 ER16	1	55	32	16	●
130PP116	30	ISO30 DIN69871 P/P H.55 ER25	1	55	35	25	●
130PP120	30	ISO40 DIN69871 P/P H.65 ER32	1	65	42	32	●

Codice	ISO	Descrizione Weldon	FIG.	H	d	D	G6.3 12000
130WLD06	30	ISO30 DIN69871 WELDON H.45 D.06	2	45	6	25	●
130WLD08	30	ISO30 DIN69871 WELDON H.45 D.08	2	45	8	28	●
130WLD10	30	ISO30 DIN69871 WELDON H.50 D.10	2	50	10	35	●
130WLD12	30	ISO30 DIN69871 WELDON H.50 D.12	2	50	12	42	●
130WLD16	30	ISO30 DIN69871 WELDON H.70 D.16	2	70	16	48	●
130WLD20	30	ISO30 DIN69871 WELDON H.70 D.20	2	70	20	52	●

Codice	ISO	Descrizione Portamaschi	FIG.	L	D2	D
130PCRM1	30	ISO30 DIN69871 M/PORTAM/C/R H.60 GR.1	3	60	38	19
130PCRM2	30	ISO30 DIN69871 M/PORTAM/C/R H.101 GR.2	3	101	53	31

**Possibilità di realizzare altri mandrini ISO30 su richiesta**

# NOTE

