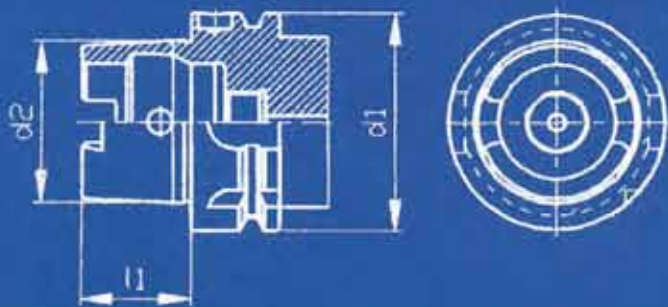


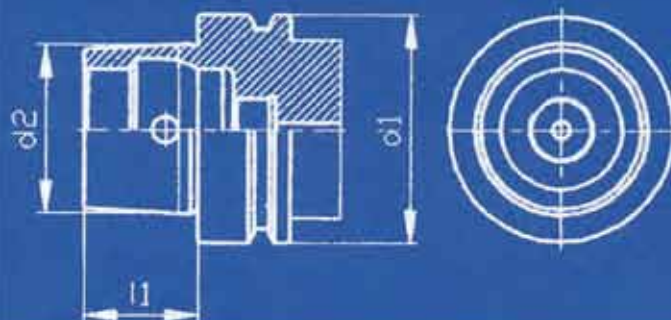
HSK 50/A



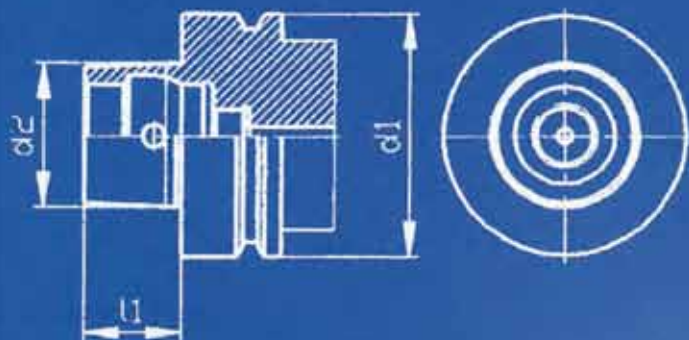
HSK A



HSK E



HSK F

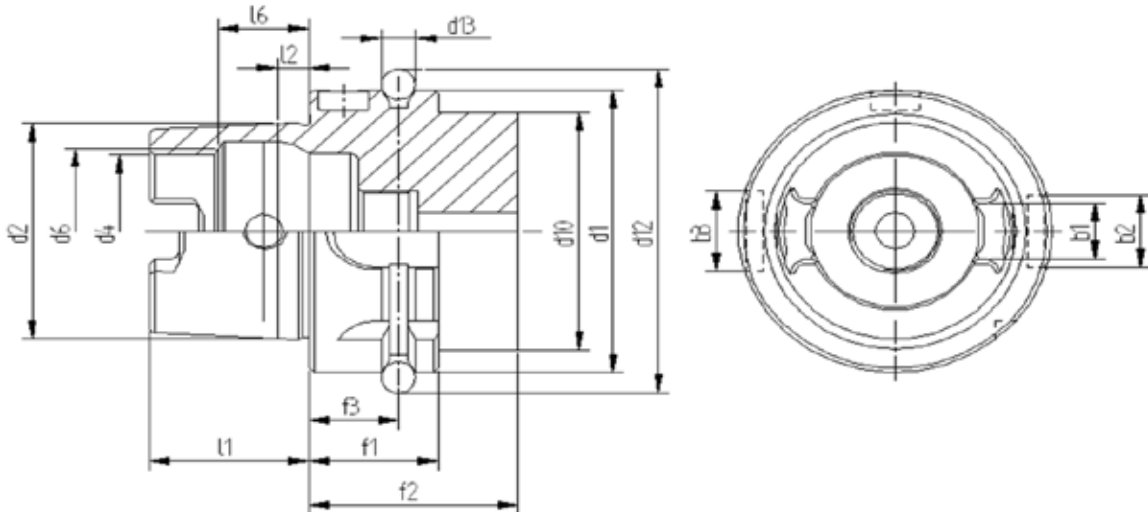


HSK A/E

d1 Nominal dia.	d2 Taper dia.	l1 Taper length
32	24	16
40	30	20
50	38	25
63	48	32
100	75	50

HSK F

d1 Nominal dia.	d2 Taper dia.	l1 Taper length
40	24	16
50	30	20
63	38	25
100	60	40



	HSK 32	HSK 40	HSK 50	HSK 63	HSK 100
b1	7.05	8.05	10.54	12.54	20.02
b2	7	9	12	16	20
b3	9	11	14	18	22
d1	32	40	50	63	100
d2	24	30	38	48	75
d4	17	21	26	34	53
d6	19	23	29	37	58
d10	26	34	42	53	85
d12	37	45	59.3	72.3	109.75
d13	4	4	7	7	7
f1	20	20	26	26	29
f2	35	35	42	42	45
f3	16	16	18	18	20
l1	16	20	25	32	50
l2	3.2	4	5	6.3	10
l6	8.92	11.42	14.13	18.13	28.56

Forma A



- Usato su centri di lavoro, fresatrici e macchine speciali con cambio utensile automatico.
- Adduzione refrigerante centrale.
- Coppia trasmessa con due chiavette al fondo della sede conica.
- Tacche di riferimento sulla flangia per riferimento posizione tagliente. Foro di predisposizione al sistema di riconoscimento a norme DIN 69873 sull'esterno flangia.

Form A



- Used on machining centres, milling machines, turning machines special machines with automatic tool change.
- Central, axial coolant supply through coolant tube.
- Torque transmission via two key slots at end of taper.
- Two slots on collar for tool magazine, location edge. Hole for data carrier DIN 69873 in collar.

Forme A



- Anwendung für Bearbeitungszentren, Fräsmaschinen, Drehmaschinen, Sondermaschinen mit automatischem Werkzeugwechsel.
 - Zentrale, axiale Kühlmittelzufuhr über Kühlmittelrohr.
 - Drehmomentübertragung über zwei Mitnehmernuten am Kegelumlauf.
 - Zwei Bundnuten für Werkzeugmagazin, Positionskerbe.
- Bohrung für Datenträger DIN69873 im Bund.
- Balluffchip

Forme A



- Utilisation sur les centre d'usinage, les fraiseuses, les machines spéciales à changement d'outils automatique.
- Alimentation centrale, axiale du liquide de lubrification par tube d'arrosage.
- Transmission du couple par deux gorges d'entraînement à l'extrémité du cône.
- Deux gorges magasin à outils, entaille de positionnement, perçage pour support de données DIN69873 dans l'épaulement.



MANDRINI PAGNONI CON ATTACCO HSK

DATI TECNICI

TUTTI I MANDRINI PORTAUTENSILI PAGNONI VENGONO PRODOTTI SECONDO LE NORMATIVE DIN
QUESTE NORMATIVE PREVEDONO LE STESSE CLASSI DI TOLLERANZA PER GLI ATTACCHI DIN69893 A+E+F

TOLLERANZA DEL CONO

HSK	L1	L2	D.A.	D.B.	B (only type A)
32 A	3.2	7.3	24 + 0.005 + 0.007	23,27 + 0.003 + 0.005	7.05 ± 0.04
40 A+E	4	9.5	30 + 0.005 + 0.007	29,05 + 0.003 + 0.005	8.05 ± 0.04
50 A+E	5	11	38 + 0.006 + 0.009	36,9 + 0.003 + 0.006	10.54 ± 0.04
50 F	4	9.5	30 + 0.005 + 0.007	29,05 + 0.003 + 0.005	/
63 A+E	6.3	14.7	48 + 0.007 + 0.011	46,53 + 0.003 + 0.007	12.54 ± 0.04
63 F	5	11	38 + 0.006 + 0.009	36,9 + 0.003 + 0.006	/
100 A	10	24	75 + 0.009 + 0.015	72,6 + 0.003 + 0.009	20.02 ± 0.04

COASSIALITA' PORTAPINZE

La norma DIN69882-6 ammette un'errore massimo di 0.005 mm. per i portapinze DIN6499.

COASSIALITA' PORTAFRESE FISSI E COMBINATI

I portafrese fissi e combinati rispondono ai criteri prescritti dalla norma DIN69882-2, la quale prevede per i Ø 16/22/27/32 una coassialità di 0,01.

COASSIALITA' PORTAFRESE WELDON

Secondo la normativa DIN 69882-4 il portafrese WELDON deve rispondere ai seguenti requisiti:

Foro: tolleranza H5 e Coassialità: 0.005

EQUILIBRATURA

Tutti i nostri mandrini presenti in questa categoria sono prebilanciati in classe G 6,3 a 8000 rpm min-1 o bilanciati fino a 25.000 rpm min-1.

DATI COSTRUTTIVI

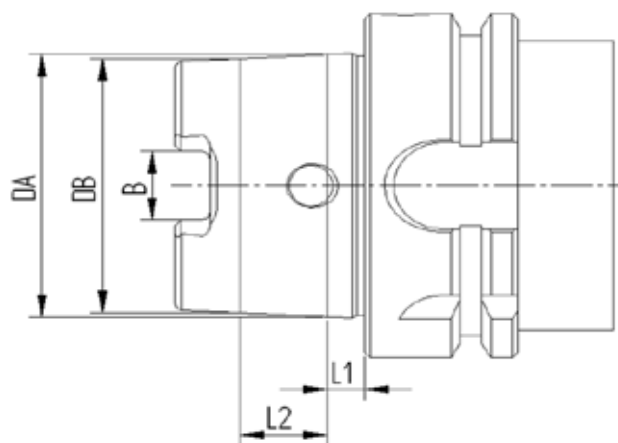
- Costruiti in acciaio da cementazione legato.
- Cementati con profondità 0,4 - 0,5 mm.
- Temprati e rinvenuti.
- Durezza HRC 58 ± 2 resistenza 800-1000 N / mm².
- Bruniti
- Finitura di rettifica interna, esterna e nelle filettature delle ghiera chiudipinza.
- Collaudati 100% con strumenti di misura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

EQUILIBRATURA MANDRINI PER ALTE VELOCITA'

Eventuali bilanciature supplementari sui nostri mandrini vengono eseguite su richiesta cliente, con una classe massima di bilanciatura di G 2,5 a 25.000 rpm.

DATI COSTRUTTIVI PER MANDRINI PER ALTE VELOCITA'

- Costruiti in acciaio da cementazione legato.
- Cementati con profondità 0,4 - 0,5 mm.
- Temprati e rinvenuti.
- Durezza HRC 58 ± 2 resistenza 800-1000 N / mm².
- Bruniti
- Finitura di rettifica interna, esterna del corpo.
- 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.
THESE NORMS PROVIDE THE SAME CLASS OF TOLERANCE FOR THE ATTACHMENT DIN69893 A+E+F

CONE'S TOLERANCE

HSK	L1	L2	D.A.	D.B.	B (only type A)
32 A	3.2	7.3	24 +0.005 +0.007	23,27 +0.003 +0.005	7.05 ± 0.04
40 A+E	4	9.5	30 +0.005 +0.007	29,05 +0.003 +0.005	8.05 ± 0.04
50 A+E	5	11	38 +0.006 +0.009	36,9 +0.003 +0.006	10.54 ± 0.04
50 F	4	9.5	30 +0.005 +0.007	29,05 +0.003 +0.005	/
63 A+E	6.3	14.7	48 +0.007 +0.011	46,53 +0.003 +0.007	12.54 ± 0.04
63 F	5	11	38 +0.006 +0.009	36,9 +0.003 +0.006	/
100 A	10	24	75 +0.009 +0.015	72,6 +0.003 +0.009	20.02 ± 0.04

COLLET CHUCK'S RUNOUT ACCURACY

The norm DIN69882-6 permits a runout error of 0.005 mm. for DIN6499 collet chucks.

SHELL END MILL ADAPTOR'S RUNOUT ACCURACY

Our shell end mill adaptors meet the requirements of the norm DIN69882-2, which prescribes for diameters Ø 16/22/ 27/32 a runout accuracy of 0,01.

WELDON END MILL HOLDER'S RUNOUT ACCURACY

According to norm DIN 69882-4 WELDON end end mill holders have to meet the following requirements:

Bore: H5 and runout accuracy: 0.005

BALANCING

All our toolholders of this category are pre-balanced in grade G 6,3 at 8000 rpm or balanced until 25.000 rpm.

CONSTRUCTIVE FEATURES

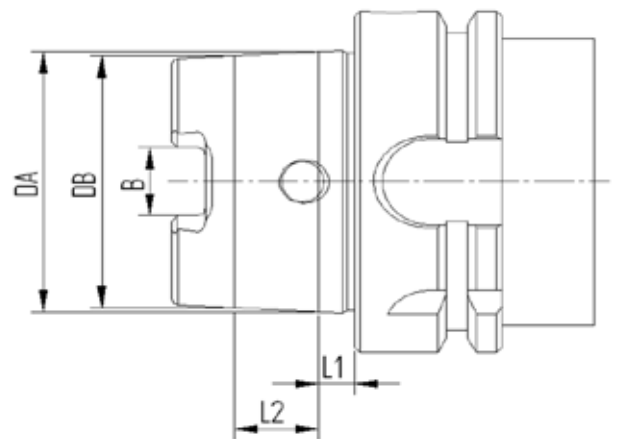
- Manufactured with Casehardening Steel.
- Casehardened with depth 0,4 - 0,5 mm.
- Hardened-Tempered.
- Hardness HRC 58 ± 2, strenght 800-1000 N / mm2.
- Black oxided.
- Thread of collet nuts, internal and external diameters are completely grinding finished
- Tested 100% with certified measuring instruments.

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, strenght 800-1000 N / mm2.
- Black oxided.
- Internal and external grinding finished 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.



**STEILGEKELAUFNHMEN PAGNONI HSK****TECHNISCHE DATEN**

ALLE PAGNONI - STEILGEKELAUFNHMEN WERDEN NACH DEN DIN - NORMEN ANGEFERTIGT.

DIESE NORMEN SEHEN DIE GLEICHEN TOLERANZKLASSEN FÜR DIE DIN69893 A+E+F AUFNHMEN VOR.

KEGELSCHAFTTOLERANZ

HSK	L1	L2	D.A.	D.B.	B (only type A)
32 A	3.2	7.3	24 $+0.005$ $+0.007$	23,27 $+0.003$ $+0.005$	7.05 ± 0.04
40 A+E	4	9.5	30 $+0.005$ $+0.007$	29,05 $+0.003$ $+0.005$	8.05 ± 0.04
50 A+E	5	11	38 $+0.006$ $+0.009$	36,9 $+0.003$ $+0.006$	10.54 ± 0.04
50 F	4	9.5	30 $+0.005$ $+0.007$	29,05 $+0.003$ $+0.005$	/
63 A+E	6.3	14.7	48 $+0.007$ $+0.011$	46,53 $+0.003$ $+0.007$	12.54 ± 0.04
63 F	5	11	38 $+0.006$ $+0.009$	36,9 $+0.003$ $+0.006$	/
100 A	10	24	75 $+0.009$ $+0.015$	72,6 $+0.003$ $+0.009$	20.02 ± 0.04

RUNDLAUFGENAUIGKEIT DER SPANZANGENAUFNAHME

Die DIN 69882-6 Norm schreibt eine Rundlaufgenauigkeit zwischen Aussenkegel und Innenkegel/Spanzangensitz für die DIN 6499-Spanzangenaufnahmen von 0,005 vor.

AUFSTECKFRÄSDORNE - RUNDLAUFGENAUIGKEIT

Pagnoni-Aufsteckfräsdorne entsprechen der DIN 69882-2 Norm, die für die \varnothing 16 / 22 / 27 / 32 eine Rundlaufgenauigkeit von 0,01 vorsieht.

WELDON AUFSTECKFRÄSDORNE - RUNDLAUFGENAUIGKEIT

Nach der DIN 69882-4 Norm muß der Weldon - Aufsteckfräsdorne die folgenden Forderungen aufweisen:

Bohrung: toleranz H5

Rundlaufgenauigkeit: 0.005

WUCHTUNG

Alle Steilkegelaufnahmen dieser Gruppe sind in Klasse G 6,3 auf 8.000 U/Min -1 vorgewuchtet oder bis auf 25.000 U/Min -1 gewuchtet.

KONSTRUKTIONS DATEN

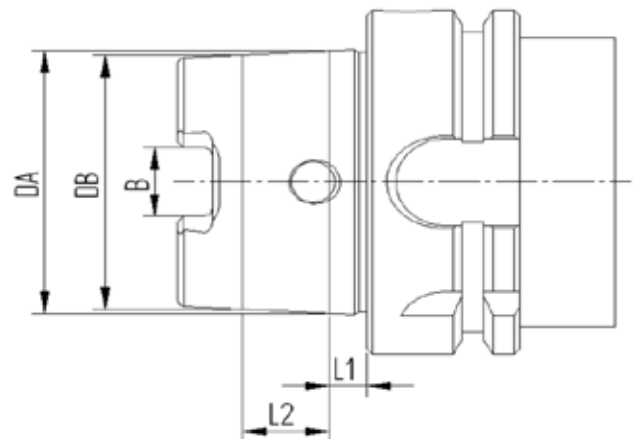
- aus Einastzstahl angefertigt
- in der Einsatztiefe von 0,4 - 0,5 mm.
- gehärtet, angelassen
- Härte HRC 58 ± 2 , Festigkeit 800-1000 N / mm².
- Brüniert
- inneres, äußeres Schleifen und am Gewinde der Spanzangenmutter.
- 100% durch zertifizierte Meßinstrumente geprüft.

WUCHTUNG MIT HOCHGESCHWINDIGKEIT

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

KONSTRUKTIONS DATEN

- aus Einastzstahl angefertigt
- in der Einsatztiefe 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 Spanzangenmutter.
- 100% durch zertifizierte Meßinstrumente geprüft und mit Wuchtungsprotokoll geliefert.





TOUS LES MANDRINS PORTE-OUTILS PAGNONI SONT FABRIQUÉS SELON LES NORMES DIN QUI PRÉVOIENT LES MÊMES CLASSES DE TOLÉRANCE POUR LES ATTACHEMENT DIN69893 A+E+F

TOLLERANCE DU CONE

HSK	L1	L2	D.A.	D.B.	B (only type A)
32 A	3.2	7.3	24 + 0.005 + 0.007	23,27 + 0.003 + 0.005	7.05 ± 0.04
40 A+E	4	9.5	30 + 0.005 + 0.007	29,05 + 0.003 + 0.005	8.05 ± 0.04
50 A+E	5	11	38 + 0.006 + 0.009	36,9 + 0.003 + 0.006	10.54 ± 0.04
50 F	4	9.5	30 + 0.005 + 0.007	29,05 + 0.003 + 0.005	/
63 A+E	6.3	14.7	48 + 0.007 + 0.011	46,53 + 0.003 + 0.007	12.54 ± 0.04
63 F	5	11	38 + 0.006 + 0.009	36,9 + 0.003 + 0.006	/
100 A	10	24	75 + 0.009 + 0.015	72,6 + 0.003 + 0.009	20.02 ± 0.04

COAXIALITÉ PORTE-PINCE

La norme DIN 69882-6 permet une erreur de 0,005 mm. Maximum pour les porte-pinces DIN 6499.

COAXIALITÉ PORTE-FRAISES FIXES ET COMBINÉS

Les porte-fraises fixes et combinés de notre production suivent la spécification de la norme DIN69882-2 qui prévoit pour les diamètres Ø 16 / 22 / 27 / 32 une coaxialité de 0,01.

COAXIALITÉ PORTE-FRAISES WELDON

Suivant les spécifications DIN69882-4 les porte-fraises WELDON doivent suivre les conditions suivantes:

Trou: H5 runout

Coaxialité: 0.005

EQUILIBRAGE

La plupart des porte-outils sont pré-équilibrés en classe G 6,3 8.000 Tr/Min -1 ou équilibrés jusqu'à 25.000 Tr/Min -1.

ELEMENTS DE CONSTRUCTION

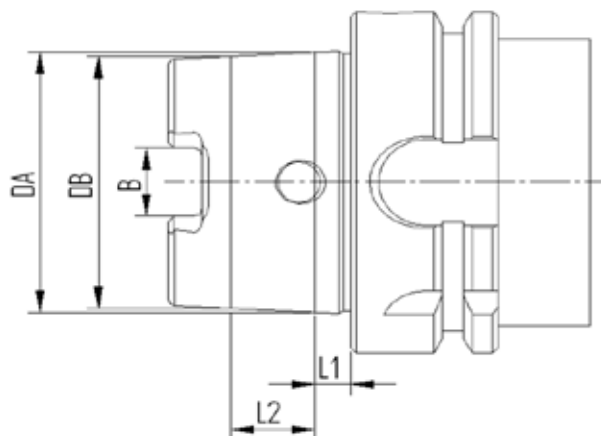
- Produits en acier cémenté allié.
- Cémentés avec une profondeur 0,4 - 0,5 mm.
- Trempé - Revenu.
- Dureté HRC 58 ± 2 résistance 800-1000 N / mm².
- Brunis.
- Rectification du cône intérieur, extérieur et dans le filetage des écrous qui serrent la pince.
- Contrôlés à 100% avec des instruments de mesure certifiés.

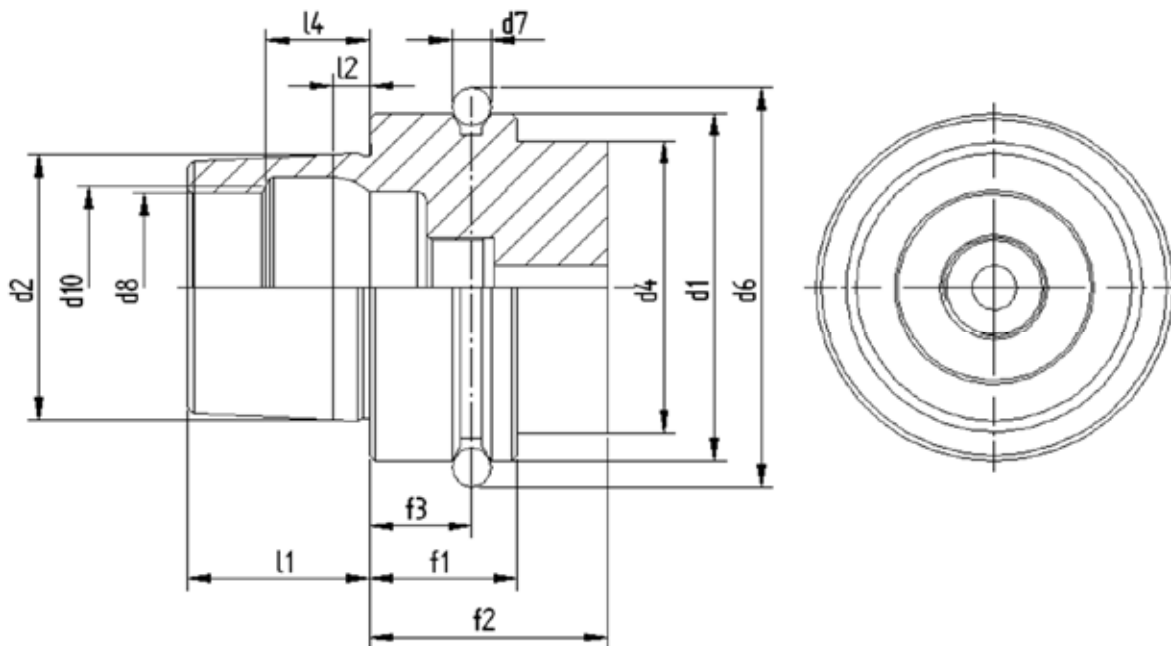
EQUILIBRAGE MANDRINS POUR HAUTE VITESSE

Équilibrage éventuels sur nos mandrins sont exécutés sur demande du client, avec une maximum classe de équilibrage de G2,5 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 / mm².
- 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.





	HSK 50	HSK 63
d1	50	63
d2	38	48
d4	42	53
d6	59.3	72.3
d7	7	7
d8	26	34
d10	29	37
f1	26	26
f2	42	42
f3	18	18
l1	25	32
l2	5	6.3
l4	14.13	18.13

Forma E



- Usato su elettromandri e su macchine per il legno.
- Rotazione simmetrica senza chiavette di trascinamento.
- Coppia trasmessa solo per attrito tra le superfici.
- Adduzione refrigerante dal centro.

Form E



- Used for high frequency spindles and wood machining.
- Rotationally symmetrical, without key slots.
- Torque transmission via friction resistance.
- Central coolant supply possible through coolant tube.

Form E



- Anwendung für Hochfrequenzspindeln, Holzbearbeitungsmaschinen.
- Rotationssymmetrisch, ohne Mitnehmernuten.
- Drehmomentübertragung über Reibschluss.
- Zentrale Kühlmittelzufuhr über Kühlmittelrohr möglich

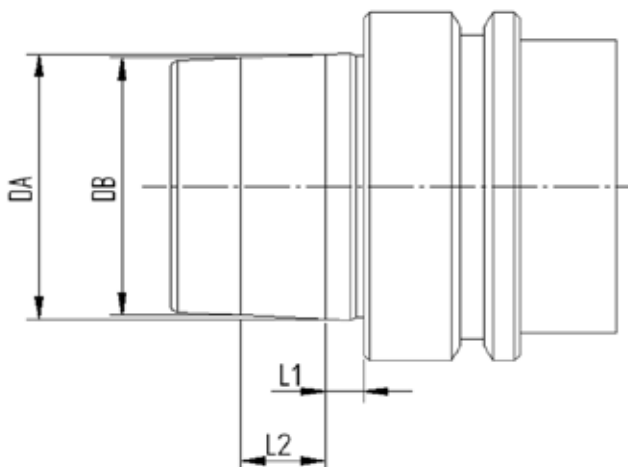
Forme E



- Utilisation pour des broches à hautes fréquences, les machines à usiner le bois.
- Symétrie de rotation, sans gorges d'entraînement.
- Transmission du couple par friction.
- Possibilité d'alimentation centrale du liquide de lubrification par tube d'arrosage.

MANDRINI PAGNONI CON ATTACCO HSK
DATI TECNICI


TUTTI I MANDRINI PORTAUTENSILI PAGNONI VENGONO PRODOTTI SECONDO LE NORMATIVE DIN
 QUESTE NORMATIVE PREVEDONO LE STESSA CLASSI DI TOLLERANZA PER GLI ATTACCHI DIN69893 A+E+F

TOLLERANZA DEL CONO


HSK	L1	L2	D.A.	D.B.
32 A	3.2	7.3	24 + 0.005 + 0.007	23,27 + 0.003 + 0.005
40 A+E	4	9.5	30 + 0.005 + 0.007	29,05 + 0.003 + 0.005
50 A+E	5	11	38 + 0.006 + 0.009	36,9 + 0.003 + 0.006
50 F	4	9.5	30 + 0.005 + 0.007	29,05 + 0.003 + 0.005
63 A+E	6.3	14.7	48 + 0.007 + 0.011	46,53 + 0.003 + 0.007
63 F	5	11	38 + 0.006 + 0.009	36,9 + 0.003 + 0.006
100 A	10	24	75 + 0.009 + 0.015	72,6 + 0.003 + 0.009

COASSIALITA' PORTAPINZE

La norma DIN69882-6 ammette un'errore massimo di 0.005 mm. per i portapinze DIN6499.

COASSIALITA' PORTAFRESE FISSI E COMBINATI

I portafrese fissi e combinati rispondono ai criteri prescritti dalla norma DIN69882-2, la quale prevede per i Ø 16 / 22 / 27 / 32 una coassialità di 0,01.

COASSIALITA' PORTAFRESE WELDON

Secondo la normativa DIN 69882-4 il portafrese WELDON deve rispondere ai seguenti requisiti:

Foro: tolleranza H5

Coassialità: 0.005

EQUILIBRATURA

Tutti i nostri mandrini presenti in questa categoria sono prebilanciati in classe G 6,3 a 8000 rpm min-1 o bilanciati fino a 25.000 rpm min-1.

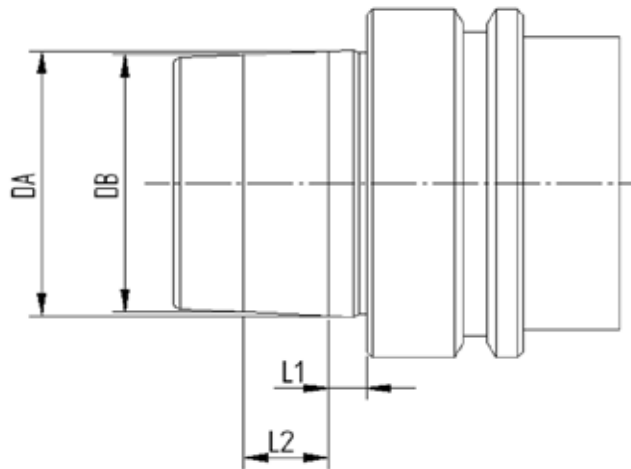
DATI COSTRUTTIVI

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



ALL PAGNONI TOOLHOLDERS ARE MANUFACTURED ACCORDING TO DIN NORMS.

THESE NORMS PROVIDE THE SAME CLASSES OF TOLLERANCE FOR THE ATTACHMENT DIN69893 A+E+F

CONE'S TOLERANCE

HSK	L1	L2	D.A.	D.B.
32 A	3.2	7.3	24 + 0.005 + 0.007	23,27 + 0.003 + 0.005
40 A+E	4	9.5	30 + 0.005 + 0.007	29,05 + 0.003 + 0.005
50 A+E	5	11	38 + 0.006 + 0.009	36,9 + 0.003 + 0.006
50 F	4	9.5	30 + 0.005 + 0.007	29,05 + 0.003 + 0.005
63 A+E	6.3	14.7	48 + 0.007 + 0.011	46,53 + 0.003 + 0.007
63 F	5	11	38 + 0.006 + 0.009	36,9 + 0.003 + 0.006
100 A	10	24	75 + 0.009 + 0.015	72,6 + 0.003 + 0.009

COLLET CHUCK'S RUNOUT ACCURACY

The norm DIN69882-6 permits a runout error of 0.005 mm. for DIN6499 collet chucks.

SHELL END MILL ADAPTOR'S RUNOUT ACCURACY

Our shell end mill adaptors meet the requirements of the norm DIN69882-2, which prescribes for diameters Ø 16 / 22 / 27 / 32 a runout accuracy of 0,01.

WELDON END MILL HOLDER'S RUNOUT ACCURACY

According to norm DIN 69882-4 WELDON end end mill holders have to meet the following requirements:

Bore: H5

Runout accuracy: 0.005

BALANCING

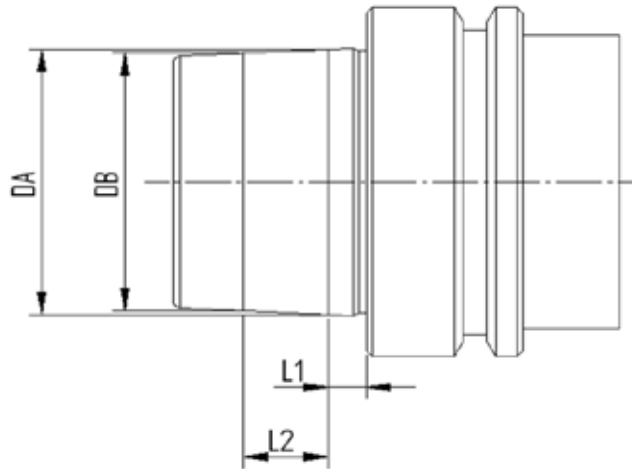
All our toolholders of this category are pre-balanced in grade G 6,3 at 8000 rpm or balanced until 25.000 rpm.

CONSTRUCTIVE FEATURES

- Manufactured with Casehardening Steel.
- Casehardened with depth 0,4 - 0,5 mm.
- Hardened-Tempered.
- Hardness HRC 58 ± 2, strenght 800-1000 N / mm2.
- Black oxided.
- Thread of collet nuts, internal and external diameters are completely grinding finished
- Tested 100% with certified measuring instruments.



ALLE PAGNONI - STEILGEKELAUFNHMEN WERDEN NACH DEN DIN - NORMEN ANGEFERTIGT.
DIESE NORMEN SEHEN DIE GLEICHEN TOLERANZKLASSEN FÜR DIE DIN69893 A+E+F AUFNHMEN VOR.

KEGELSCHAFTTOLERANZ

HSK	L1	L2	D.A.		D.B.	
32 A	3.2	7.3	24	+ 0.005 + 0.007	23,27	+ 0.003 + 0.005
40 A+E	4	9.5	30	+ 0.005 + 0.007	29,05	+ 0.003 + 0.005
50 A+E	5	11	38	+ 0.006 + 0.009	36,9	+ 0.003 + 0.006
50 F	4	9.5	30	+ 0.005 + 0.007	29,05	+ 0.003 + 0.005
63 A+E	6.3	14.7	48	+ 0.007 + 0.011	46,53	+ 0.003 + 0.007
63 F	5	11	38	+ 0.006 + 0.009	36,9	+ 0.003 + 0.006
100 A	10	24	75	+ 0.009 + 0.015	72,6	+ 0.003 + 0.009

RUNDLAUFGENAUIGKEIT DER SPANNZANGENAUFNAHME

Die DIN 69882-6 Norm schreibt eine Rundlaufgenauigkeit zwischen Aussenkegel und Innenkegel/Spannzangensitz für die DIN 6499 Spannzangenaufnahmen von 0,005 vor.

AUFSTECKFRÄSDORNE - RUNDLAUFGENAUIGKEIT

Pagnoni-Aufsteckfräsdorne entsprechen der DIN 69882-2 Norm, die für die $\varnothing 16 / 22 / 27 / 32$ eine Rundlaufgenauigkeit vom 0,01 vorsieht.

WELDON AUFSTECKFRÄSDORNE - RUNDLAUFGENAUIGKEIT

Nach der DIN 69882-4 Norm muß der Weldon - Aufsteckfräsdorn die folgenden Forderungen aufweisen:

Bohrung: toleranz H5

Rundlaufgenauigkeit: 0.005

WUCHTUNG

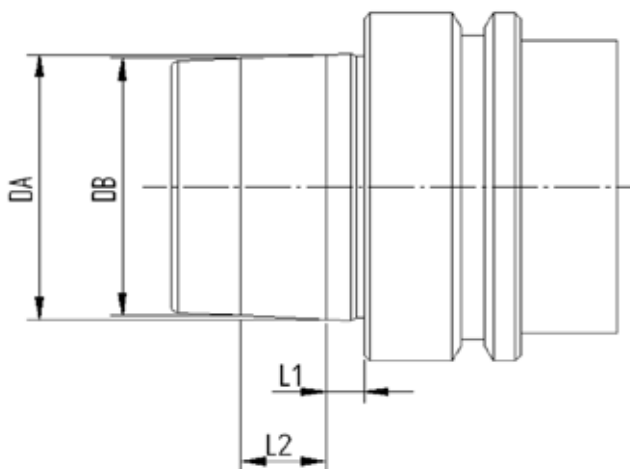
Alle Steilkegelaufnahmen dieser Gruppe sind in Klasse G 6,3 auf 8.000 U/Min -1 vorgewuchtet oder bis auf 25.000 U/Min -1 gewuchtet.

KONSTRUKTIONSDATEN

- aus Einastzstahl angefertigt
- in der Einsatziefe von 0,4 - 0,5 mm zementiert
- gehärtet, angelassen
- Härte HRC 58 \pm 2, Festigkeit 800-1000 N / mm².
- Brüniert
- inneres, äußeres Schleifen und am Gewinde der Spannzangenmutter
- 100% durch zertifizierte Meßinstrumente geprüft.



TOUS LES MANDRINS PORTE-OUTILS PAGNONI SONT FABRIQUÉS SELON LES NORMES DIN QUI PRÉVOIENT LES MÊMES CLASSES DE TOLÉRANCE POUR LES ATTACHEMENT DIN69893 A+E+F

TOLLERANCE DU CONE

HSK	L1	L2	D.A.	D.B.
32 A	3.2	7.3	24 + 0.005 + 0.007	23,27 + 0.003 + 0.005
40 A+E	4	9.5	30 + 0.005 + 0.007	29,05 + 0.003 + 0.005
50 A+E	5	11	38 + 0.006 + 0.009	36,9 + 0.003 + 0.006
50 F	4	9.5	30 + 0.005 + 0.007	29,05 + 0.003 + 0.005
63 A+E	6.3	14.7	48 + 0.007 + 0.011	46,53 + 0.003 + 0.007
63 F	5	11	38 + 0.006 + 0.009	36,9 + 0.003 + 0.006
100 A	10	24	75 + 0.009 + 0.015	72,6 + 0.003 + 0.009

COAXIALITÉ PORTE-PINCE

La norme DIN 69882-6 permet une erreur de 0,005 mm. Maximum pour les porte-pinces DIN 6499.

COAXIALITÉ PORTE-FRAISES FIXES ET COMBINÉS

Les porte-fraises fixes et combinés de notre production suivent la spécification de la norme DIN69882-2 qui prévoit pour les diamètres 16 / 22 / 27 / 32 une coaxialité de 0,01.

COAXIALITÉ PORTE-FRAISES WELDON

Suivant les spécifications DIN69882-4 les porte-fraises WELDON doivent suivre les conditions suivantes:

Trou: H5

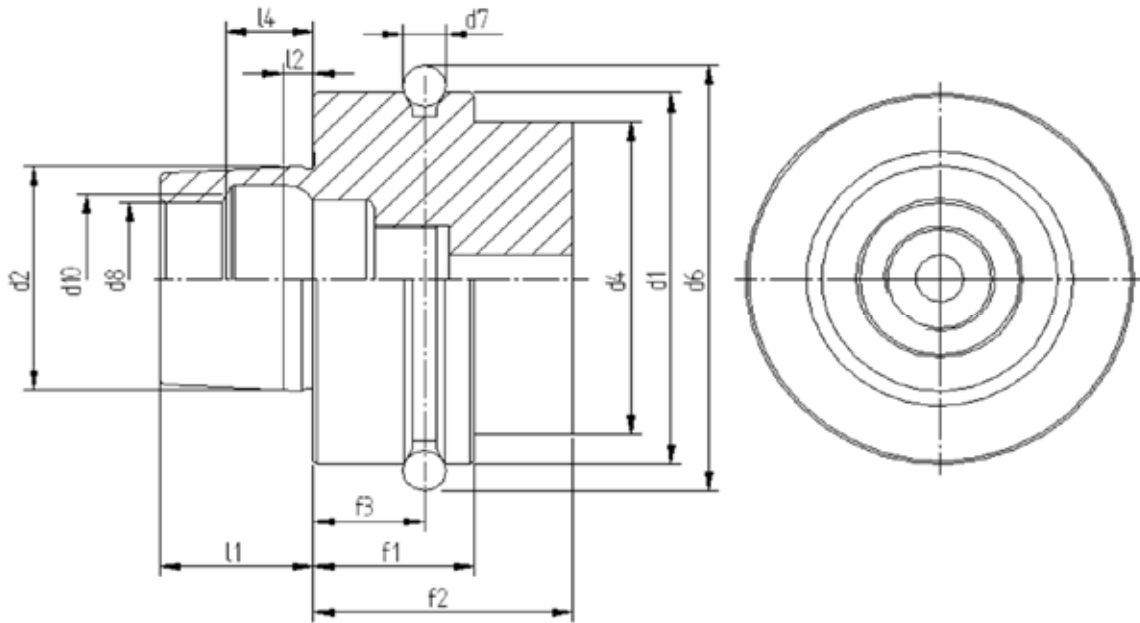
Coaxialité: 0.005

EQUILIBRAGE

La plupart des porte-outils sont pré-équilibrés en classe G 6,3 8.000 Tr/Min -1 ou équilibrés jusqu'à 25.000 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 / mm2.
- Brunis.
- Retification du cône intérieur, extérieur et dans le filetage des écrous qui serrent la pince.
- Contrôlés à 100% avec des instruments de mesure certifiés.



	HSK 50	HSK 63
d1	50	63
d2	30	38
d4	42	53
d6	59.3	72.3
d7	7	7
d8	21	26
d10	23	29
f1	26	26
f2	42	42
f3	18	18
l1	20	25
l2	4	5
l4	11.42	14.13

Forma F

- Usato su elettromandri e su macchine per il legno.
- Con flangia maggiorata.
- Adduzione refrigerante dal centro.

Form F

- Used for high frequency spindles and wood machining.
- With larger collar.
- Central coolant supply possible through coolant tube.

Form F

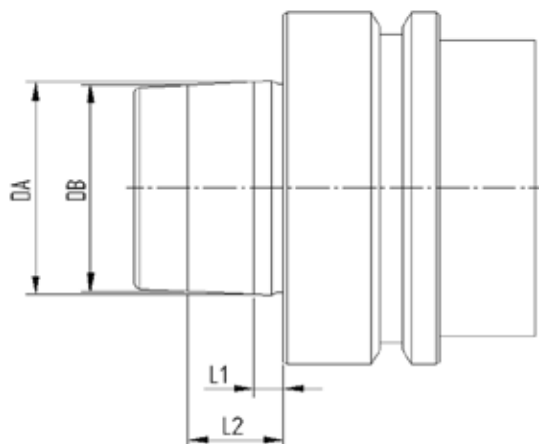
- Anwendung für Hochfrequenzspindeln, Holzbearbeitungsmaschinen.
- Mit vergrößertem Bund.
- Zentrale Kühlmittelzufuhr über Kühlmittelrohr möglich.

Forme F

- Utilisation pour des broches à hautes fréquences, les machines à usiner le bois.
- Avec épaulement agrandi.
- Possibilité d'alimentation centrale du liquide de lubrification par tube d'arrosage.



TUTTI I MANDRINI PORTAUTENSILI PAGNONI VENGONO PRODOTTI SECONDO LE NORMATIVE DIN
 QUESTE NORMATIVE PREVEDONO LE STESSE CLASSI DI TOLLERANZA PER GLI ATTACCHI DIN69893 A+E+F

TOLLERANZA DEL CONO


HSK	L1	L2	D.A.		D.B.	
32 A	3.2	7.3	24	+ 0.005 + 0.007	23,27	+ 0.003 + 0.005
40 A+E	4	9.5	30	+ 0.005 + 0.007	29,05	+ 0.003 + 0.005
50 A+E	5	11	38	+ 0.006 + 0.009	36,9	+ 0.003 + 0.006
50 F	4	9.5	30	+ 0.005 + 0.007	29,05	+ 0.003 + 0.005
63 A+E	6.3	14.7	48	+ 0.007 + 0.011	46,53	+ 0.003 + 0.007
63 F	5	11	38	+ 0.006 + 0.009	36,9	+ 0.003 + 0.006
100 A	10	24	75	+ 0.009 + 0.015	72,6	+ 0.003 + 0.009

COASSIALITA' PORTAPINZE

La norma DIN69882-6 ammette un'errore massimo di 0.005 mm. per i portapinze DIN6499.

COASSIALITA' PORTAFRESE FISSI E COMBINATI

I portafrese fissi e combinati rispondono ai criteri prescritti dalla norma DIN69882-2, la quale prevede per i Ø 16 / 22 / 27 / 32 una coassialità di 0,01.

COASSIALITA' PORTAFRESE WELDON

Secondo la normativa DIN 69882-4 il portafrese WELDON deve rispondere ai seguenti requisiti:

Foro: tolleranza H5

Coassialità: 0.005

EQUILIBRATURA

Tutti i nostri mandrini presenti in questa categoria sono prebilanciati in classe G 6,3 a 8000 rpm min-1 o bilanciati fino a 25.000 rpm min-1.

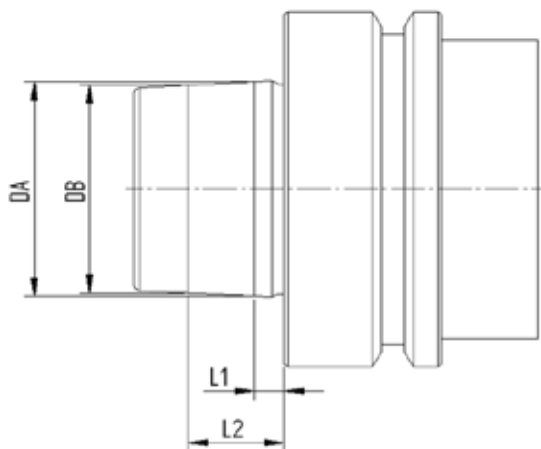
DATI COSTRUTTIVI

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



ALL PAGNONI TOOLHOLDERS ARE MANUFACTURED ACCORDING TO DIN NORMS.

THESE NORMS PROVIDE THE SAME CLASSES OF TOLLERANCE FOR THE ATTACHMENT DIN69893 A+E+F

CONE'S TOLERANCE

HSK	L1	L2	D.A.	D.B.
32 A	3.2	7.3	24 + 0.005 + 0.007	23,27 + 0.003 + 0.005
40 A+E	4	9.5	30 + 0.005 + 0.007	29,05 + 0.003 + 0.005
50 A+E	5	11	38 + 0.006 + 0.009	36,9 + 0.003 + 0.006
50 F	4	9.5	30 + 0.005 + 0.007	29,05 + 0.003 + 0.005
63 A+E	6.3	14.7	48 + 0.007 + 0.011	46,53 + 0.003 + 0.007
63 F	5	11	38 + 0.006 + 0.009	36,9 + 0.003 + 0.006
100 A	10	24	75 + 0.009 + 0.015	72,6 + 0.003 + 0.009

COLLET CHUCK'S RUNOUT ACCURACY

The norm DIN69882-6 permits a runout error of 0.005 mm. for DIN6499 collet chucks.

SHELL END MILL ADAPTOR'S RUNOUT ACCURACY

Our shell end mill adaptors meet the requirements of the norm DIN69882-2, which prescribes for diameters Ø 16 / 22 / 27 / 32 a runout accuracy of 0,01.

WELDON END MILL HOLDER'S RUNOUT ACCURACY

According to norm DIN 69882-4 WELDON end end mill holders have to meet the following requirements:

Bore: H5

Runout accuracy: 0.005

BALANCING

All our toolholders of this category are pre-balanced in grade G 6,3 at 8000 rpm or balanced until 25.000 rpm.

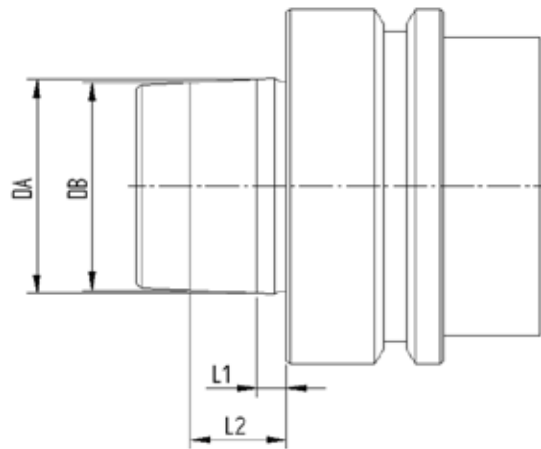
CONSTRUCTIVE FEATURES

- Manufactured with Casehardening Steel.
- Casehardened with depth 0,4 - 0,5 mm.
- Hardened-Tempered.
- Hardness HRC 58 ± 2, strenght 800-1000 N / mm2.
- Black oxided.
- Thread of collet nuts, internal and external diameters are completely grinding finished
- Tested 100% with certified measuring instruments.



ALLE PAGNONI - STEILGEKELAUFNAMEN WERDEN NACH DEN DIN - NORMEN ANGEFERTIGT.
DIESE NORMEN SEHEN DIE GLEICHEN TOLERANZKLASSEN FÜR DIE DIN69893 A+E+F AUFNAHMEN VOR.

KEGELSCHAFTTOLERANZ



HSK	L1	L2	D.A.	D.B.
32 A	3.2	7.3	24 + 0.005 + 0.007	23,27 + 0.003 + 0.005
40 A+E	4	9.5	30 + 0.005 + 0.007	29,05 + 0.003 + 0.005
50 A+E	5	11	38 + 0.006 + 0.009	36,9 + 0.003 + 0.006
50 F	4	9.5	30 + 0.005 + 0.007	29,05 + 0.003 + 0.005
63 A+E	6.3	14.7	48 + 0.007 + 0.011	46,53 + 0.003 + 0.007
63 F	5	11	38 + 0.006 + 0.009	36,9 + 0.003 + 0.006
100 A	10	24	75 + 0.009 + 0.015	72,6 + 0.003 + 0.009

RUNDLAUFGENAUIGKEIT DER SPANNZANGENAUFNAHME

Die DIN 69882-6 Norm schreibt eine Rundlaufgenauigkeit zwischen Aussenkegel und Innenkegel/Spannzangensitz für die DIN 6499 Spannzangenaufnahmen von 0,005 vor.

AUFSTECKFRÄSDORNE - RUNDLAUFGENAUIGKEIT

Pagnoni-Aufsteckfräsdorne entsprechen der DIN 69882-2 Norm, die für die $\varnothing 16 / 22 / 27 / 32$ eine Rundlaufgenauigkeit von 0,01 vorsieht.

WELDON AUFSTECKFRÄSDORNE - RUNDLAUFGENAUIGKEIT

Nach der DIN 69882-4 Norm muß der Weldon - Aufsteckfräsdorn die folgenden Forderungen aufweisen:

Bohrung: toleranz H5

Rundlaufgenauigkeit: 0.005

WUCHTUNG

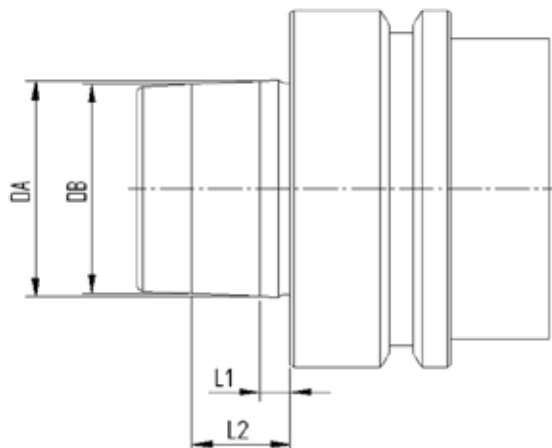
Alle Steilkegelaufnahmen dieser Gruppe sind in Klasse G 6,3 auf 8.000 U/Min -1 vorgewuchtet oder bis auf 25.000 U/Min -1 gewuchtet.

KONSTRUKTIONSDATEN

- aus legiertem Einastzstahl angefertigt
- in der Einsatzhärtetiefe von 0,4 - 0,5 mm zementiert
- gehärtet, angelassen
- Härte HRC 58 ± 2, Festigkeit 800-1000 N / mm².
- Brüniert
- inneres, äußeres Schleifen und am Gewinde der Spannzangenmutter
- 100% durch zertifizierte Meßinstrumente geprüft.



TOUS LES MANDRINS PORTE-OUTILS PAGNONI SONT FABRIQUÉS SELON LES NORMES DIN
QUI PRÉVOIENT LES MÊMES CLASSES DE TOLÉRANCE POUR LES ATTACHEMENT DIN69893 A+E+F

TOLLERANCE DU CONE

HSK	L1	L2	D.A.	D.B.
32 A	3.2	7.3	24 + 0.005 + 0.007	23,27 + 0.003 + 0.005
40 A+E	4	9.5	30 + 0.005 + 0.007	29,05 + 0.003 + 0.005
50 A+E	5	11	38 + 0.006 + 0.009	36,9 + 0.003 + 0.006
50 F	4	9.5	30 + 0.005 + 0.007	29,05 + 0.003 + 0.005
63 A+E	6.3	14.7	48 + 0.007 + 0.011	46,53 + 0.003 + 0.007
63 F	5	11	38 + 0.006 + 0.009	36,9 + 0.003 + 0.006
100 A	10	24	75 + 0.009 + 0.015	72,6 + 0.003 + 0.009

COAXIALITÉ PORTE-PINCE

La norme DIN 69882-6 permet une erreur de 0,005 mm. Maximum pour les porte-pinces DIN 6499.

COAXIALITÉ PORTE-FRAISES FIXES ET COMBINÉS

Les porte-fraises fixes et combinés de notre production suivent la spécification de la norme DIN69882-2 qui prévoit pour les diamètres 16 / 22 / 27 / 32 une coaxialité de 0,01.

COAXIALITÉ PORTE-FRAISES WELDON

Suivant les spécifications DIN69882-4 les porte-fraises WELDON doivent suivre les conditions suivantes:

Trou: H5 runout

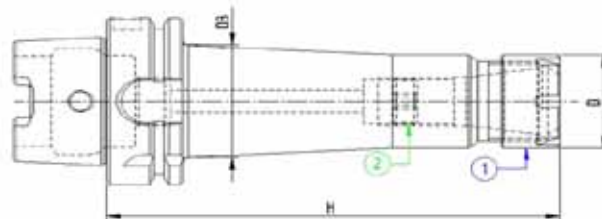
Coaxialité: 0.005

EQUILIBRAGE

La plupart des porte-outils sont pré-équilibrés en classe G 6,3 8.000 Tr/Min -1 ou équilibrés jusqu'à 25.000 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 / mm².
- Brunis.
- Retification du cône intérieur, extérieur et dans le filetage des écrous qui serrent la pince.
- Contrôlés à 100% avec des instruments de mesure certifiés.





STANDARD

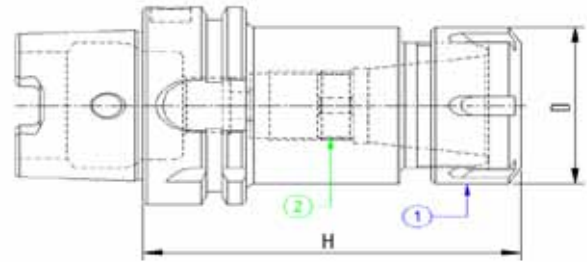
Codice	HSK	Descrizione	ER	D	H	D3	G6.3 15000
65APM207	50/A	HSK50/A DIN69893 P/P H100 ER11MINI	11	16	100	20	●
65APM210	50/A	HSK50/A DIN69893 P/P H100 ER16MINI	16	22	100	26	●

L = 160

Codice	HSK	Descrizione	ER	D	H	D3	G6.3 15000
65APM407	50/A	HSK50/A DIN69893 P/P H160 ER11MINI	11	16	160	25	●
65APM410	50/A	HSK50/A DIN69893 P/P H160 ER16MINI	16	22	160	28	●

COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

ER MINI	Ghiera	Q.tà	Grano	Q.tà
				
	1		2	
11	911GHRMN	1	100601004	1
16	916GHRMN	1	101001601	1





STANDARD

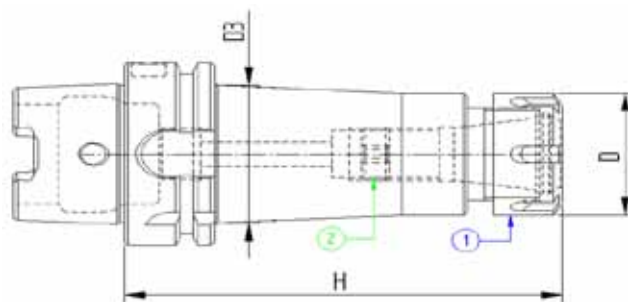
Codice	HSK	Descrizione	ER	D	H	G6.3 15000
65APP110	50/A	HSK50/A DIN69893 P/P H70 ER16	16	32	70	●
65APP113	50/A	HSK50/A DIN69893 P/P H70 ER20	20	35	70	●
65APP116	50/A	HSK50/A DIN69893 P/P H70 ER25	25	42	70	●
65APP120	50/A	HSK50/A DIN69893 P/P H70 ER32	32	50	70	●
65APP126	50/A	HSK50/A DIN69893 P/P H75 ER40	40	63	75	●

L = 100

Codice	HSK	Descrizione	ER	D	H	G6.3 15000
65APP210	50/A	HSK50/A DIN69893 P/P H100 ER16	16	32	100	●
65APP213	50/A	HSK50/A DIN69893 P/P H100 ER20	20	35	100	●
65APP216	50/A	HSK50/A DIN69893 P/P H100 ER25	25	42	100	●
65APP220	50/A	HSK50/A DIN69893 P/P H100 ER32	32	50	100	●
65APP226	50/A	HSK50/A DIN69893 P/P H100 ER40	40	63	100	●



COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

ER	Ghiera	Q.tà	Grano	Q.tà
				
	1		2	
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	HSK	Descrizione	ER	D	H	D3	G6.3 15000
65APP410	50/A	HSK50/A DIN69893 P/P H160 ER16	16	32	160	-	●
65APP413	50/A	HSK50/A DIN69893 P/P H160 ER20	20	35	160	-	●
65APP416	50/A	HSK50/A DIN69893 P/P H160 ER25	25	42	160	-	●
65APP420	50/A	HSK50/A DIN69893 P/P H160 ER32	32	50	160	-	●
65APP426	50/A	HSK50/A DIN69893 P/P H160 ER40	40	63	160	-	●

COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

ER	Ghiera	Q.tà	Grano	Q.tà
				
	1		2	
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

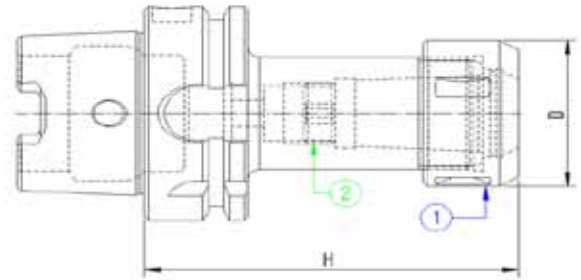


MANDRINI PORTAPINZA TIPO EOC
 EOC COLLET CHUCK
 MANDRINS A PINCES TYPE EOC
 SPANNZANGENFUTTER EOC TYP





DIN 69893

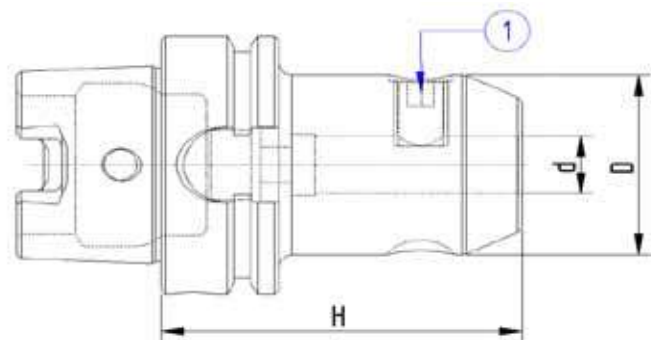
DIN 6388



Codice	HSK	Descrizione	EOC	D	H	G6.3 15000
65APO216	50/A	HSK50/A DIN69893 P/P H100 EOC16	16	43	100	●
65APO225	50/A	HSK50/A DIN69893 P/P H100 EOC25	25	60	100	●

COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

EOC	Ghiera	Q.tà	Ghiera Interna	Q.tà
				
16	916GHROS	1	101815801	1
25	925GHROS	1	102215901	1



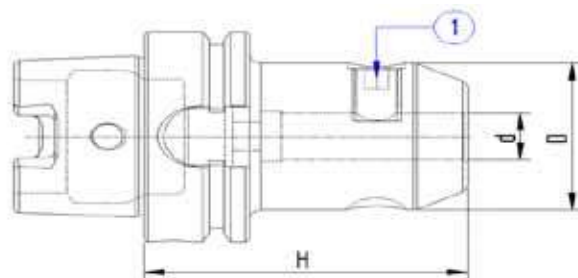
Codice	HSK	Descrizione	d	D	H	G6.3 15000
65AWLD06	50/A	HSK50/A DIN69893 WELDON H65 D.6	6	25	65	●
65AWLD08	50/A	HSK50/A DIN69893 WELDON H65 D.8	8	28	65	●
65AWLD10	50/A	HSK50/A DIN69893 WELDON H65 D.10	10	35	65	●
65AWLD12	50/A	HSK50/A DIN69893 WELDON H80 D.12	12	42	80	●
65AWLD14	50/A	HSK50/A DIN69893 WELDON H80 D.14	14	44	80	●
65AWLD16	50/A	HSK50/A DIN69893 WELDON H80 D.16	16	48	80	●
65AWLD18	50/A	HSK50/A DIN69893 WELDON H80 D.18	18	50	80	●
65AWLD20	50/A	HSK50/A DIN69893 WELDON H80 D.20	20	52	80	●
65AWLD25	50/A	HSK50/A DIN69893 WELDON H105 D.25	25	65	105	●
65AWLD32	50/A	HSK50/A DIN69893 WELDON H120 D.32	32	72	120	●

COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

Ø WLD	Grano	Q.tà
-------	-------	------



6	100601002	1
8	100801002	1
10	101001202	1
12 - 14	101201602	1
16 - 18	101401602	1
20	101601602	1
25	101802002	2
32	102002002	2



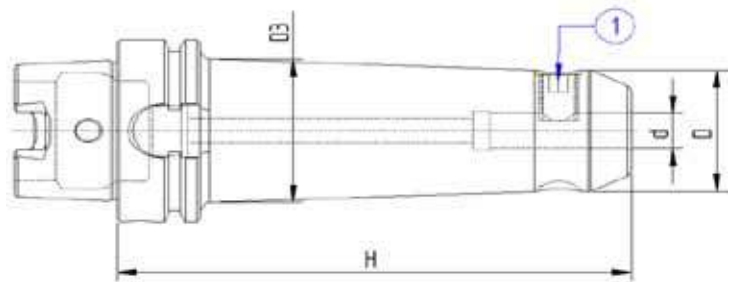
Codice	HSK	Descrizione	d	D	H	G6.3 15000
65AWE206	50/A	HSK50/A DIN69893 WELDON H100 D.6	6	25	100	●
65AWE208	50/A	HSK50/A DIN69893 WELDON H100 D.8	8	28	100	●
65AWE210	50/A	HSK50/A DIN69893 WELDON H100 D.10	10	35	100	●
65AWE212	50/A	HSK50/A DIN69893 WELDON H100 D.12	12	42	100	●
65AWE214	50/A	HSK50/A DIN69893 WELDON H100 D.14	14	44	100	●
65AWE216	50/A	HSK50/A DIN69893 WELDON H100 D.16	16	48	100	●
65AWE218	50/A	HSK50/A DIN69893 WELDON H100 D.18	18	50	100	●
65AWE220	50/A	HSK50/A DIN69893 WELDON H100 D.20	20	52	100	●

COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

Ø WLD	Grano	Q.tà
-------	-------	------



6	100601002	1
8	100801002	1
10	101001202	1
12 - 14	101201602	1
16 - 18	101401602	1
20	101601602	1



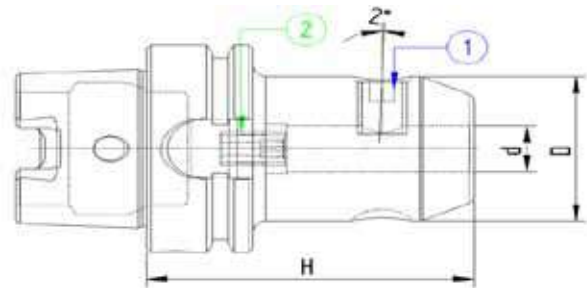
Codice	HSK	Descrizione	d	D	H	D3	G6.3 15000
65AWE406	50/A	HSK50/A DIN69893 WELDON H160 D.6	6	25	160	-	●
65AWE408	50/A	HSK50/A DIN69893 WELDON H160 D.8	8	28	160	-	●
65AWE410	50/A	HSK50/A DIN69893 WELDON H160 D.10	10	35	160	-	●
65AWE412	50/A	HSK50/A DIN69893 WELDON H160 D.12	12	42	160	-	●
65AWE414	50/A	HSK50/A DIN69893 WELDON H160 D.14	14	44	160	-	●
65AWE416	50/A	HSK50/A DIN69893 WELDON H160 D.16	16	48	160	-	●
65AWE418	50/A	HSK50/A DIN69893 WELDON H160 D.18	18	50	160	-	●
65AWE420	50/A	HSK50/A DIN69893 WELDON H160 D.20	20	52	160	-	●
65AWE425	50/A	HSK50/A DIN69893 WELDON H160 D.25	25	65	160	-	●

COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

Ø WLD	Grano	Q.tà
-------	-------	------



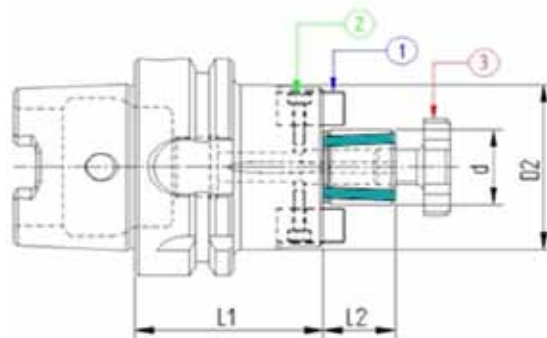
6	100601002	1
8	100801002	1
10	101001202	1
12 - 14	101201602	1
16 - 18	101401602	1
20	101601602	1
25	101802002	2



Codice	HSK	Descrizione	d	D	H	G6.3 15000
65AWHN06	50/A	HSK50/A DIN69893 W/NOTCH H80 D06	6	25	80	●
65AWHN08	50/A	HSK50/A DIN69893 W/NOTCH H80 D08	8	28	80	●
65AWHN10	50/A	HSK50/A DIN69893 W/NOTCH H80 D10	10	35	80	●
65AWHN12	50/A	HSK50/A DIN69893 W/NOTCH H90 D12	12	42	90	●
65AWHN14	50/A	HSK50/A DIN69893 W/NOTCH H90 D14	14	44	90	●
65AWHN16	50/A	HSK50/A DIN69893 W/NOTCH H90 D16	16	48	90	●
65AWHN18	50/A	HSK50/A DIN69893 W/NOTCH H90 D18	18	50	90	●
65AWHN20	50/A	HSK50/A DIN69893 W/NOTCH H100 D20	20	50	100	●
65AWHN25	50/A	HSK50/A DIN69893 W/NOTCH H110 D25	25	65	110	●
65AWHN32	50/A	HSK50/A DIN69893 W/NOTCH H120 D32	32	72	120	●




COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

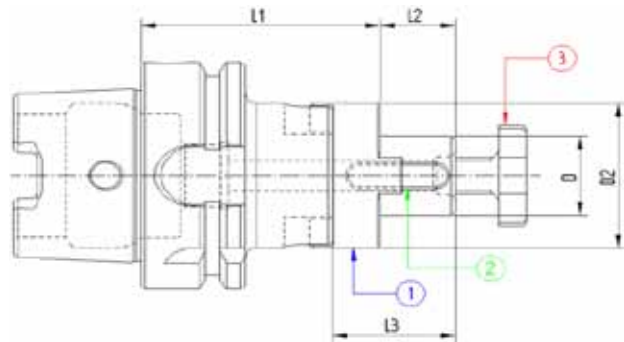
Ø WHN	Grano	Q.tà	Grano	Q.tà
				
	1		2	
6	100601002	1	100501601	1
8	100801002	1	100601601	1
10	101001202	1	100801601	1
12 - 14	101201602	1	100801601	1
16 - 18	101401602	1	100801601	1
20	101601602	1	100801601	1
25	101802002	2	100801601	1
32	102002002	2	101603501	1



Codice	HSK	Descrizione	L1	L2	d	D2	G6.3 15000
65APF116	50/A	HSK50/A DIN69893 P/F FISSO H50 D16	50	17	16	38	●
65APF122	50/A	HSK50/A DIN69893 P/F FISSO H60 D22	60	19	22	48	●
65APF127	50/A	HSK50/A DIN69893 P/F FISSO H60 D27	60	21	27	58	●
65APF132	50/A	HSK50/A DIN69893 P/F FISSO H60 D32	60	24	32	66	●
65APF140	50/A	HSK50/A DIN69893 P/F FISSO H70 D40	70	27	40	80	●




COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE


d / D2	Tassello	Q.tà	Vite	Q.tà	Vite Croce	Q.tà
						
16 / 38	916TSL01	2	110301001	2	916VTC02	1
22 / 48	922TSL01	2	110301201	2	922VTC02	1
27 / 58	927TSL01	2	110401601	2	927VTC02	1
32 / 66	932TSL01	2	110601601	2	932VTC02	1
40 / 80	940TSL01	2	110601601	2	940VTC02	1



Codice	HSK	Descrizione	D	L1	L2	L3	D2
65APU116	50/A	HSK 50/A P/FRESA UNIV.H50 D.16	16	50	17	27	32
65APU122	50/A	HSK 50/A P/FRESA UNIV.H50 D.22	22	50	19	31	40
65APU127	50/A	HSK 50/A P/FRESA UNIV.H65 D.27	27	65	21	33	48
65APU132	50/A	HSK 50/A P/FRESA UNIV.H65 D.32	32	65	24	38	58
65APU140	50/A	HSK 50/A P/FRESA UNIV.H75 D.40	40	75	27	41	70

COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

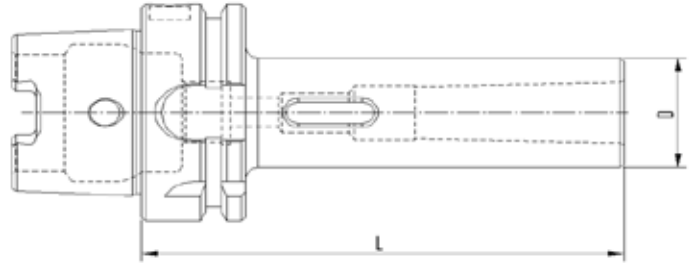
D	Giunto	Q.tà	Linguetta	Q.tà	Vite Croce	Q.tà
						
	1		2		3	
16	916GNT01	1	170402004	1	916VTC02	1
22	922GNT01	1	170602506	1	922VTC02	1
27	927GNT01	1	170702507	1	927VTC02	1
32	932GNT01	1	170802807	1	932VTC02	1
40	940GNT01	1	171003208	1	940VTC02	1


MANDRINI ATTACCO CONO MORSE PER PUNTE
MORSE TAPER ADAPTORS FOR DRILLS
DOUILLES POUR CONE MORSE A TENON
ZWISCHENHULSEN FUER MORSEKEGEL MIT AUSTREIBLAPPEN




DIN 69893

DIN 228-2

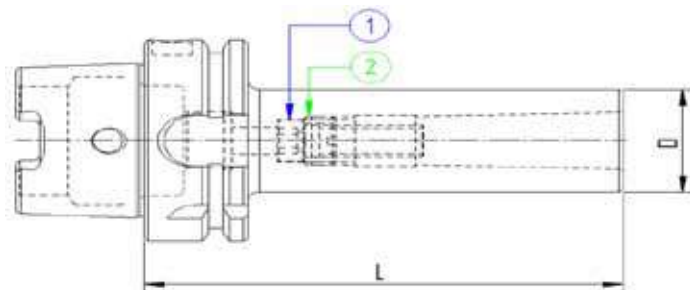


Codice	HSK	Descrizione	L	D
65AMP101	50/A	HSK50/A DIN69893 H100 CM1PUNTE	100	25
65AMP102	50/A	HSK50/A DIN69893 H120 CM2PUNTE	120	32
65AMP103	50/A	HSK50/A DIN69893 H140 CM3PUNTE	140	40


MANDRINI ATTACCO CONO MORSE PER FRESE
MORSE TAPER ADAPTER WITH THREAD
DOUILLES POUR CONE MORSE AVEC TARAUDAGE
ZWISCHENHULSEN FÜR MORSEKEGEL MIT ANZUGSGEWINDE





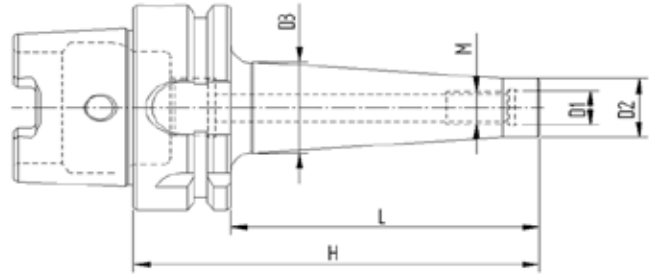
DIN 69893
DIN 228-2



Codice	HSK	Descrizione	L	D
65AMF101	50/A	HSK50/A DIN69893 H100 CM1FRESE	100	25
65AMF102	50/A	HSK50/A DIN69893 H120 CM2FRESE	120	32
65AMF103	50/A	HSK50/A DIN69893 H140 CM3FRESE	140	40

COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

CM	Ghiera Interna	Q.tà	Vite	Q.tà
				
	2		1	
CM1	-	-	110604501	1
CM2	121500802	1	111003014	1
CM3	122000903	1	111204003	1



L = 59

Codice	HSK	Descrizione	D1	D2	D3	H	L	M	G2.5 25000
65AAF106	50/A	HSK50/A DIN69893 P/F AT.FIL.M6x59	6,5	9,7	10	59	33	M6	●
65AAF108	50/A	HSK50/A DIN69893 P/F AT.FIL.M8x59	8,5	13	15	59	33	M8	●
65AAF110	50/A	HSK50/A DIN69893 P/F AT.FIL.M10x59	10,5	18	20	59	33	M10	●
65AAF112	50/A	HSK50/A DIN69893 P/F AT.FIL.M12x59	12,5	21	24	59	33	M12	●

L = 84

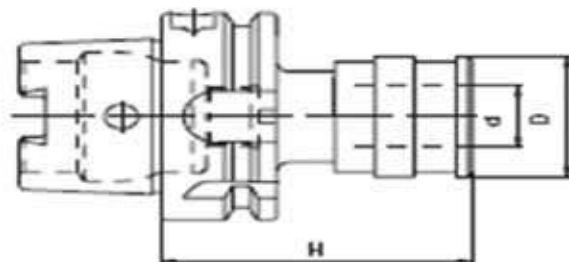
Codice	HSK	Descrizione	D1	D2	D3	H	L	M	G2.5 25000
65AAF206	50/A	HSK50/A DIN69893 P/F AT.FIL.M6x84	6,5	9,7	20	84	58	M6	●
65AAF208	50/A	HSK50/A DIN69893 P/F AT.FIL.M8x84	8,5	13	23	84	58	M8	●
65AAF210	50/A	HSK50/A DIN69893 P/F AT.FIL.M10x84	10,5	18	25	84	58	M10	●
65AAF212	50/A	HSK50/A DIN69893 P/F AT.FIL.M12x84	12,5	21	24	84	58	M12	●

L = 109

Codice	HSK	Descrizione	D1	D2	D3	H	L	M	G2.5 25000
65AAF306	50/A	HSK50/A DIN69893 P/F AT.FIL.M6x109	6,5	9,7	23	109	83	M6	●
65AAF308	50/A	HSK50/A DIN69893 P/F AT.FIL.M8x109	8,5	13	23	109	83	M8	●
65AAF310	50/A	HSK50/A DIN69893 P/F AT.FIL.M10x109	10,5	18	28	109	83	M10	●
65AAF312	50/A	HSK50/A DIN69893 P/F AT.FIL.M12x109	12,5	21	31	109	83	M12	●

L = 134

Codice	HSK	Descrizione	D1	D2	D3	H	L	M	G2.5 25000
65AAF408	50/A	HSK50/A DIN69893 P/F AT.FIL.M8x134	8,5	13	25	134	108	M8	●
65AAF410	50/A	HSK50/A DIN69893 P/F AT.FIL.M10x134	10,5	18	30	134	108	M10	●
65AAF412	50/A	HSK50/A DIN69893 P/F AT.FIL.M12x134	12,5	21	31	134	108	M12	●



CON COMPENSAZIONE

Codice	HSK	Descrizione	D	d	H
65APCRM1	50/A	HSK50/A M/PORTAM/C/R H72 GR.1	38	19	72
65APCRM2	50/A	HSK50/A M/PORTAM/C/R H110 GR.2	54	31	110

SENZA COMPENSAZIONE

Codice	HSK	Descrizione	D	d	H
65APRRM1	50/A	HSK50/A M/PORTAM/C/R/R H72 GR.1	38	19	72
65APRRM2	50/A	HSK50/A M/PORTAM/C/R/R H110 GR.2	54	31	110

ACCESSORI - ACCESSORIES - ACCESSOIRES - ZUBEHÖR



RIF. PAGINA **312**



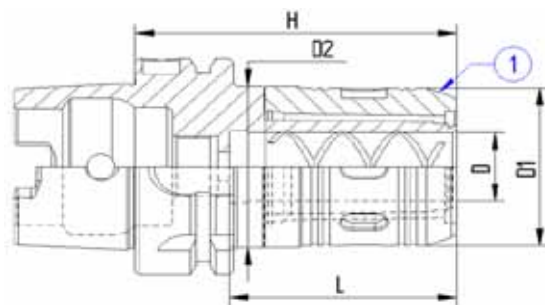
RIF. PAGINA **313**



MANDRINI A FORTE SERRAGGIO
MILLING CHUCK
MANDRINS A FORT SERRAGE
KRAFTSPANNFUTTER



DIN 69893



Codice	HSK	Descrizione	H	D	D1	D2	L	G6.3 12000
65AFS120	50/A	HSK 50/A FORTE SERRAGGIO Ø20 H90	90	20	46	47	60	●
65AFS232	50/A	HSK 50/A FORTE SERRAGGIO Ø32 H110	110	32	62	63	80	●

ACCESSORI - ACCESSORIES - ACCESSOIRES - ZUBEHÖR

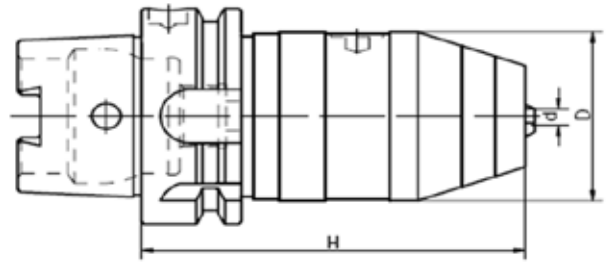


RIF. PAGINA **315**


MANDRINI INTEGRALI CON CHIAVE ESAGONALE
NC-DRILL WITH EXAGONAL KEY LOCK SYSTEM
MANDRINS MONOBLOC-SERRAGE PAR CLE' 6 PANS
NC-KURZBOHRFUTTER FUER SPANNEN DURCH 6 KANTSCHLUSSEL



DIN 69893



Codice	HSK	Descrizione	H	D	Capacità
65AMAZ13	50/A	HSK50/A M/AUTOS./FORI H100 D13	100	50	1-13
65AMAZ16	50/A	HSK50/A M/AUTOS./FORI H105 D16	105	50	3-16


MANDRINI SEMILAVORATI A STELO TENERO
BLANK TOOLHOLDERS WITH SOFT SHANK
BARRE D'ALEPAGE SEMI-FINIES
ROHLINGE MIT WEICHEM SCHAFT

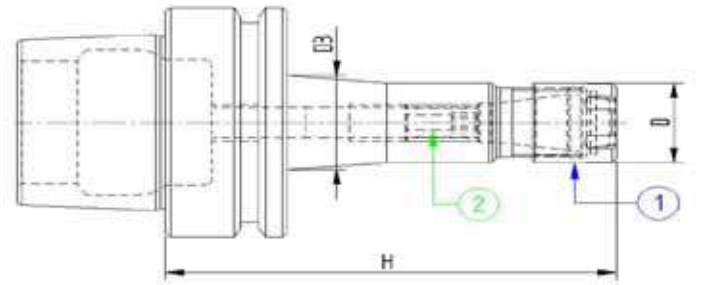


DIN 69893



Codice	HSK	Descrizione	L	D
65AST250	50/A	HSK50/A DIN69893 ST.TENERO D.50x200	200	50
65AST263	50/A	HSK50/A DIN69893 ST.TENERO D.63x200	200	63

HSK 50/E





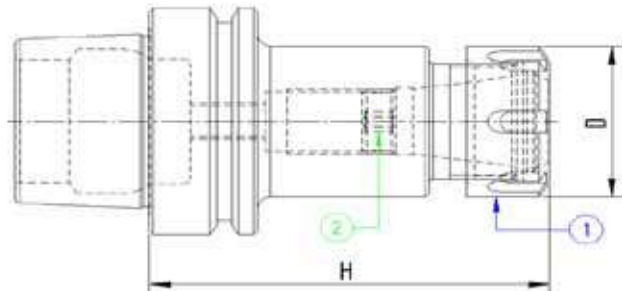
Codice	HSK	Descrizione	ER	D	H	D3	G2.5 20000
65EPM207	50/E	HSK50/E DIN69893 P/P H100 ER11MINI	11	16	100	20	●
65EPM210	50/E	HSK50/E DIN69893 P/P H100 ER16MINI	16	22	100	24	●

L = 160

Codice	HSK	Descrizione	ER	D	H	D3	G2.5 20000
65EPM407	50/E	HSK50/E DIN69893 P/P H160 ER11MINI	11	16	160	24	●
65EPM410	50/E	HSK50/E DIN69893 P/P H160 ER16MINI	16	22	160	30	●


COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

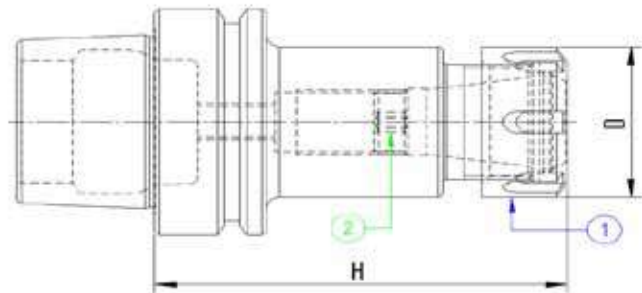
ER MINI	Ghiera	Q.tà	Grano Interno	Q.tà
11		1		1
16	911GHRMN	1	100601001	1
	916GHRMN	1	101001601	1



Codice	HSK	Descrizione	ER	D	H	G2.5 20000
65EPP210	50/E	HSK50/E DIN69893 P/P H=100 ER16	16	32	100	●
65EPP213	50/E	HSK50/E DIN69893 P/P H=100 ER20	20	35	100	●
65EPP216	50/E	HSK50/E DIN69893 P/P H=100 ER25	25	42	100	●
65EPP220	50/E	HSK50/E DIN69893 P/P H=100 ER32	32	50	100	●
65EPP226	50/E	HSK50/E DIN69893 P/P H=100 ER40	40	63	100	●



COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

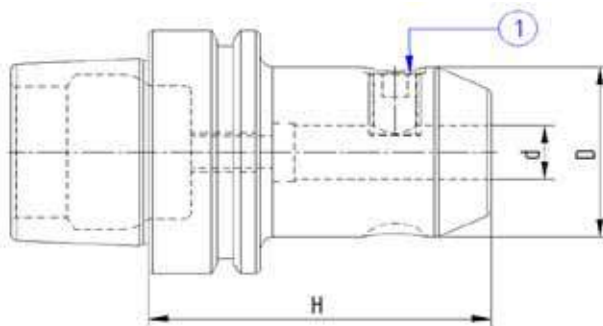
ER	Ghiera	Q.tà	Grano Interno	Q.tà
				
16	916GHREQ	1	101001601	1
20	920GHREQ	1	101001601	1
25	925GHREQ	1	101815801	1
32	932GHREQ	1	102215901	1
40	940GHREQ	1	103015901	1



Codice	HSK	Descrizione	ER	D	H	G2.5 20000
65EPP410	50/E	HSK50/E DIN69893 P/P H160 ER16	16	32	160	●
65EPP413	50/E	HSK50/E DIN69893 P/P H160 ER20	20	35	160	●
65EPP416	50/E	HSK50/E DIN69893 P/P H160 ER25	25	42	160	●
65EPP420	50/E	HSK50/E DIN69893 P/P H160 ER32	32	50	160	●
65EPP426	50/E	HSK50/E DIN69893 P/P H160 ER40	40	63	160	●

COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

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



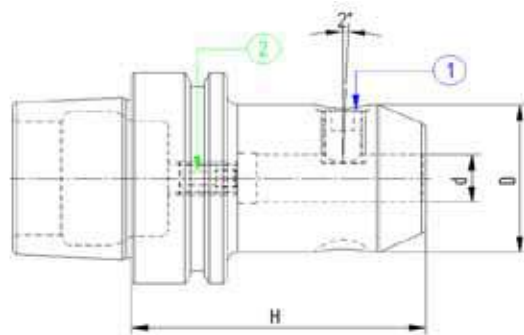
Codice	HSK	Descrizione	d	D	H	G2.5 20000
65EWLD06	50/E	HSK50/E DIN69893 WELDON H65 D.06	6	25	65	●
65EWLD08	50/E	HSK50/E DIN69893 WELDON H65 D.08	8	28	65	●
65EWLD10	50/E	HSK50/E DIN69893 WELDON H65 D.10	10	35	65	●
65EWLD12	50/E	HSK50/E DIN69893 WELDON H80 D.12	12	42	80	●
65EWLD14	50/E	HSK50/E DIN69893 WELDON H80 D.14	14	44	80	●
65EWLD16	50/E	HSK50/E DIN69893 WELDON H80 D.16	16	48	80	●
65EWLD18	50/E	HSK50/E DIN69893 WELDON H80 D.18	18	50	80	●
65EWLD20	50/E	HSK50/E DIN69893 WELDON H80 D.20	20	52	80	●
65EWLD25	50/E	HSK50/E DIN69893 WELDON H105 D.25	25	65	105	●

COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

Ø WLD	Grano	Q.tà
-------	-------	------





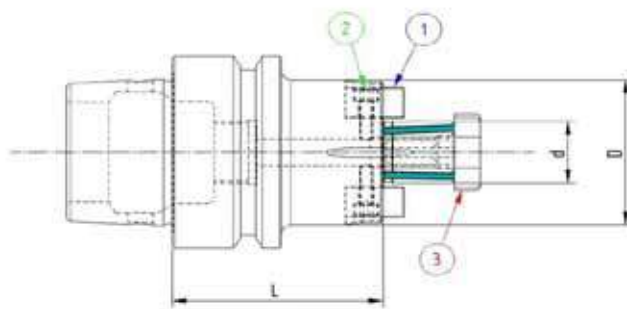
6	100601002	1
8	100801002	1
10	101001202	1
12 - 14	101201602	1
16 - 18	101401602	1
20	101601602	1
25	101802002	2



Codice	HSK	Descrizione	d	D	H	G2.5 20000
65EWHN06	50/E	HSK50/E DIN69893 W/NOTCH H80 D06	6	25	80	●
65EWHN08	50/E	HSK50/E DIN69893 W/NOTCH H80 D08	8	28	80	●
65EWHN10	50/E	HSK50/E DIN69893 W/NOTCH H80 D10	10	35	80	●
65EWHN12	50/E	HSK50/E DIN69893 W/NOTCH H90 D12	12	42	90	●
65EWHN14	50/E	HSK50/E DIN69893 W/NOTCH H90 D14	14	44	90	●
65EWHN16	50/E	HSK50/E DIN69893 W/NOTCH H100 D16	16	48	100	●
65EWHN18	50/E	HSK50/E DIN69893 W/NOTCH H100 D18	18	50	100	●
65EWHN20	50/E	HSK50/E DIN69893 W/NOTCH H100 D20	20	52	100	●
65EWHN25	50/E	HSK50/E DIN69893 W/NOTCH H110 D25	25	65	110	●
65EWHN32	50/E	HSK50/E DIN69893 W/NOTCH H120 D32	32	72	120	●




COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE


Ø WHN	Grano	Q.tà	Vite	Q.tà
				
				
6	100601004	1	100501601	1
8	100801004	1	100601601	1
10	101001204	1	100801601	1
12 - 14	101201604	1	101002501	1
16 - 18	101401604	1	101002501	1
20	101601604	1	101002501	1
25	101802002	2	101002501	1
32	102002002	2	101002501	1



Codice	HSK	Descrizione	L	d	D	G2.5 20000
65EPF116	50/E	HSK50/E DIN69893 P/F FISSO H50 D16	50	16	38	●
65EPF122	50/E	HSK50/E DIN69893 P/F FISSO H60 D22	60	22	48	●
65EPF127	50/E	HSK50/E DIN69893 P/F FISSO H60 D27	60	27	58	●
65EPF132	50/E	HSK50/E DIN69893 P/F FISSO H60 D32	60	32	66	●
65EPF140	50/E	HSK50/E DIN69893 P/F FISSO H70 D40	70	40	80	●

COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

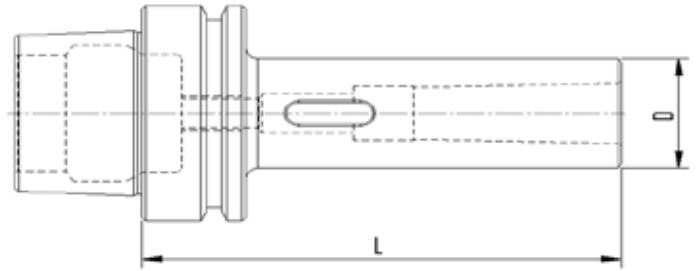
Ø	Tassello	Q.tà	Vite	Q.tà	Vite Croce	Q.tà
						
	1		2		3	
16	916TSL01	2	110301001	2	916VTC02	1
22	922TSL01	2	110301201	2	922VTC02	1
27	927TSL01	2	110401601	2	927VTC02	1
32	932TSL01	2	110601601	2	932VTC02	1
40	940TSL01	2	110601601	2	940VTC02	1


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




DIN 69893

DIN 228-2

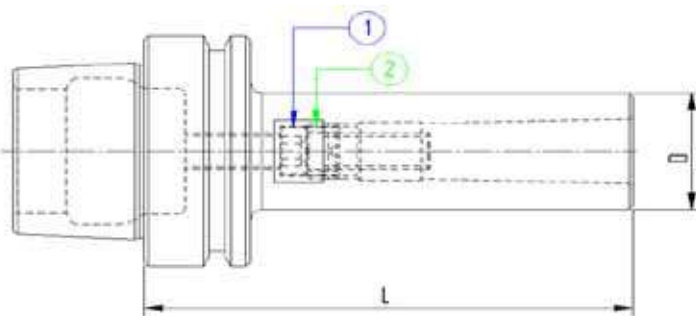


Codice	HSK	Descrizione	L	D
65EMP101	50/E	HSK50/E DIN69893 H100 CM1PUNTE	100	25
65EMP102	50/E	HSK50/E DIN69893 H120 CM2PUNTE	120	32
65EMP103	50/E	HSK50/E DIN69893 H140 CM3PUNTE	140	40
65EMP104	50/E	HSK50/E DIN69893 H160 CM4PUNTE	160	48


MANDRINI ATTACCO CONO MORSE PER FRESE
MORSE TAPER ADAPTER WITH THREAD
DOUILLES POUR CONE MORSE AVEC TARAUDAGE
ZWISCHENHUELSEN FUER MORSEKEGEL MIT ANZUGSGEWINDE





DIN 69893
DIN 228-2 C



Codice	HSK	Descrizione	L	D
65EMF101	50/E	HSK50/E DIN69893 H105 CM1FRESE	105	25
65EMF102	50/E	HSK50/E DIN69893 H120 CM2FRESE	120	32
65EMF103	50/E	HSK50/E DIN69893 H140 CM3FRESE	140	40

COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

CM	Ghiera Interna	Q.tà	Vite	Q.tà
				
1			2	
CM1	121206502	1	110603501	1
CM2	121500802	1	111003014	1
CM3	122000903	1	111204003	1


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

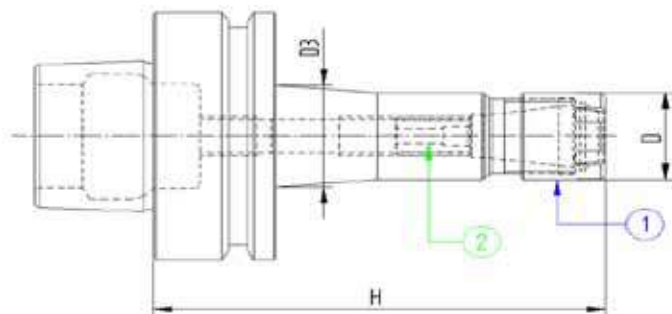


DIN 69893



Codice	HSK	Descrizione	L	D
65EST250	50/E	HSK50/E DIN69893 ST.TENERO D.50x200	200	50
65EST263	50/E	HSK50/E DIN69893 ST.TENERO D.63x200	200	63

HSK 50/F





Codice	HSK	Descrizione	ER	D	H	D3	G2.5 20000
65FPM207	50/F	HSK50/F DIN69893 P/P H100 ER11MINI	11	16	100	20	●
65FPM210	50/F	HSK50/F DIN69893 P/P H100 ER16MINI	16	22	100	24	●

L = 160

Codice	HSK	Descrizione	ER	D	H	D3	G2.5 20000
65FPM407	50/F	HSK50/F DIN69893 P/P H160 ER11MINI	11	16	160	20	●
65FPM410	50/F	HSK50/F DIN69893 P/P H160 ER16MINI	16	22	160	35	●

COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

ER MINI	Ghiera	Q.tà	Grano	Q.tà
				
11	911GHRMN	1	100601004	1
16	916GHRMN	1	101001601	1

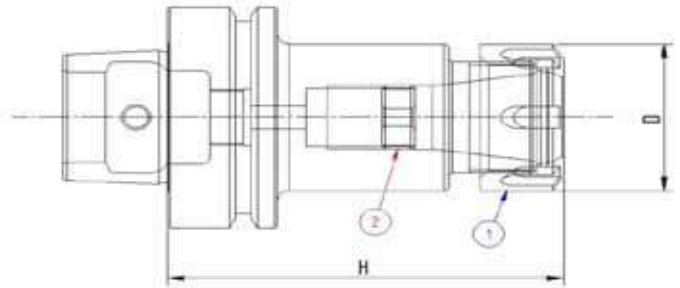


MANDRINI PORTAPINZA TIPO ER
ER COLLET CHUCKS
MANDRINS A PINCES TYPE ER
SPANNZANGENFUTTER ER TYP





DIN 69893

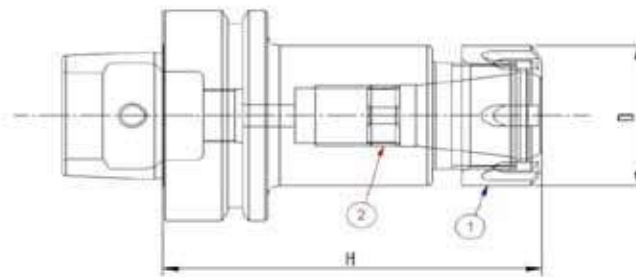
DIN 6499



Codice	HSK	Descrizione	ER	D	H	G2.5 20000
65FPP210	50/F	HSK50/F DIN69893 P/PINZA H.100 ER16	16	32	100	●
65FPP213	50/F	HSK50/F DIN69893 P/PINZA H.100 ER20	20	35	100	●
65FPP216	50/F	HSK50/F DIN69893 P/PINZA H.100 ER25	25	42	100	●
65FPP220	50/F	HSK50/F DIN69893 P/PINZA H.100 ER32	32	50	100	●
65FPP226	50/F	HSK50/F DIN69893 P/PINZA H.100 ER40	40	63	100	●

COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

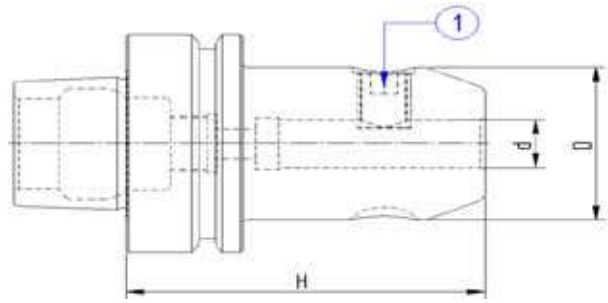
ER	Grano Interno	Q.tà	Ghiera	Q.tà
				
	2		1	
16	101001601	1	916GHREQ	1
20	101001601	1	920GHREQ	1
25	101815801	1	925GHREQ	1
32	102215901	1	932GHREQ	1
40	102215901	1	940GHREQ	1



Codice	HSK	Descrizione	ER	D	L	G2.5 20000
65FPP410	50/F	HSK50/F DIN69893 P/PINZA H.160 ER16	16	32	160	●
65FPP413	50/F	HSK50/F DIN69893 P/PINZA H.160 ER20	20	35	160	●
65FPP416	50/F	HSK50/F DIN69893 P/PINZA H.160 ER25	25	42	160	●
65FPP420	50/F	HSK50/F DIN69893 P/PINZA H.160 ER32	32	50	160	●
65FPP426	50/F	HSK50/F DIN69893 P/PINZA H.160 ER40	40	63	160	●

COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

ER	Grano Interno	Q.tà	Ghiera	Q.tà
		2		1
				1
16	101001601	1	916GHREQ	1
20	101001601	1	920GHREQ	1
25	101815801	1	925GHREQ	1
32	102215901	1	932GHREQ	1
40	102215901	1	940GHREQ	1



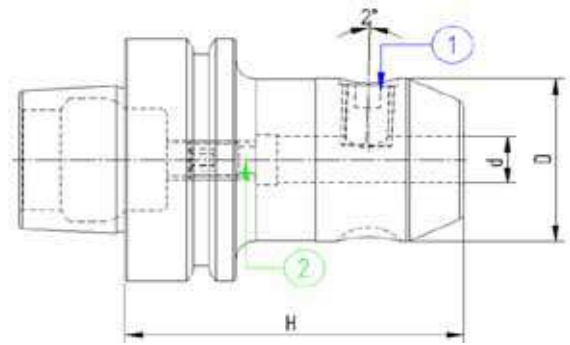
Codice	HSK	Descrizione	d	D	H	G2.5 20000
65FWLD06	50/F	HSK50/F DIN69893 WELDON H.65 D.06	6	25	65	●
65FWLD08	50/F	HSK50/F DIN69893 WELDON H.65 D.08	8	28	65	●
65FWLD10	50/F	HSK50/F DIN69893 WELDON H.65 D.10	10	35	70	●
65FWLD12	50/F	HSK50/F DIN69893 WELDON H.80 D.12	12	42	80	●
65FWLD14	50/F	HSK50/F DIN69893 WELDON H.80 D.14	14	44	80	●
65FWLD16	50/F	HSK50/F DIN69893 WELDON H.80 D.16	16	48	80	●
65FWLD18	50/F	HSK50/F DIN69893 WELDON H.80 D.18	18	50	80	●
65FWLD20	50/F	HSK50/F DIN69893 WELDON H.80 D.20	20	52	80	●
65FWLD25	50/F	HSK50/F DIN69893 WELDON H.105 D.25	25	65	105	●

COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

Ø WLD	Grano	Q.tà
-------	-------	------





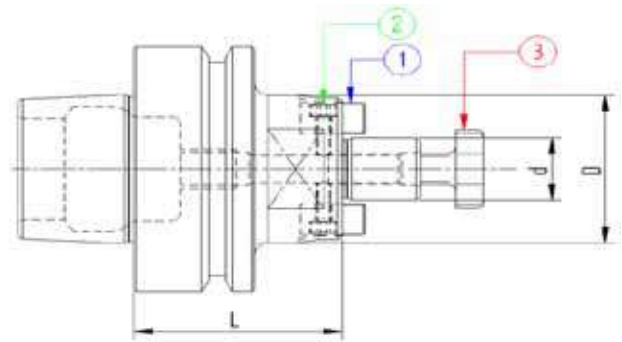
6	100601002	1
8	100801002	1
10	101001202	1
12 - 14	101201602	1
16 - 18	101401602	1
20	101601602	1
25	101802002	2



Codice	HSK	Descrizione	d	D	H	G2.5 20000
65FWHN06	50/F	HSK50/F DIN69893 W/NOTCH H80 D06	6	25	80	●
65FWHN08	50/F	HSK50/F DIN69893 W/NOTCH H80 D08	8	28	80	●
65FWHN10	50/F	HSK50/F DIN69893 W/NOTCH H80 D10	10	35	80	●
65FWHN12	50/F	HSK50/F DIN69893 W/NOTCH H90 D12	12	42	90	●
65FWHN14	50/F	HSK50/F DIN69893 W/NOTCH H90 D14	14	44	90	●
65FWHN16	50/F	HSK50/F DIN69893 W/NOTCH H100 D16	16	48	100	●
65FWHN18	50/F	HSK50/F DIN69893 W/NOTCH H100 D18	18	50	100	●
65FWHN20	50/F	HSK50/F DIN69893 W/NOTCH H100 D20	20	52	100	●
65FWHN25	50/F	HSK50/F DIN69893 W/NOTCH H110 D25	25	65	110	●
65FWHN32	50/F	HSK50/F DIN69893 W/NOTCH H120 D32	32	72	120	●




COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE


Ø WHN	Grano	Q.tà	Grano	Q.tà
				
	1		2	
6	100601002	1	100501601	1
8	100801002	1	100601601	1
10	101001202	1	100601601	1
12 - 14	101201602	1	101002501	1
16 - 18	101401602	1	101002501	1
20	101601602	1	101002501	1
25	101802002	2	102002001	1
32	102002002	2	102002001	1



Codice	HSK	Descrizione	L	d	D	G2.5 20000
65FPF116	50/F	HSK50/F DIN69893 P/F FISSO H50 D16	50	16	38	●
65FPF122	50/F	HSK50/F DIN69893 P/F FISSO H50 D22	50	22	48	●
65FPF127	50/F	HSK50/F DIN69893 P/F FISSO H60 D27	60	27	58	●
65FPF132	50/F	HSK50/F DIN69893 P/F FISSO H60 D32	60	32	66	●
65FPF140	50/F	HSK50/F DIN69893 P/F FISSO H70 D40	70	40	80	●

COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

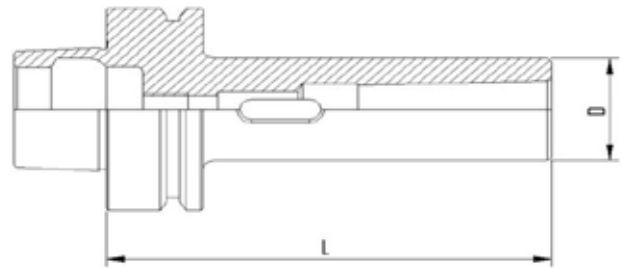
d / D	Tassello	Q.tà	Vite Tassello	Q.tà	Vite Croce	Q.tà
						
	1		2		3	
16 / 38	916TSL01	2	110301001	2	916VTC02	1
22 / 48	922TSL01	2	110301201	2	922VTC02	1
27 / 58	927TSL01	2	110401601	2	927VTC02	1
32 / 66	932TSL01	2	110601601	2	932VTC02	1
40 / 80	940TSL01	2	110601601	2	940VTC02	1


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

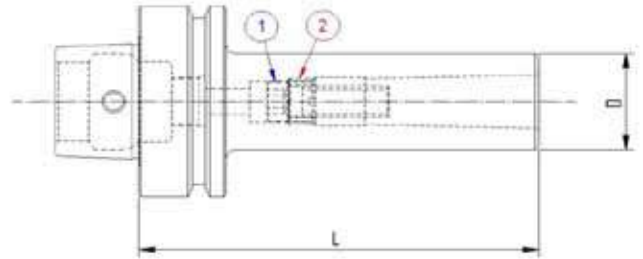


DIN 69893

DIN 228-2



Codice	HSK	Descrizione	L	D
65FMP101	50/F	HSK50/F DIN69893 H100 CM1PUNTE	100	25
65FMP102	50/F	HSK50/F DIN69893 H120 CM2PUNTE	120	32
65FMP103	50/F	HSK50/F DIN69893 H140 CM3PUNTE	140	40
65FMP104	50/F	HSK50/F DIN69893 H160 CM4PUNTE	160	48



Codice	HSK	Descrizione	L	D
65FMF101	50/F	HSK50/F DIN69893 H100 CM1FRESE	100	25
65FMF102	50/F	HSK50/F DIN69893 H120 CM2FRESE	120	32
65FMF103	50/F	HSK50/F DIN69893 H140 CM3FRESE	140	40

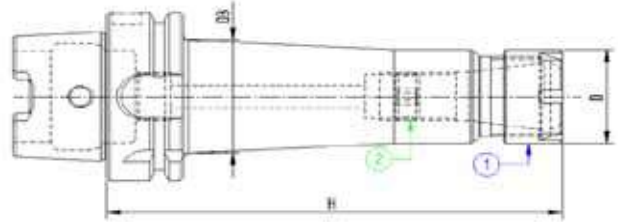
COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

CM	Ghiera Interna	Q.tà	Vite	Q.tà
				
	1		2	
CM1	111206502	1	110603501	1
CM2	121500802	1	111003014	1
CM3	122000903	1	111204003	1





Codice	HSK	Descrizione	L	D
65FST250	50/F	HSK50/F DIN69893 ST.TENERO D.50x200	200	50
65FST263	50/F	HSK50/F DIN69893 ST.TENERO D.63x200	200	63

HSK 63/A



Codice	HSK	Descrizione	ER	D	H	D3	G6.3 15000
66APM107	63/A	HSK63/A DIN69893 P/P H80 ER11MINI	11	16	80	-	●
66APM207	63/A	HSK63/A DIN69893 P/P H100 ER11MINI	11	16	100	20	●
66APM210	63/A	HSK63/A DIN69893 P/P H100 ER16MINI	16	22	100	25	●
66APM213	63/A	HSK63/A DIN69893 P/P H100 ER20MINI	20	28	100	31	●
66APM216	63/A	HSK63/A DIN69893 P/P H100 ER25MINI	25	35	100	38	●
66APM407	63/A	HSK63/A DIN69893 P/P H160 ER11MINI	11	16	160	23	●
66APM410	63/A	HSK63/A DIN69893 P/P H160 ER16MINI	16	22	160	28	●
66APM413	63/A	HSK63/A DIN69893 P/P H160 ER20MINI	20	28	160	35	●
66APM416	63/A	HSK63/A DIN69893 P/P H160 ER25MINI	25	35	160	42	●

COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

ER	Ghiera	Q.tà	Ghiera Interna	Q.tà
				
	1		2	
11	911GHRMN	1	100601004	1
16	916GHRMN	1	101001601	1
20	920GHRMN	1	101001601	1
25	925GHRMN	1	101815801	1

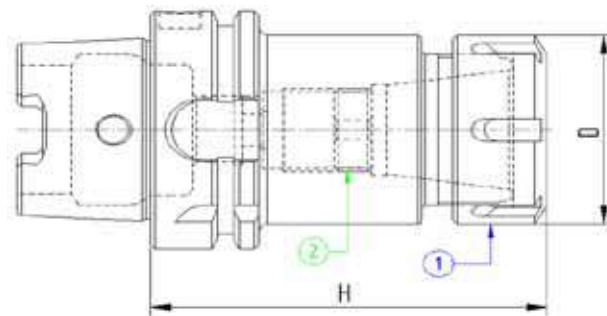


MANDRINI PORTAPINZA TIPO ER
ER COLLET CHUCK
MANDRINS A PINCES TYPE ER
SPANNZANGENFUTTER ER





DIN 69893

DIN 6499



Codice	HSK	Descrizione	ER	D	H	G6.3 15000
66APP110	63/A	HSK63/A DIN69893 P/P H75 ER16	16	32	75	●
66APP113	63/A	HSK63/A DIN69893 P/P H75 ER20	20	35	75	●
66APP116	63/A	HSK63/A DIN69893 P/P H75 ER25	25	42	75	●
66APP120	63/A	HSK63/A DIN69893 P/P H75 ER32	32	50	75	●
66APP126	63/A	HSK63/A DIN69893 P/P H80 ER40	40	63	80	●

COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

ER	Ghiera	Q.tà	Ghiera Interna	Q.tà
				
	1		2	
16	916GHREQ	1	101001601	1
20	920GHREQ	1	101001601	1
25	925GHREQ	1	101815801	1
32	932GHREQ	1	-	-
40	940GHREQ	1	-	-

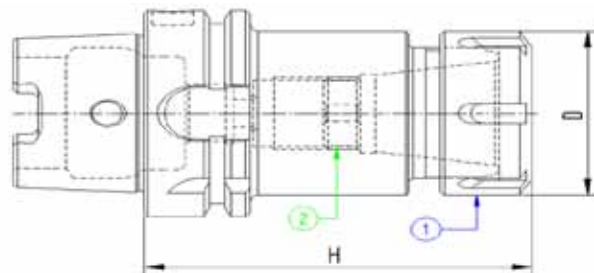


MANDRINI PORTAPINZA TIPO ER
ER COLLET CHUCK
MANDRINS A PINCES TYPE ER
SPANNZANGENFUTTER ER



DIN 69893

DIN 6499



L=100

Codice	HSK	Descrizione	ER	D	H	G6.3 15000
66APP210	63/A	HSK63/A DIN69893 P/P H100 ER16	16	32	100	●
66APP213	63/A	HSK63/A DIN69893 P/P H100 ER20	20	35	100	●
66APP216	63/A	HSK63/A DIN69893 P/P H100 ER25	25	42	100	●
66APP220	63/A	HSK63/A DIN69893 P/P H100 ER32	32	50	100	●
66APP226	63/A	HSK63/A DIN69893 P/P H100 ER40	40	63	100	●

COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

ER	Ghiera	Q.tà	Ghiera Interna	Q.tà
----	--------	------	----------------	------

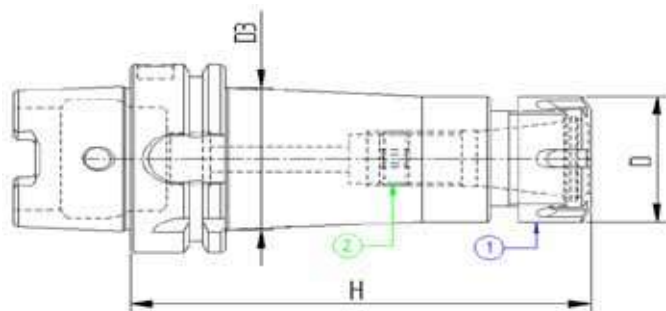
1



2



16	916GHREQ	1	101001601	1
20	920GHREQ	1	101001601	1
25	925GHREQ	1	101815801	1
32	932GHREQ	1	102215901	1
40	940GHREQ	1	102215901	1



L=120

Codice	HSK	Descrizione	ER	D	D3	H	G6.3 15000
66APP310	63/A	HSK63/A DIN69893 P/P H120 ER16	16	32	-	120	●
66APP313	63/A	HSK63/A DIN69893 P/P H120 ER20	20	35	-	120	●
66APP316	63/A	HSK63/A DIN69893 P/P H120 ER25	25	42	-	120	●
66APP320	63/A	HSK63/A DIN69893 P/P H120 ER32	32	50	-	120	●
66APP326	63/A	HSK63/A DIN69893 P/P H120 ER40	40	63	50	120	●

L=160

Codice	HSK	Descrizione	ER	D	D3	H	G6.3 15000
66APP410	63/A	HSK63/A DIN69893 P/P H160 ER16	16	32	38	160	●
66APP413	63/A	HSK63/A DIN69893 P/P H160 ER20	20	35	42	160	●
66APP416	63/A	HSK63/A DIN69893 P/P H160 ER25	25	42	48	160	●
66APP420	63/A	HSK63/A DIN69893 P/P H160 ER32	32	50	50	160	●
66APP426	63/A	HSK63/A DIN69893 P/P H160 ER40	40	63	50	160	●

L=200

Codice	HSK	Descrizione	ER	D	D3	H	G6.3 15000
66APP510	63/A	HSK63/A DIN69893 P/P H200 ER16	16	32	40	200	●
66APP513	63/A	HSK63/A DIN69893 P/P H200 ER20	20	35	44	200	●
66APP516	63/A	HSK63/A DIN69893 P/P H200 ER25	25	42	50	200	●
66APP520	63/A	HSK63/A DIN69893 P/P H200 ER32	32	50	50	200	●
66APP526	63/A	HSK63/A DIN69893 P/P H200 ER40	40	63	50	200	●

COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

ER	Ghiera	Q.tà	Ghiera Interna	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	102215901	1



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



DIN 69893

DIN 6388



FIG. 1

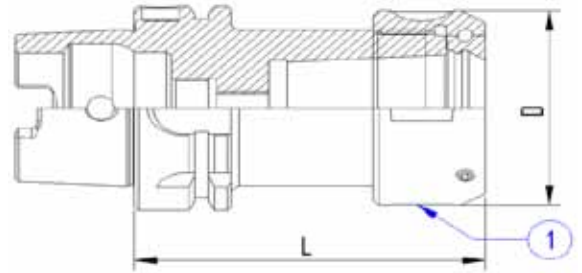
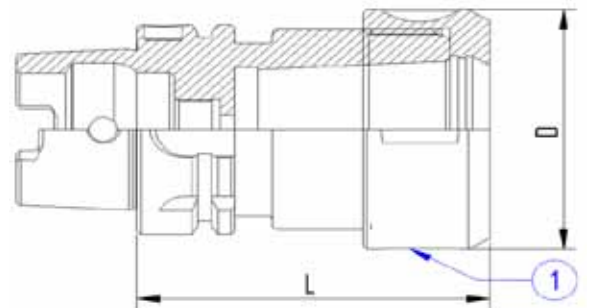


FIG. 2



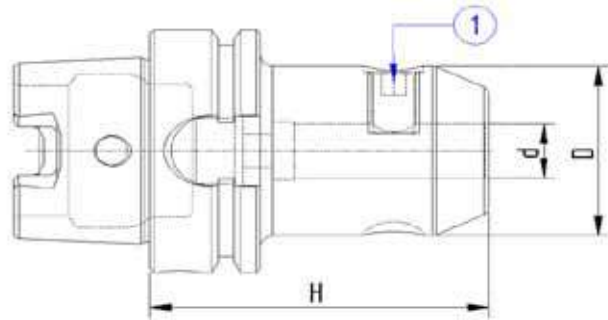
Codice	HSK	Descrizione	EOC	D	L	Fig.	G6.3 15000
66APO216	63/A	HSK63/A DIN69893 P/P H100 EOC16	16	43	100	1	●
66APO225	63/A	HSK63/A DIN69893 P/P H100 EOC25	25	60	100	1	●
66APO232	63/A	HSK63/A DIN69893 P/P H120 EOC32	32	72	120	2	●
66APO416	63/A	HSK63/A DIN69893 P/P H160 EOC16	16	43	160	1	●
66APO425	63/A	HSK63/A DIN69893 P/P H160 EOC25	25	60	160	1	●
66APO432	63/A	HSK63/A DIN69893 P/P H160 EOC32	32	72	160	2	●

COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

EOC	L	Ghiera	Q.tà	Grano	Q.tà
-----	---	--------	------	-------	------



16	100	916GHROS	1	101001601	1
25	100	925GHROS	1	101001601	1
32	100	932GHROS	1	101001601	1
16	160	916GHROS	1	101815801	1
25	160	925GHROS	1	102215901	1
32	160	932GHROS	1	102215901	1



Codice	HSK	Descrizione	d	D	H	G6.3 15000
66AWLD06	63/A	HSK63/A DIN69893 WELDON H65 D.06	6	25	65	●
66AWLD08	63/A	HSK63/A DIN69893 WELDON H65 D.08	8	28	65	●
66AWLD10	63/A	HSK63/A DIN69893 WELDON H65 D.10	10	35	65	●
66AWLD12	63/A	HSK63/A DIN69893 WELDON H80 D.12	12	42	80	●
66AWLD14	63/A	HSK63/A DIN69893 WELDON H80 D.14	14	44	80	●
66AWLD16	63/A	HSK63/A DIN69893 WELDON H80 D.16	16	48	80	●
66AWLD18	63/A	HSK63/A DIN69893 WELDON H80 D.18	18	50	80	●
66AWLD20	63/A	HSK63/A DIN69893 WELDON H80 D.20	20	52	80	●
66AWLD24	63/A	HSK63/A DIN69893 WELDON H100 D.24	24	63	100	●
66AWLD25	63/A	HSK63/A DIN69893 WELDON H110 D.25	25	65	110	●
66AWLD32	63/A	HSK63/A DIN69893 WELDON H110 D.32	32	72	110	●
66AWLD40	63/A	HSK63/A DIN69893 WELDON H125 D.40	40	80	125	●

COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

Ø WLD	Grano	Q.tà
-------	-------	------



1

6	100601002	1
8	100801002	1
10	101001202	1
12 - 14	101201602	1
16 - 18	101401602	1
20	101601602	1
24	101802002	2
25	101802002	2
32 - 40	102002002	2

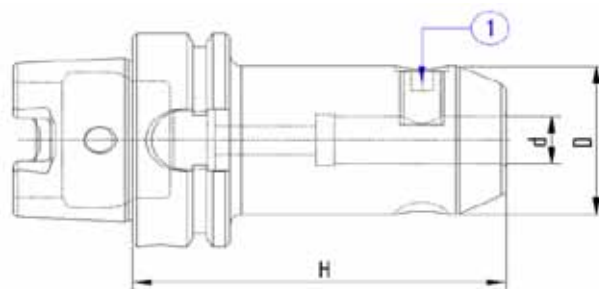


MANDRINO PORTAFRESE TIPO WELDON
 END MILL HOLDERS WELDON
 MANDRINS POUR OUTIL TYPE WELDON
 ZYLINDERSCHAFTAUFNAHME WELDON



DIN 69893

DIN 1835 B



Codice	HSK	Descrizione	d	D	H	G6.3 15000
66AWE206	63/A	HSK63/A DIN69893 WELDON H.100 D.6	6	25	100	●
66AWE208	63/A	HSK63/A DIN69893 WELDON H.100 D.8	8	28	100	●
66AWE210	63/A	HSK63/A DIN69893 WELDON H.100 D.10	10	35	100	●
66AWE212	63/A	HSK63/A DIN69893 WELDON H.100 D.12	12	42	100	●
66AWE214	63/A	HSK63/A DIN69893 WELDON H.100 D.14	14	44	100	●
66AWE216	63/A	HSK63/A DIN69893 WELDON H.100 D.16	16	48	100	●
66AWE218	63/A	HSK63/A DIN69893 WELDON H.100 D.18	18	50	100	●
66AWE220	63/A	HSK63/A DIN69893 WELDON H.100 D.20	20	52	100	●

COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

Ø WLD	Grano	Q.tà
-------	-------	------



6	100601002	1
8	100801002	1
10	101001202	1
12 - 14	101201602	1
16 - 18	101401602	1
20	101601602	1

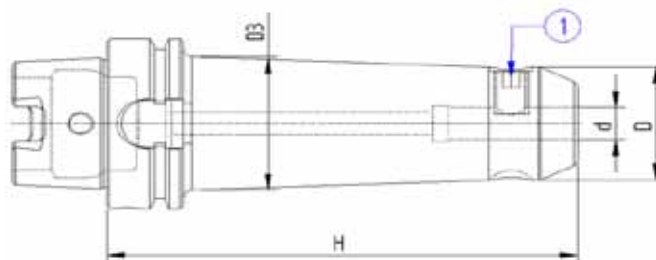


MANDRINO PORTAFRESE TIPO WELDON
 END MILL HOLDERS WELDON
 MANDRINS POUR OUTIL TYPE WELDON
 ZYLINDERSCHAFTAUFNAHME WELDON



DIN 69893

DIN 1835 B



Codice	HSK	Descrizione	d	D	H	D3	G6.3 15000
66AWE306	63/A	HSK63/A DIN69893 WELDON H.120 D.6	6	25	120	-	●
66AWE308	63/A	HSK63/A DIN69893 WELDON H.120 D.8	8	28	120	-	●
66AWE310	63/A	HSK63/A DIN69893 WELDON H.120 D.10	10	35	120	-	●
66AWE312	63/A	HSK63/A DIN69893 WELDON H.120 D.12	12	42	120	-	●
66AWE314	63/A	HSK63/A DIN69893 WELDON H.120 D.14	14	44	120	-	●
66AWE316	63/A	HSK63/A DIN69893 WELDON H.120 D.16	16	48	120	-	●
66AWE318	63/A	HSK63/A DIN69893 WELDON H.120 D.18	18	50	120	-	●
66AWE320	63/A	HSK63/A DIN69893 WELDON H.120 D.20	20	52	120	-	●
66AWE325	63/A	HSK63/A DIN69893 WELDON H.120 D.25	25	65	120	52	●
66AWE332	63/A	HSK63/A DIN69893 WELDON H.120 D.32	32	72	120	52	●

COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

Ø WLD	Grano	Q.tà
-------	-------	------



6	100601002	1
8	100801002	1
10	101001202	1
12 - 14	101201602	1
16 - 18	101401602	1
20	101601602	1
25	101802002	2
32	102002002	2

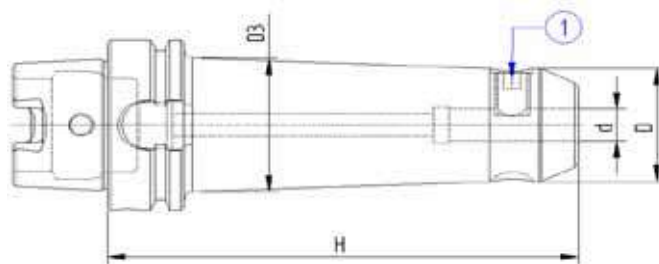


MANDRINO PORTAFRESE TIPO WELDON
 END MILL HOLDERS WELDON
 MANDRINS POUR OUTIL TYPE WELDON
 ZYLINDERSCHAFTAUFNAHME WELDON



DIN 69893

DIN 1835 B




Codice	HSK	Descrizione	d	D	H	D3	G6.3 15000
66AWE406	63/A	HSK63/A DIN69893 WELDON H.160 D.6	6	25	160	32	●
66AWE408	63/A	HSK63/A DIN69893 WELDON H.160 D.8	8	28	160	36	●
66AWE410	63/A	HSK63/A DIN69893 WELDON H.160 D.10	10	35	160	38	●
66AWE412	63/A	HSK63/A DIN69893 WELDON H.160 D.12	12	42	160	46	●
66AWE414	63/A	HSK63/A DIN69893 WELDON H.160 D.14	14	44	160	48	●
66AWE416	63/A	HSK63/A DIN69893 WELDON H.160 D.16	16	44	160	50	●
66AWE418	63/A	HSK63/A DIN69893 WELDON H.160 D.18	18	50	160	-	●
66AWE420	63/A	HSK63/A DIN69893 WELDON H.160 D.20	20	52	160	-	●
66AWE425	63/A	HSK63/A DIN69893 WELDON H.160 D.25	25	63	160	52	●
66AWE432	63/A	HSK63/A DIN69893 WELDON H.160 D.32	32	72	160	52	●
66AWE440	63/A	HSK63/A DIN69893 WELDON H.160 D.40	40	80	160	52	●

COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

Ø WLD	Grano	Q.tà
-------	-------	------

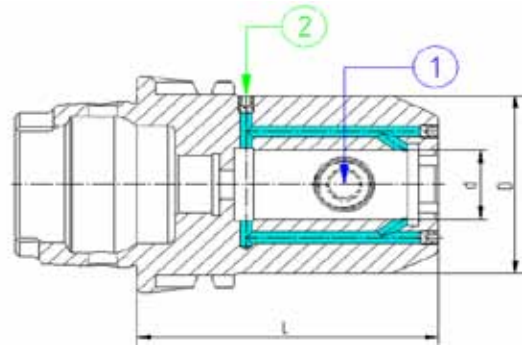


6	100601002	1
8	100801002	1
10	101001202	1
12 - 14	101201602	1
16 - 18	101401602	1
20	101601602	1
25	101802002	2
32 - 40	102002002	2


MANDRINO PORTAFRESE TIPO 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



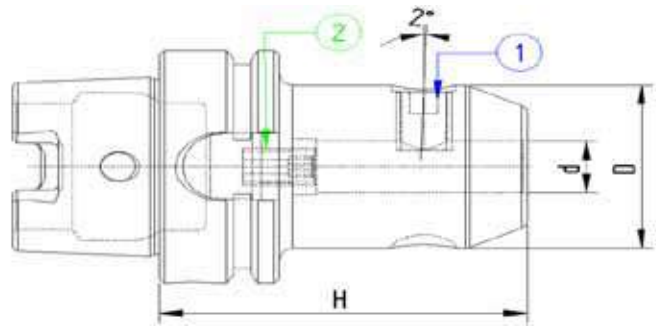
DIN 69893
DIN 1835 B



Codice	HSK	Descrizione	d	D	L	G6.3 15000
66AWLK06	63/A	HSK63/A DIN69893 WELDON/C H65 D.6	6	25	65	●
66AWLK08	63/A	HSK63/A DIN69893 WELDON/C H65 D.8	8	28	65	●
66AWLK10	63/A	HSK63/A DIN69893 WELDON/C H65 D.10	10	35	65	●
66AWLK12	63/A	HSK63/A DIN69893 WELDON/C H80 D.12	12	42	80	●
66AWLK14	63/A	HSK63/A DIN69893 WELDON/C H80 D.14	14	44	80	●
66AWLK16	63/A	HSK63/A DIN69893 WELDON/C H80 D.16	16	48	80	●
66AWLK18	63/A	HSK63/A DIN69893 WELDON/C H80 D.18	18	50	80	●
66AWLK20	63/A	HSK63/A DIN69893 WELDON/C H80 D.20	20	52	80	●
66AWLK25	63/A	HSK63/A DIN69893 WELDON/C H110 D.25	25	65	110	●
66AWLK32	63/A	HSK63/A DIN69893 WELDON/C H110 D.32	32	72	110	●
66AWLK40	63/A	HSK63/A DIN69893 WELDON/C H125 D.40	40	80	125	●

COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

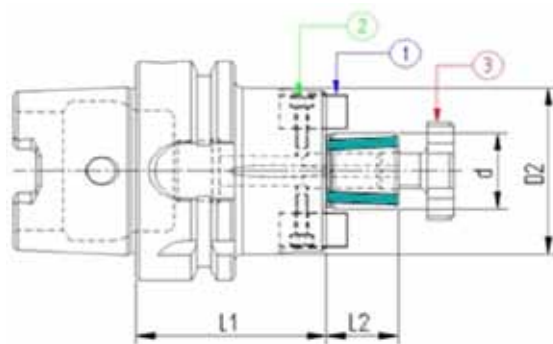
Ø WLD	Grano	Q.tà	Grano	Q.tà
		1		2
6	100601002	1	100400404	2
8	100801002	1	100400504	2
10	101001202	1	100400504	2
12 - 14	101201602	1	100400504	2
16 - 18	101401602	1	100400504	3
20	101601602	1	100400504	3
25	101802002	2	100400504	3
32 - 40	102002002	2	100400504	3



Codice	HSK	Descrizione	d	D	H	G6.3 15000
66AWHN06	63/A	HSK63/A DIN69893 W/NOTCH H.80 D.06	6	25	80	●
66AWHN08	63/A	HSK63/A DIN69893 W/NOTCH H.80 D.08	8	28	80	●
66AWHN10	63/A	HSK63/A DIN69893 W/NOTCH H.80 D.10	10	35	80	●
66AWHN12	63/A	HSK63/A DIN69893 W/NOTCH H.90 D.12	12	42	90	●
66AWHN14	63/A	HSK63/A DIN69893 W/NOTCH H.90 D.14	14	44	90	●
66AWHN16	63/A	HSK63/A DIN69893 W/NOTCH H.100 D.16	16	48	100	●
66AWHN18	63/A	HSK63/A DIN69893 W/NOTCH H.100 D.18	18	50	100	●
66AWHN20	63/A	HSK63/A DIN69893 W/NOTCH H.100 D.20	20	52	100	●
66AWHN25	63/A	HSK63/A DIN69893 W/NOTCH H.110 D.25	25	63	110	●
66AWHN32	63/A	HSK63/A DIN69893 W/NOTCH H.110 D.32	32	72	110	●




COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

Ø WLD	Grano	Q.tà	Grano Interno	Q.tà
		1		
				2
6	100601002	1	100501601	1
8	100801002	1	100601601	1
10	101001202	1	100801601	1
12 - 14	101201602	1	101001601	1
16 - 18	101401602	1	101001601	1
20	101601602	1	101002501	1
25	101802002	2	101002501	1
32	102002002	2	101001601	1



Codice	HSK	Descrizione	d	L1	L2	D2	G6.3 15000
66APF116	63/A	HSK63/A DIN69893 P/F FISSO H50 D.16	16	50	17	38	●
66APF122	63/A	HSK63/A DIN69893 P/F FISSO H50 D.22	22	50	19	48	●
66APF127	63/A	HSK63/A DIN69893 P/F FISSO H60 D.27	27	60	21	58	●
66APF132	63/A	HSK63/A DIN69893 P/F FISSO H60 D.32	32	60	24	66	●
66APF140	63/A	HSK63/A DIN69893 P/F FISSO H60 D.40	40	60	27	80	●

COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

d / D2	Tassello	Q.tà	Vite	Q.tà	Vite a Croce	Q.tà
						
16 / 38	916TSL01	2	110301001	2	916VTC02	1
22 / 48	922TSL01	2	110301201	2	922VTC02	1
27 / 58	927TSL01	2	110401601	2	927VTC02	1
32 / 66	932TSL01	2	110601601	2	932VTC02	1
40 / 80	940TSL01	2	110601601	2	940VTC02	1






L=100

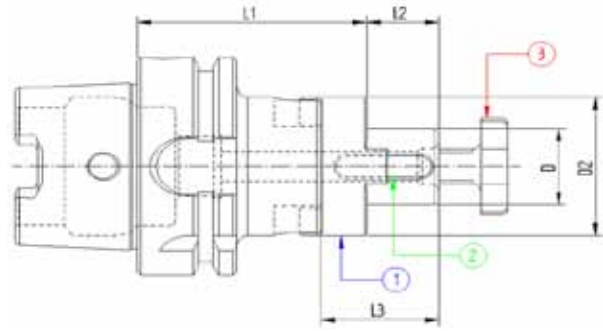
Codice	HSK	Descrizione	d	L	L1	D	G6.3 15000
66APF216	63/A	HSK63/A DIN69893 P/F FISSO H100 D16	16	100	17	38	●
66APF222	63/A	HSK63/A DIN69893 P/F FISSO H100 D22	22	100	19	48	●
66APF227	63/A	HSK63/A DIN69893 P/F FISSO H100 D27	27	100	21	58	●
66APF232	63/A	HSK63/A DIN69893 P/F FISSO H100 D32	32	100	24	66	●
66APF240	63/A	HSK63/A DIN69893 P/F FISSO H100 D40	40	100	27	80	●

L=160

Codice	HSK	Descrizione	d	L	L1	D	G6.3 15000
66APF416	63/A	HSK63/A DIN69893 P/F FISSO H160 D16	16	160	17	38	●
66APF422	63/A	HSK63/A DIN69893 P/F FISSO H160 D22	22	160	19	48	●
66APF427	63/A	HSK63/A DIN69893 P/F FISSO H160 D27	27	160	21	58	●
66APF432	63/A	HSK63/A DIN69893 P/F FISSO H160 D32	32	160	24	66	●
66APF440	63/A	HSK63/A DIN69893 P/F FISSO H160 D40	40	160	27	80	●




COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

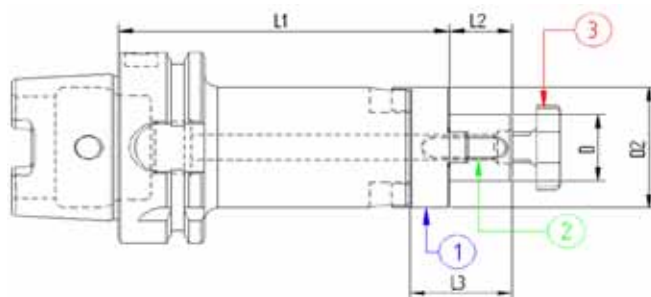
d / D	Tassello	Q.tà	Vite	Q.tà	Vite a Croce	Q.tà
						
	1		2		3	
16 / 38	916TSL01	2	110301001	2	916VTC02	1
22 / 48	922TSL01	2	110301201	2	922VTC02	1
27 / 58	927TSL01	2	110401601	2	927VTC02	1
32 / 66	932TSL01	2	110601601	2	932VTC02	1
40 / 80	940TSL01	2	110601601	2	940VTC02	1



Codice	HSK	Descrizione	D	L1	L2	L3	D2
66APU116	63/A	HSK63/A DIN69893 P/F UNIV.H60 D16	16	60	17	27	32
66APU122	63/A	HSK63/A DIN69893 P/F UNIV.H60 D22	22	60	19	31	40
66APU127	63/A	HSK63/A DIN69893 P/F UNIV.H60 D27	27	60	21	33	48
66APU132	63/A	HSK63/A DIN69893 P/F UNIV.H60 D32	32	60	24	38	58
66APU140	63/A	HSK63/A DIN69893 P/F UNIV.H70 D40	40	70	27	41	70

COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

Ø	Giunto	Q.tà	Linguetta	Q.tà	Vite a Croce	Q.tà
						
	1		2		3	
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






L=100


Codice	HSK	Descrizione	D	L1	L2	L3	D2
66APU216	63/A	HSK63/A DIN69893 P/F UNIV. H100 D16	16	100	17	27	32
66APU222	63/A	HSK63/A DIN69893 P/F UNIV. H100 D22	22	100	19	31	40
66APU227	63/A	HSK63/A DIN69893 P/F UNIV. H100 D27	27	100	21	33	48
66APU232	63/A	HSK63/A DIN69893 P/F UNIV. H100 D32	32	100	24	38	58
66APU240	63/A	HSK63/A DIN69893 P/F UNIV. H100 D40	40	100	27	41	70

L=160

Codice	HSK	Descrizione	D	L1	L2	L3	D2
66APU416	63/A	HSK63/A DIN69893 P/F UNIV.H160 D16	16	160	17	27	32
66APU422	63/A	HSK63/A DIN69893 P/F UNIV.H160 D22	22	160	19	31	40
66APU427	63/A	HSK63/A DIN69893 P/F UNIV.H160 D27	27	160	21	33	48
66APU432	63/A	HSK63/A DIN69893 P/F UNIV.H160 D32	32	160	24	38	58
66APU440	63/A	HSK63/A DIN69893 P/F UNIV.H160 D40	40	160	27	41	70

COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

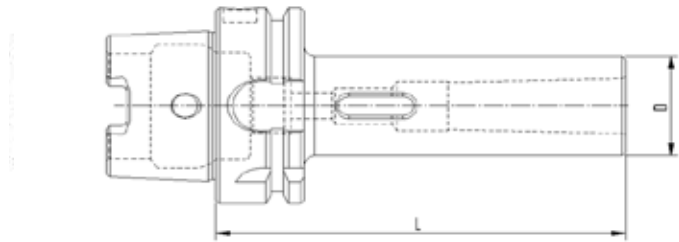
Ø	Giunto	Q.tà	Linguetta	Q.tà	Vite a Croce	Q.tà
						
16	916GNT01	1	170402004	1	916VTC02	1
22	922GNT01	1	170602506	1	922VTC02	1
27	927GNT01	1	170702507	1	927VTC02	1
32	932GNT01	1	170802807	1	932VTC02	1
40	940GNT01	1	171003208	1	940VTC02	1


MANDRINI ATTACCO CONO MORSE PER PUNTE
MORSE TAPER ADAPTORS FOR DRILL
DOUILLES POUR CONE MORSE A TENON
ZWINSCHENHULSEN FÜR MORSEKEGEL MIT AUSTREIBLAPPEN

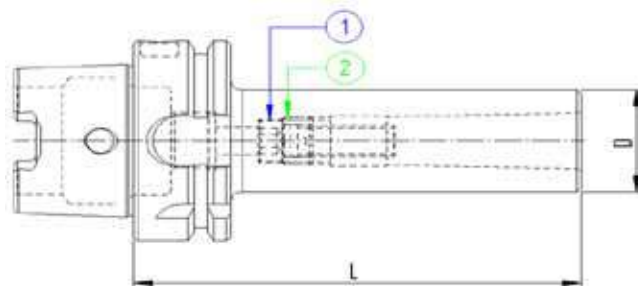


DIN 69893

DIN 228 - 2





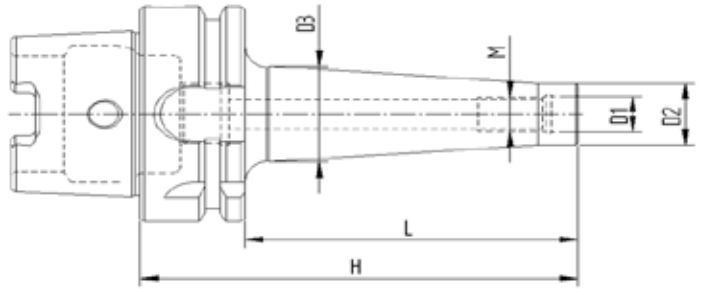
Codice	HSK	Descrizione	MORSE	D	L
66AMP101	63/A	HSK63/A DIN69893 H100 CM1 PUNTE	1	25	100
66AMP102	63/A	HSK63/A DIN69893 H120 CM2 PUNTE	2	32	120
66AMP103	63/A	HSK63/A DIN69893 H140 CM3 PUNTE	3	40	140
66AMP104	63/A	HSK63/A DIN69893 H160 CM4 PUNTE	4	48	160



Codice	HSK	Descrizione	MORSE	D	L
66AMF101	63/A	HSK63/A DIN69893 H100 CM1 FRESE	1	25	100
66AMF102	63/A	HSK63/A DIN69893 H120 CM2 FRESE	2	32	120
66AMF103	63/A	HSK63/A DIN69893 H140 CM3 FRESE	3	40	140
66AMF104	63/A	HSK63/A DIN69893 H160 CM4 FRESE	4	48	160

COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

HSK	Vite	Q.tà	Boccola	Q.tà
				
CM1	110603001	1	-	1
CM2	111003014	1	121500802	1
CM3	111204003	1	122000903	1
CM4	111604516	1	122501204	1



L = 59

Codice	HSK	Descrizione	D1	D2	D3	H	L	M	G2.5 20000
66AAF108	63/A	HSK63/A DIN69893 P/F AT.FIL.M8x59	8.5	13	15	59	33	M8	●
66AAF110	63/A	HSK63/A DIN69893 P/F AT.FIL.M10x59	10.5	18	19.5	59	33	M10	●
66AAF112	63/A	HSK63/A DIN69893 P/F AT.FIL.M12x59	12.5	21	24	59	33	M12	●
66AAF116	63/A	HSK63/A DIN69893 P/F AT.FIL.M16x59	17	29	34	59	33	M16	●

L = 84

Codice	HSK	Descrizione	D1	D2	D3	H	L	M	G2.5 20000
66AAF208	63/A	HSK63/A DIN69893 P/F AT.FIL.M8x84	8.5	13	23	84	58	M8	●
66AAF210	63/A	HSK63/A DIN69893 P/F AT.FIL.M10x84	10.5	18	25	84	58	M10	●
66AAF212	63/A	HSK63/A DIN69893 P/F AT.FIL.M12x84	12.5	21	24	84	58	M12	●
66AAF216	63/A	HSK63/A DIN69893 P/F AT.FIL.M16x84	17	29	34	84	58	M16	●

L = 109

Codice	HSK	Descrizione	D1	D2	D3	H	L	M	G2.5 20000
66AAF308	63/A	HSK63/A DIN69893 P/F AT.FIL.M8x109	8.5	13	23	109	83	M8	●
66AAF310	63/A	HSK63/A DIN69893 P/F AT.FIL.M10x109	10.5	18	28	109	83	M10	●
66AAF312	63/A	HSK63/A DIN69893 P/F AT.FIL.M12x109	12.5	21	31	109	83	M12	●
66AAF316	63/A	HSK63/A DIN69893 P/F AT.FIL.M16x109	17	29	34	109	83	M16	●

L = 134

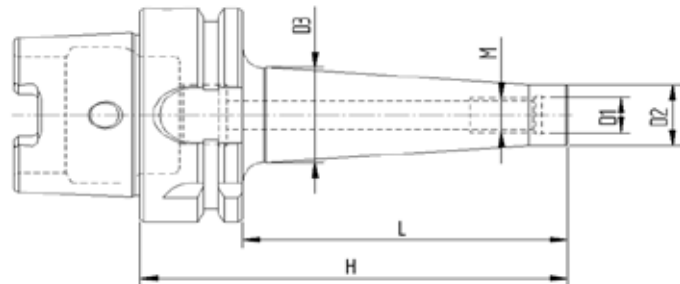
Codice	HSK	Descrizione	D1	D2	D3	H	L	M	G2.5 20000
66AAF408	63/A	HSK63/A DIN69893 P/F AT.FIL.M8x134	8.5	13	25	134	108	M8	●
66AAF410	63/A	HSK63/A DIN69893 P/F AT.FIL.M10x134	10.5	18	28	134	108	M10	●
66AAF412	63/A	HSK63/A DIN69893 P/F AT.FIL.M12x134	12.5	21	31	134	108	M12	●
66AAF416	63/A	HSK63/A DIN69893 P/F AT.FIL.M16x134	17	29	39	134	108	M16	●



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



DIN 69893



L = 159

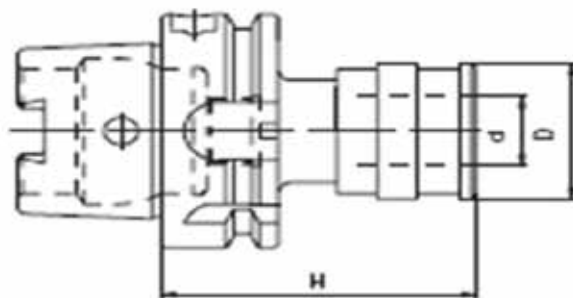
Codice	HSK	Descrizione	D1	D2	D3	H	L	M	G2.5 20000
66AAF510	63/A	HSK63/A DIN69893 P/F AT.FIL.M10x159	10.5	18	34	159	133	M10	●
66AAF512	63/A	HSK63/A DIN69893 P/F AT.FIL.M12x159	12.5	21	31	159	133	M12	●
66AAF516	63/A	HSK63/A DIN69893 P/F AT.FIL.M16x159	17	29	39	159	133	M16	●

L = 184

Codice	HSK	Descrizione	D1	D2	D3	H	L	M	G2.5 20000
66AAF612	63/A	HSK63/A DIN69893 P/F AT.FIL.M12x184	12.5	21	39	184	158	M12	●
66AAF616	63/A	HSK63/A DIN69893 P/F AT.FIL.M16x184	17	29	39	184	158	M16	●

L = 209

Codice	HSK	Descrizione	D1	D2	D3	H	L	M	G2.5 20000
66AAF712	63/A	HSK63/A DIN69893 P/F AT.FIL.M12x209	12.5	21	42	209	183	M12	●
66AAF716	63/A	HSK63/A DIN69893 P/F AT.FIL.M16x209	17	29	42	209	183	M16	●



Codice	HSK	Descrizione	H	D	d
66APCRM1	63/A	HSK63/A M/PORTAM/C/R H72 GR.1	72	48	19
66APCRM2	63/A	HSK63/A M/PORTAM/C/R H110 GR.2	110	60	31

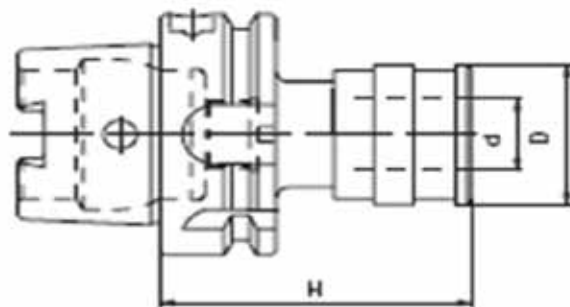
ACCESSORI - ACCESSORIES - ACCESSIRES - ZUBEHOR



RIF. PAGINA **312**



RIF. PAGINA **313**



Codice	HSK	Descrizione	H	D	d
66APRRM1	63/A	HSK63/A M/PORTAM/C/R/R H72 GR.1	72	33	19
66APRRM2	63/A	HSK63/A M/PORTAM/C/R/R H110 GR.2	110	50	31

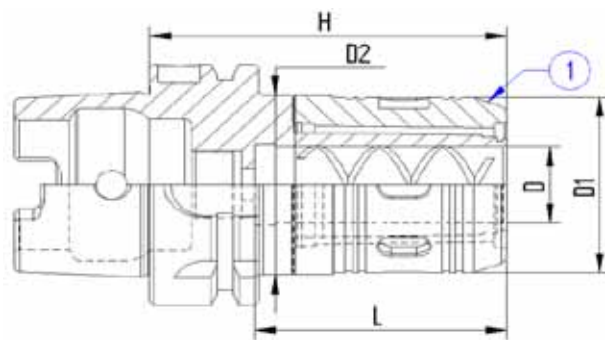
ACCESSORI - ACCESSORIES - ACCESSOIRES - ZUBEHÖR



RIF. PAGINA **312**



RIF. PAGINA **313**




Codice	HSK	Descrizione	H	D	D1	D2	L	G6.3 12000
66AFS120	63/A	HSK 63/A FORTE SERRAGGIO Ø20 H85	85	20	46	47	60	●
66AFS232	63/A	HSK 63/A FORTE SERRAGGIO Ø32 H110	110	32	62	63	84	●

ACCESSORI - ACCESSORIES - ACCESSOIRES - ZUBEHÖR

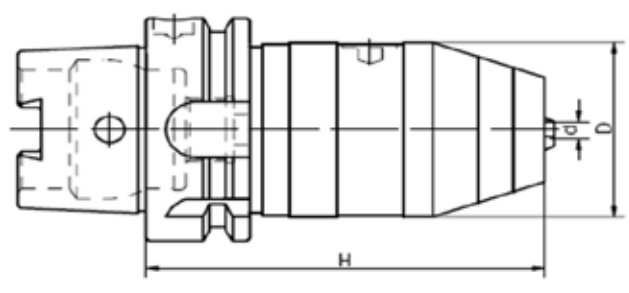


RIF. PAGINA **315**


MANDRINI INTEGRALI CON CHIAVE ESAGONALE
DRILL CHUCK WITH EXAG-KEY LOCK SYSTEM
MANDRINS MONOBLOC-SERRAGE PAR CLE 6 PANS
NC-KURZBOHRFUTTER-SPANNEN DURCH 6 - KANTSCHLUSSEL



DIN 69893



CON REFRIGERANTE CENTRALE - WITH INTERNAL COOLANT SUPPLY - AVEC ARROSAGE INTERNE - MIT ZENTRALEM KUHLMITTELLOCH

Codice	HSK	Descrizione	H	D	d
66AMAZ13	63/A	HSK63/A M/AUTOS./FORI H100 D13	100	50	1 - 13
66AMAZ16	63/A	HSK63/A M/AUTOS./FORI H105 D16	105	50	3 - 16


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

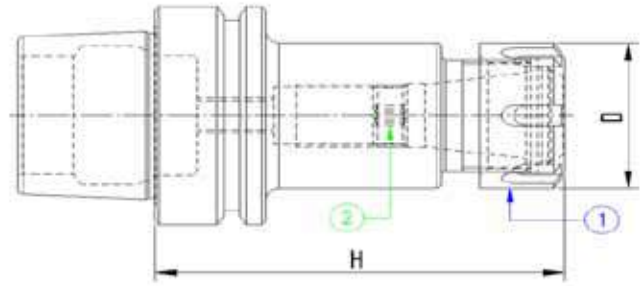


DIN 69893



Codice	HSK	Descrizione	D	L
66AST363	63/A	HSK63/A DIN69893 ST.TENERO D.63x250	63	250
66AST380	63/A	HSK63/A DIN69893 ST.TENERO D.80x250	80	250

HSK 63/E



STANDARD

Codice	HSK	Descrizione	ER	D	H	G2.5 20000
66EPP110	63/E	HSK63/E DIN69893 P/P H75 ER16	16	32	75	●
66EPP116	63/E	HSK63/E DIN69893 P/P H75 ER25	25	42	75	●
66EPP120	63/E	HSK63/E DIN69893 P/P H75 ER32	32	50	75	●
66EPP126	63/E	HSK63/E DIN69893 P/P H75 ER40	40	63	75	●

L=100

Codice	HSK	Descrizione	ER	D	H	G2.5 20000
66EPP210	63/E	HSK63/E DIN69893 P/P H100 ER16	16	32	100	●
66EPP216	63/E	HSK63/E DIN69893 P/P H100 ER25	25	42	100	●
66EPP220	63/E	HSK63/E DIN69893 P/P H100 ER32	32	50	100	●
66EPP226	63/E	HSK63/E DIN69893 P/P H100 ER40	40	63	100	●

COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

ER	Ghiera Interna	Q.tà	Ghiera	Q.tà
----	----------------	------	--------	------

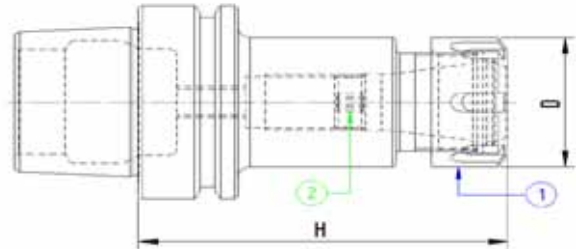
2



1



16	101001601	1	916GHREQ	1
25	101815801	1	925GHREQ	1
32	102215901	1	932GHREQ	1
40	102215901	1	940GHREQ	1



L=120

Codice	HSK	Descrizione	ER	D	H	G2.5 20000
66EPP310	63/E	HSK63/E DIN69893 P/P H120 ER16	16	32	120	●
66EPP316	63/E	HSK63/E DIN69893 P/P H120 ER25	25	42	120	●
66EPP320	63/E	HSK63/E DIN69893 P/P H120 ER32	32	50	120	●
66EPP326	63/E	HSK63/E DIN69893 P/P H120 ER40	40	63	120	●

L=160

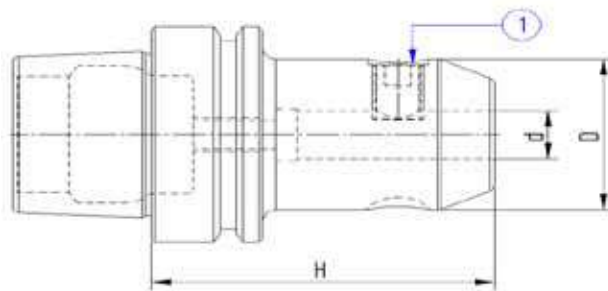
Codice	HSK	Descrizione	ER	D	H	G2.5 20000
66EPP410	63/E	HSK63/E DIN69893 P/P H160 ER16	16	32	160	●
66EPP416	63/E	HSK63/E DIN69893 P/P H160 ER25	25	42	160	●
66EPP420	63/E	HSK63/E DIN69893 P/P H160 ER32	32	50	160	●
66EPP426	63/E	HSK63/E DIN69893 P/P H160 ER40	40	63	160	●

COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

ER Ghiera Interna Q.tà Ghiera Q.tà



16	101001601	1	916GHREQ	1
25	101815801	1	925GHREQ	1
32	102215901	1	932GHREQ	1
40	102215901	1	940GHREQ	1



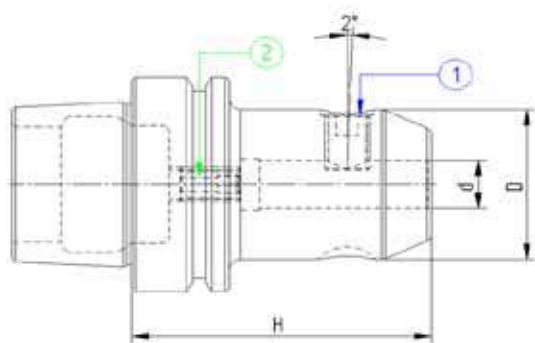
Codice	HSK	Descrizione	d	D	H	G2.5 20000
66EWLD06	63/E	HSK63/E DIN69893 WELDON H65 D06	6	25	65	●
66EWLD08	63/E	HSK63/E DIN69893 WELDON H65 D08	8	28	65	●
66EWLD10	63/E	HSK63/E DIN69893 WELDON H70 D10	10	35	70	●
66EWLD12	63/E	HSK63/E DIN69893 WELDON H80 D12	12	42	80	●
66EWLD14	63/E	HSK63/E DIN69893 WELDON H80 D14	14	44	80	●
66EWLD16	63/E	HSK63/E DIN69893 WELDON H80 D16	16	48	80	●
66EWLD18	63/E	HSK63/E DIN69893 WELDON H80 D18	18	50	80	●
66EWLD20	63/E	HSK63/E DIN69893 WELDON H80 D20	20	52	80	●
66EWLD25	63/E	HSK63/E DIN69893 WELDON H105 D25	25	65	105	●
66EWLD32	63/E	HSK63/E DIN69893 WELDON H110 D32	32	72	110	●

COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

Ø WLD	Grano	Q.tà
-------	-------	------





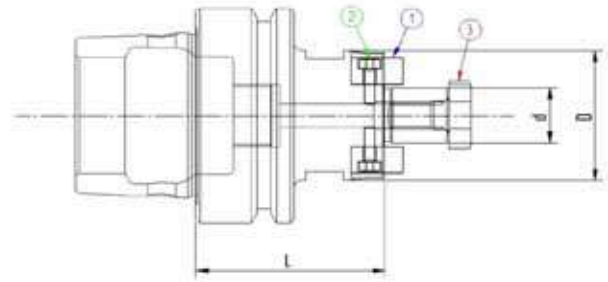
6	100601002	1
8	100801002	1
10	101001202	1
12 - 14	101201602	1
16 - 18	101401602	1
20	101601602	1
25	101802002	2
32	102002002	2



Codice	HSK	Descrizione	d	D	H	G2.5 20000
66EWHN06	63/E	HSK63/E DIN69893 W/NOTCH H65 D06	6	25	65	●
66EWHN08	63/E	HSK63/E DIN69893 W/NOTCH H65 D08	8	28	65	●
66EWHN10	63/E	HSK63/E DIN69893 W/NOTCH H65 D10	10	35	65	●
66EWHN12	63/E	HSK63/E DIN69893 W/NOTCH H80 D12	12	42	80	●
66EWHN14	63/E	HSK63/E DIN69893 W/NOTCH H80 D14	14	44	80	●
66EWHN16	63/E	HSK63/E DIN69893 W/NOTCH H80 D16	16	44	80	●
66EWHN18	63/E	HSK63/E DIN69893 W/NOTCH H80 D18	18	50	80	●
66EWHN20	63/E	HSK63/E DIN69893 W/NOTCH H80 D20	20	52	80	●
66EWHN25	63/E	HSK63/E DIN69893 W/NOTCH H100 D25	25	65	100	●
66EWHN32	63/E	HSK63/E DIN69893 W/NOTCH H100 D32	32	72	100	●

COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

Ø WHN	Grano	Q.tà	Grano Interno	Q.tà
				
	1		2	
6	100601002	1	100501601	1
8	100801002	1	100601601	1
10	101001202	1	-	-
12 - 14	101201602	1	101001601	1
16 - 18	101401602	1	101001601	1
20	101601602	1	101001601	1
25	101802002	2	101001601	1
32	102002002	2	101001601	1





STANDARD

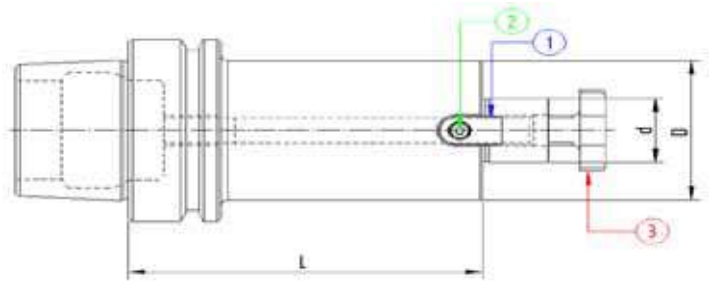
Codice	HSK	Descrizione	d	D	L	G2.5 20000
66EPF116	63/E	HSK63/E DIN69893 P/F FISSO H50 D16	16	38	50	●
66EPF122	63/E	HSK63/E DIN69893 P/F FISSO H50 D22	22	48	50	●
66EPF127	63/E	HSK63/E DIN69893 P/F FISSO H60 D27	27	58	60	●
66EPF132	63/E	HSK63/E DIN69893 P/F FISSO H60 D32	32	66	60	●
66EPF140	63/E	HSK63/E DIN69893 P/F FISSO H65 D40	40	80	65	●

L=100

Codice	HSK	Descrizione	d	D	L	G2.5 20000
66EPF216	63/E	HSK63/E DIN69893 P/F FISSO H100 D16	16	38	100	●
66EPF222	63/E	HSK63/E DIN69893 P/F FISSO H100 D22	22	48	100	●
66EPF227	63/E	HSK63/E DIN69893 P/F FISSO H100 D27	27	58	100	●
66EPF232	63/E	HSK63/E DIN69893 P/F FISSO H100 D32	32	66	100	●
66EPF240	63/E	HSK63/E DIN69893 P/F FISSO H100 D40	40	80	100	●

COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

d / D	Tassello	Q.tà	Vite Tassello	Q.tà	Vite Croce	Q.tà
						
	1		2		3	
16 / 38	916TSL01	2	110301001	2	916VTC02	1
22 / 48	922TSL01	2	110301201	2	922VTC02	1
27 / 58	927TSL01	2	110401601	2	927VTC02	1
32 / 66	932TSL01	2	110601601	2	932VTC02	1
40 / 80	940TSL01	2	110601601	2	940VTC02	1



L=130

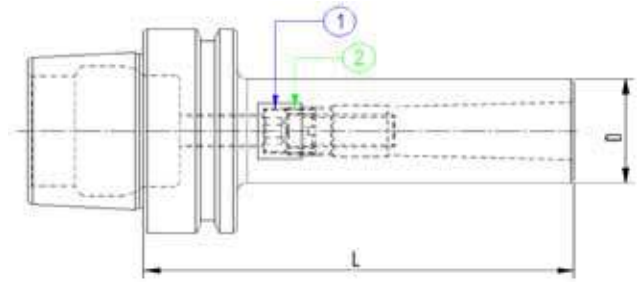
Codice	HSK	Descrizione	d	D	L	G2.5 20000
66EPF316	63/E	HSK63/E DIN69893 P/F FISSO H130 D16	16	38	130	●
66EPF322	63/E	HSK63/E DIN69893 P/F FISSO H130 D22	22	48	130	●
66EPF327	63/E	HSK63/E DIN69893 P/F FISSO H130 D27	27	58	130	●
66EPF332	63/E	HSK63/E DIN69893 P/F FISSO H130 D32	32	66	130	●
66EPF340	63/E	HSK63/E DIN69893 P/F FISSO H130 D40	40	80	130	●

L=160

Codice	HSK	Descrizione	d	D	L	G2.5 20000
66EPF416	63/E	HSK63/E DIN69893 P/F FISSO H160 D16	16	38	160	●
66EPF422	63/E	HSK63/E DIN69893 P/F FISSO H160 D22	22	48	160	●
66EPF427	63/E	HSK63/E DIN69893 P/F FISSO H160 D27	27	58	160	●
66EPF432	63/E	HSK63/E DIN69893 P/F FISSO H160 D32	32	66	160	●
66EPF440	63/E	HSK63/E DIN69893 P/F FISSO H160 D40	40	80	160	●



COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

d / D	Tassello	Q.tà	Vite Tassello	Q.tà	Vite Croce	Q.tà
						
	1		2		3	
16 / 38	916TSL01	2	110301001	2	916VTC02	1
22 / 48	922TSL01	2	110301201	2	922VTC02	1
27 / 58	927TSL01	2	110401601	2	927VTC02	1
32 / 66	932TSL01	2	110601601	2	932VTC02	1
40 / 80	940TSL01	2	110601601	2	940VTC02	1



Codice	HSK	Descrizione	MORSE	D	L
66EMF101	63/E	HSK63/E DIN69893 H100 CM1FRESE	1	25	100
66EMF102	63/E	HSK63/E DIN69893 H125 CM2FRESE	2	32	125
66EMF103	63/E	HSK63/E DIN69893 H145 CM3FRESE	3	40	145
66EMF104	63/E	HSK63/E DIN69893 H165 CM4FRESE	4	48	165

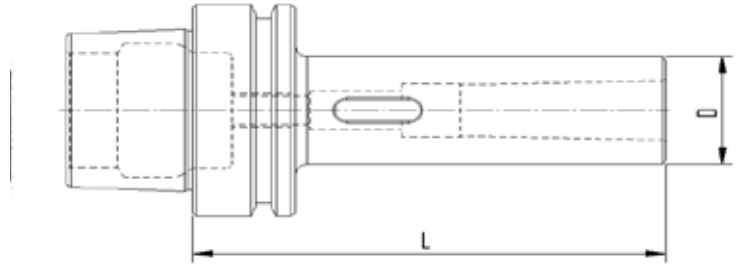
COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

HSK	Vite	Q.tà	Boccola	Q.tà
				
	1		2	
CM1	110603501	1	121206502	1
CM2	111003014	1	121500802	1
CM3	111204003	1	122000903	1
CM4	111604514	1	122501204	1

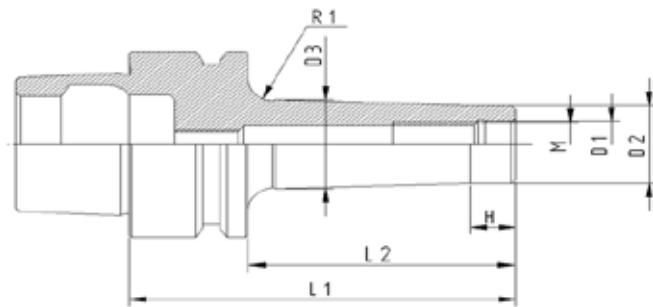

MANDRINI ATTACCO CONO MORSE PER PUNTE
MORSE TAPER ADAPTORS FOR DRILL
DOUILLES POUR CONE MORSE A TENON
ZWISCHENHULSEN FUER MORSEKEGEL MIT AUSTREIBLAPPEN



DIN 69893
DIN 228-2



Codice	HSK	Descrizione	MORSE	D	L
66EMP101	63/E	HSK63/E DIN69893 H100 CM1PUNTE	1	25	100
66EMP102	63/E	HSK63/E DIN69893 H120 CM2PUNTE	2	32	120
66EMP103	63/E	HSK63/E DIN69893 H140 CM3PUNTE	3	40	140
66EMP104	63/E	HSK63/E DIN69893 H165 CM4PUNTE	4	48	165



L = 59

Codice	Descrizione	D1	D2	D3	H	L1	L2	M	G2.5 20000
66EAF106	HSK63/E DIN69893 P/F AT.FIL.M6x59	6.5	9.7	9.7	-	59	33	M6	●
66EAF108	HSK63/E DIN69893 P/F AT.FIL.M8x59	8.5	13	15	10	59	33	M8	●
66EAF110	HSK63/E DIN69893 P/F AT.FIL.M10x59	10.5	18	20	10	59	33	M10	●
66EAF112	HSK63/E DIN69893 P/F AT.FIL.M12x59	12.5	21	24	10	59	33	M12	●
66EAF116	HSK63/E DIN69893 P/F AT.FIL.M16x59	17.0	29	34	10	59	33	M16	●

L = 84

Codice	Descrizione	D1	D2	D3	H	L1	L2	M	G2.5 20000
66EAF206	HSK63/E DIN69893 P/F AT.FIL.M6x84	6.5	9.7	20	10	84	58	M6	●
66EAF208	HSK63/E DIN69893 P/F AT.FIL.M8x84	8.5	13	23	10	84	58	M8	●
66EAF210	HSK63/E DIN69893 P/F AT.FIL.M10x84	10.5	18	25	10	84	58	M10	●
66EAF212	HSK63/E DIN69893 P/F AT.FIL.M12x84	12.5	21	24	10	84	58	M12	●
66EAF216	HSK63/E DIN69893 P/F AT.FIL.M16x84	17.0	29	34	10	84	58	M16	●

L = 109

Codice	Descrizione	D1	D2	D3	H	L1	L2	M	G2.5 20000
66EAF306	HSK63/E DIN69893 P/F AT.FIL.M6x109	6.5	9.7	23	10	109	83	M6	●
66EAF308	HSK63/E DIN69893 P/F AT.FIL.M8x109	8.5	13	23	10	109	83	M8	●
66EAF310	HSK63/E DIN69893 P/F AT.FIL.M10x109	10.5	18	28	10	109	83	M10	●
66EAF312	HSK63/E DIN69893 P/F AT.FIL.M12x109	12.5	21	31	10	109	83	M12	●
66EAF316	HSK63/E DIN69893 P/F AT.FIL.M16x109	17.0	29	34	10	109	83	M16	●

L = 134

Codice	Descrizione	D1	D2	D3	H	L1	L2	M	G2.5 20000
66EAF408	HSK63/E DIN69893 P/F AT.FIL.M8x134	8.5	13	25	10	134	108	M8	●
66EAF410	HSK63/E DIN69893 P/F AT.FIL.M10x134	10.5	18	30	10	134	108	M10	●
66EAF412	HSK63/E DIN69893 P/F AT.FIL.M12x134	12.5	21	31	10	134	108	M12	●
66EAF416	HSK63/E DIN69893 P/F AT.FIL.M16x134	17.0	29	39	10	134	108	M16	●

L = 159

Codice	Descrizione	D1	D2	D3	H	L1	L2	M	G2.5 20000
66EAF512	HSK63/E DIN69893 P/F AT.FIL.M12x159	12.5	21	31	10	159	133	M12	●
66EAF516	HSK63/E DIN69893 P/F AT.FIL.M16x159	17.0	29	39	10	159	133	M16	●


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

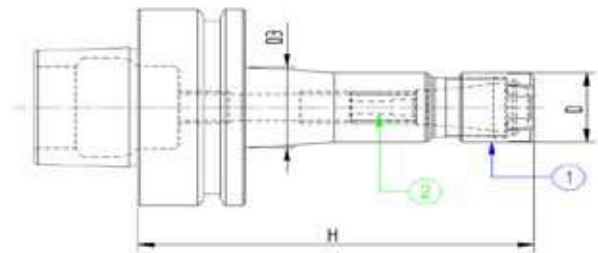


DIN 69893





Codice	HSK	Descrizione	D	L
66EST263	63/E	HSK63/E DIN69893 ST.TENERO D.63x200	63	200
66EST380	63/E	HSK63/E DIN69893 ST.TENERO D.80x250	80	250

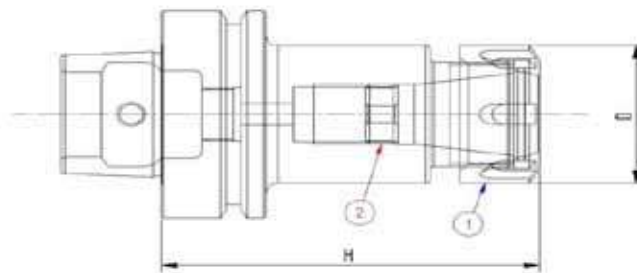
HSK 63/F



Codice	HSK	Descrizione	ER	H	D	D3	G2.5 20000
66FPM207	63/F	HSK63/F DIN69893 P/P H100 ER11MINI	11	100	16	20	●
66FPM210	63/F	HSK63/F DIN69893 P/P H100 ER16MINI	16	100	22	26	●
66FPM213	63/F	HSK63/F DIN69893 P/P H100 ER20MINI	20	100	28	32	●
66FPM216	63/F	HSK63/F DIN69893 P/P H100 ER25MINI	25	100	35	39	●

COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

ER	Ghiera	Q.tà	Ghiera Interna	Q.tà
				
11	911GHRMN	1	100601004	1
16	916GHRMN	1	101001601	1
20	920GHRMN	1	101001601	1
25	925GHRMN	1	101815801	1



L=100

Codice	HSK	Descrizione	ER	D	H	G2.5 20000
66FPP210	63/F	HSK63/F DIN69893 P/P H100 ER16	16	32	100	●
66FPP213	63/F	HSK63/F DIN69893 P/P H100 ER20	20	35	100	●
66FPP216	63/F	HSK63/F DIN69893 P/P H100 ER25	25	42	100	●
66FPP220	63/F	HSK63/F DIN69893 P/P H100 ER32	32	50	100	●
66FPP226	63/F	HSK63/F DIN69893 P/P H100 ER40	40	63	100	●

COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

ER	Ghiera	Q.tà	Ghiera Interna	Q.tà
----	--------	------	----------------	------

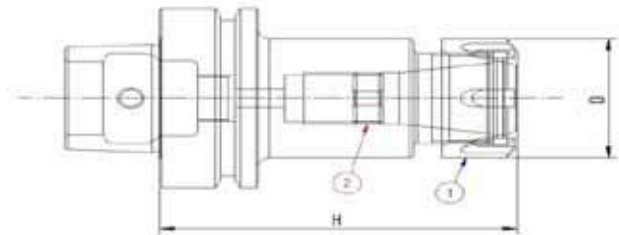
1



2



16	916GHREQ	1	101001601	1
20	920GHREQ	1	101001601	1
25	925GHREQ	1	101815801	1
32	932GHREQ	1	102215901	1
40	940GHREQ	1	102215901	1



L=120

Codice	HSK	Descrizione	ER	D	H	G2.5 20000
66FPP310	63/F	HSK63/F DIN69893 P/P H120 ER16	16	32	120	●
66FPP313	63/F	HSK63/F DIN69893 P/P H120 ER20	20	35	120	●
66FPP316	63/F	HSK63/F DIN69893 P/P H120 ER25	25	42	120	●
66FPP320	63/F	HSK63/F DIN69893 P/P H120 ER32	32	50	120	●
66FPP326	63/F	HSK63/F DIN69893 P/P H120 ER40	40	63	120	●

L=160

Codice	HSK	Descrizione	ER	D	H	G2.5 20000
66FPP410	63/F	HSK63/F DIN69893 P/P H160 ER16	16	32	160	●
66FPP413	63/F	HSK63/F DIN69893 P/P H160 ER20	20	35	160	●
66FPP416	63/F	HSK63/F DIN69893 P/P H160 ER25	25	42	160	●
66FPP420	63/F	HSK63/F DIN69893 P/P H160 ER32	32	50	160	●
66FPP426	63/F	HSK63/F DIN69893 P/P H160 ER40	40	63	160	●

COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

ER	Ghiera	Q.tà	Ghiera Interna	Q.tà
----	--------	------	----------------	------

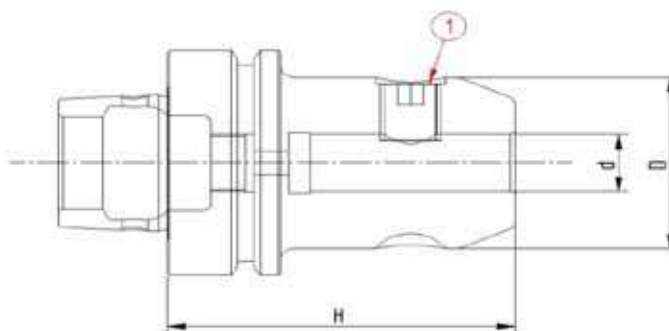
1



2



16	916GHREQ	1	101001601	1
20	920GHREQ	1	101001601	1
25	925GHREQ	1	101815801	1
32	932GHREQ	1	102215901	1
40	940GHREQ	1	102215901	1



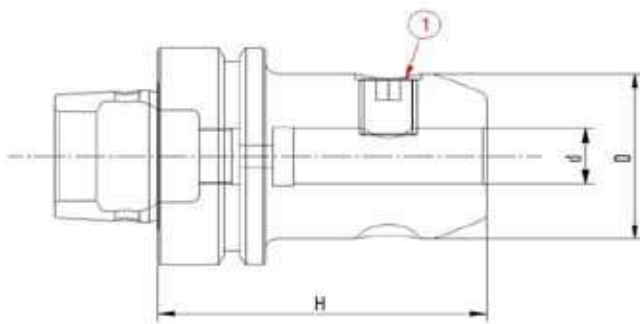
Codice	HSK	Descrizione	d	D	H	G2.5 20000
66FWLD06	63/F	HSK63/F DIN69893 WELDON H.65 D.6	6	25	65	●
66FWLD08	63/F	HSK63/F DIN69893 WELDON H.65 D.8	8	28	65	●
66FWLD10	63/F	HSK63/F DIN69893 WELDON H.65 D.10	10	35	65	●
66FWLD12	63/F	HSK63/F DIN69893 WELDON H.80 D.12	12	42	80	●
66FWLD14	63/F	HSK63/F DIN69893 WELDON H.80 D.14	14	44	80	●
66FWLD16	63/F	HSK63/F DIN69893 WELDON H.80 D.16	16	48	80	●
66FWLD18	63/F	HSK63/F DIN69893 WELDON H.80 D.18	18	50	80	●
66FWLD20	63/F	HSK63/F DIN69893 WELDON H.80 D.20	20	52	80	●
66FWLD25	63/F	HSK63/F DIN69893 WELDON H110 D25	25	65	110	●
66FWLD32	63/F	HSK63/F DIN69893 WELDON H110 D32	32	72	110	●

COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

Ø WLD	Grano	Q.tà
-------	-------	------



6	100601002	1
8	100801002	1
10	101001202	1
12 - 14	101201602	1
16 - 18	101401602	1
20	101601602	1
25	101802002	2
32	102002002	2



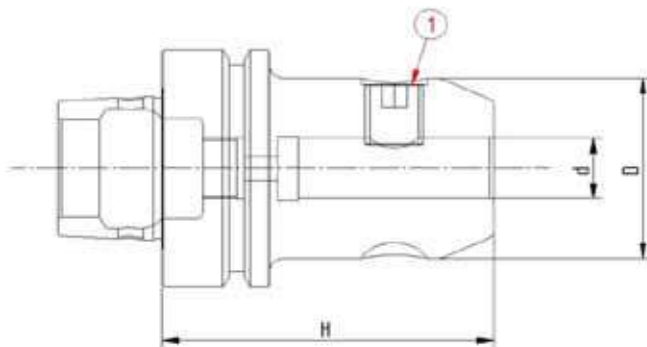
Codice	HSK	Descrizione	d	D	H	G2.5 20000
66FWE206	63/F	HSK63/F DIN69893 WELDON H100 D.6	6	25	100	●
66FWE208	63/F	HSK63/F DIN69893 WELDON H100 D.8	8	28	100	●
66FWE210	63/F	HSK63/F DIN69893 WELDON H100 D.10	10	35	100	●
66FWE212	63/F	HSK63/F DIN69893 WELDON H100 D.12	12	42	100	●
66FWE214	63/F	HSK63/F DIN69893 WELDON H100 D.14	14	44	100	●
66FWE216	63/F	HSK63/F DIN69893 WELDON H100 D.16	16	48	100	●
66FWE218	63/F	HSK63/F DIN69893 WELDON H100 D.18	18	50	100	●
66FWE220	63/F	HSK63/F DIN69893 WELDON H100 D.20	20	52	100	●

COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

Ø WLD	Grano	Q.tà
-------	-------	------



6	100601002	1
8	100801002	1
10	101001202	1
12 - 14	101201602	1
16 - 18	101401602	1
20	101601602	1



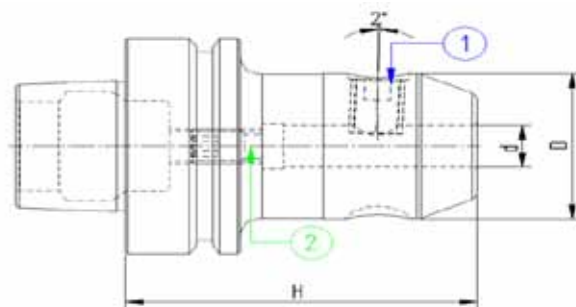
Codice	HSK	Descrizione	d	D	H	G2.5 20000
66FWE406	63/F	HSK63/F DIN69893 WELDON H.160 D.6	6	25	160	●
66FWE408	63/F	HSK63/F DIN69893 WELDON H.160 D.8	8	28	160	●
66FWE410	63/F	HSK63/F DIN69893 WELDON H.160 D.10	10	35	160	●
66FWE412	63/F	HSK63/F DIN69893 WELDON H.160 D.12	12	42	160	●
66FWE414	63/F	HSK63/F DIN69893 WELDON H.160 D.14	14	44	160	●
66FWE416	63/F	HSK63/F DIN69893 WELDON H.160 D.16	16	48	160	●
66FWE418	63/F	HSK63/F DIN69893 WELDON H.160 D.18	18	50	160	●
66FWE420	63/F	HSK63/F DIN69893 WELDON H.160 D.20	20	52	160	●
66FWE425	63/F	HSK63/F DIN69893 WELDON H.160 D.25	25	65	160	●
66FWE432	63/F	HSK63/F DIN69893 WELDON H.160 D.32	32	72	160	●
66FWE440	63/F	HSK63/F DIN69893 WELDON H.160 D.40	40	80	160	●

COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

Ø WLD	Grano	Q.tà
-------	-------	------





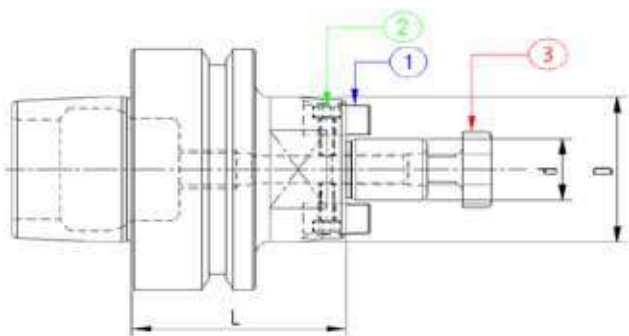
6	100601002	1
8	100801002	1
10	101001202	1
12 - 14	101201602	1
16 - 18	101401602	1
20	101601602	1
25	101802002	2
32 - 40	102002002	2



Codice	HSK	Descrizione	d	D	H	G2.5 20000
66FWHN06	63/F	HSK63/F DIN69893 W/NOTCH H80 D.06	6	25	80	●
66FWHN08	63/F	HSK63/F DIN69893 W/NOTCH H80 D.08	8	28	80	●
66FWHN10	63/F	HSK63/F DIN69893 W/NOTCH H80 D.10	10	35	80	●
66FWHN12	63/F	HSK63/F DIN69893 W/NOTCH H90 D.12	12	42	90	●
66FWHN14	63/F	HSK63/F DIN69893 W/NOTCH H90 D.14	14	44	90	●
66FWHN16	63/F	HSK63/F DIN69893 W/NOTCH H100 D.16	16	48	100	●
66FWHN18	63/F	HSK63/F DIN69893 W/NOTCH H100 D.18	18	50	100	●
66FWHN20	63/F	HSK63/F DIN69893 W/NOTCH H100 D.20	20	52	100	●
66FWHN25	63/F	HSK63/F DIN69893 W/NOTCH H110 D.25	25	65	110	●
66FWHN32	63/F	HSK63/F DIN69893 W/NOTCH H115 D.32	32	72	115	●

COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

Ø WHN	Grano	Q.tà	Grano Interno	Q.tà
				
6	100601002	1	100501601	1
8	100801002	1	100601601	1
10	101001202	1	100801601	1
12 - 14	101201602	1	100801601	1
16 - 18	101401602	1	100801601	1
20	101601602	1	100801601	1
25	101802002	2	100801601	1
32	102002002	2	100801601	1






STANDARD

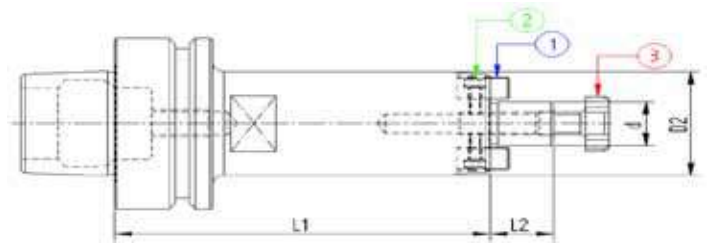
Codice	HSK	Descrizione	d	D	L	G2.5 20000
66FPF116	63/F	HSK63/F DIN69893 P/F FISSO H50 D16	16	38	50	●
66FPF122	63/F	HSK63/F DIN69893 P/F FISSO H50 D22	22	48	50	●
66FPF127	63/F	HSK63/F DIN69893 P/F FISSO H60 D27	27	58	60	●
66FPF132	63/F	HSK63/F DIN69893 P/F FISSO H60 D32	32	63	60	●
66FPF140	63/F	HSK63/F DIN69893 P/F FISSO H60 D40	40	80	60	●

L = 100

Codice	HSK	Descrizione	d	D	L	G2.5 20000
66FPF216	63/F	HSK63/F DIN69893 P/F FISSO H100 D16	16	38	100	●
66FPF222	63/F	HSK63/F DIN69893 P/F FISSO H100 D22	22	48	100	●
66FPF227	63/F	HSK63/F DIN69893 P/F FISSO H100 D27	27	58	100	●
66FPF232	63/F	HSK63/F DIN69893 P/F FISSO H100 D32	32	66	100	●
66FPF240	63/F	HSK63/F DIN69893 P/F FISSO H100 D40	40	80	100	●

COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

d / D	Tassello	Q.tà	Vite Tassello	Q.tà	Vite a Croce	Q.tà
						
	1		2		3	
16 / 38	916TSL01	2	110301001	2	916VTC02	1
22 / 48	922TSL01	2	110301201	2	922VTC02	1
27 / 58	927TSL01	2	110401601	2	927VTC02	1
32 / 66	932TSL01	2	110601601	2	932VTC02	1
40 / 80	940TSL01	2	110601601	2	940VTC02	1






L = 130

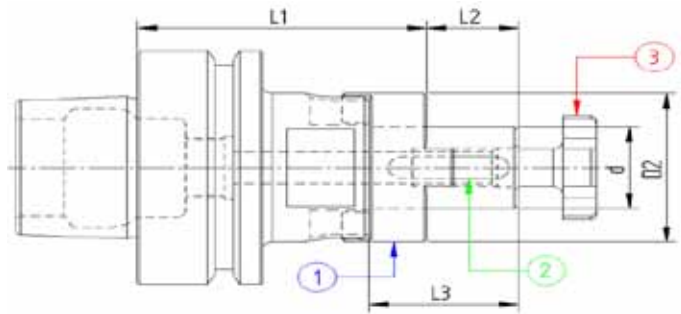
Codice	HSK	Descrizione	d	D	L1	L2	G2.5 20000
66FPF316	63/F	HSK63/F DIN69893 P/F FISSO H130 D16	16	38	130	17	●
66FPF322	63/F	HSK63/F DIN69893 P/F FISSO H130 D22	22	40	130	19	●
66FPF327	63/F	HSK63/F DIN69893 P/F FISSO H130 D27	27	58	130	21	●
66FPF332	63/F	HSK63/F DIN69893 P/F FISSO H130 D32	32	66	130	24	●
66FPF340	63/F	HSK63/F DIN69893 P/F FISSO H130 D40	40	80	130	27	●

L = 160

Codice	HSK	Descrizione	d	D	L1	L2	G2.5 20000
66FPF416	63/F	HSK63/F DIN69893 P/F FISSO H160 D16	16	38	160	17	●
66FPF422	63/F	HSK63/F DIN69893 P/F FISSO H160 D22	22	48	160	19	●
66FPF427	63/F	HSK63/F DIN69893 P/F FISSO H160 D27	27	58	160	21	●
66FPF432	63/F	HSK63/F DIN69893 P/F FISSO H160 D32	32	66	160	24	●
66FPF440	63/F	HSK63/F DIN69893 P/F FISSO H160 D40	40	80	160	27	●

COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

d / D	Tassello	Q.tà	Vite Tassello	Q.tà	Vite a Croce	Q.tà
						
	1		2		3	
16 / 38	916TSL01	2	110301001	2	916VTC02	1
22 / 48	922TSL01	2	110301201	2	922VTC02	1
27 / 58	927TSL01	2	110401601	2	927VTC02	1
32 / 66	932TSL01	2	110601601	2	932VTC02	1
40 / 80	940TSL01	2	110601601	2	940VTC02	1






STANDARD


Codice	HSK	Descrizione	d	L1	L2	L3	D2
66FPU116	63/F	HSK63/F DIN69893 P/F UNIV.H60 D16	16	60	17	27	32
66FPU122	63/F	HSK63/F DIN69893 P/F UNIV.H60 D22	22	60	19	31	40
66FPU127	63/F	HSK63/F DIN69893 P/F UNIV.H60 D27	27	60	21	33	48
66FPU132	63/F	HSK63/F DIN69893 P/F UNIV.H60 D32	32	60	24	38	58
66FPU140	63/F	HSK63/F DIN69893 P/F UNIV.H70 D40	40	70	27	41	70

L = 160

Codice	HSK	Descrizione	d	L1	L2	L3	D2
66FPU416	63/F	HSK63/F DIN69893 P/F UNIV.H160 D16	16	160	17	27	32
66FPU422	63/F	HSK63/F DIN69893 P/F UNIV.H160 D22	22	160	19	31	40
66FPU427	63/F	HSK63/F DIN69893 P/F UNIV.H160 D27	27	160	21	33	48
66FPU432	63/F	HSK63/F DIN69893 P/F UNIV.H160 D32	32	160	24	38	58
66FPU440	63/F	HSK63/F DIN69893 P/F UNIV.H160 D40	40	160	27	41	70

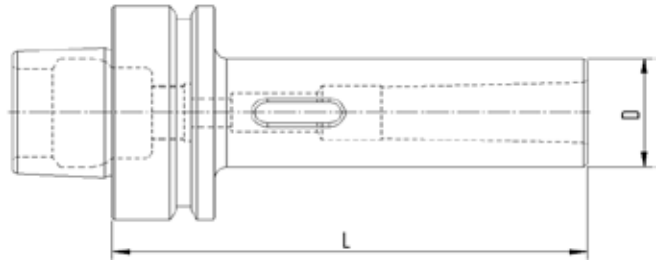
COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

d	Distanziale	Q.tà	Linguetta	Q.tà	Vite a 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



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



DIN 69893
DIN 228 - 2

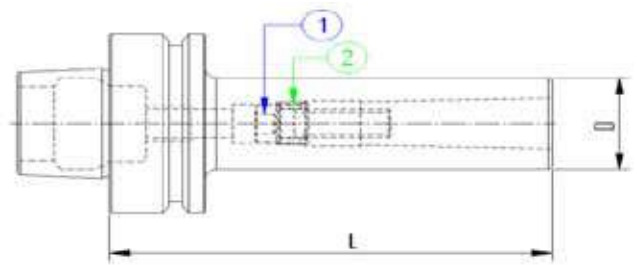


Codice	HSK	Descrizione	MORSE	D	L
66FMP101	63/F	HSK63/F DIN69893 H.100 CM1 PUNTE	1	25	100
66FMP102	63/F	HSK63/F DIN69893 H.120 CM2 PUNTE	2	32	120
66FMP103	63/F	HSK63/F DIN69893 H.140 CM3 PUNTE	3	40	140
66FMP104	63/F	HSK63/F DIN69893 H.165 CM4 PUNTE	4	48	165


MANDRINI ATTACCO CONO MORSE PER FRESE
MORSE TAPER ADAPTER WITH THREAD
DOUILLES POUR CONE MORSE AVEC TARAUDAGE
ZWISCHENHULSEN FUER MORSEKEGEL MIT ANZUGSGEWINDE





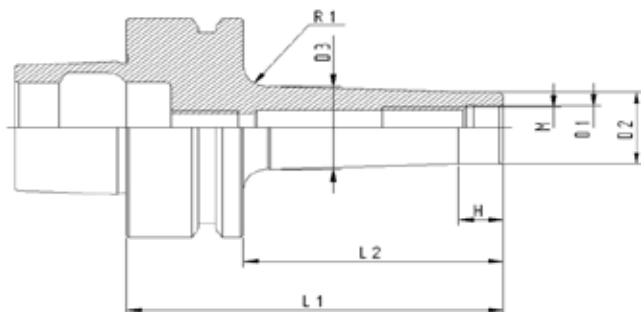
DIN 69893
DIN 228 - 2



Codice	HSK	Descrizione	MORSE	D	L
66FMF101	63/F	HSK63/F DIN69893 H.100 CM1 FRESE	1	25	100
66FMF102	63/F	HSK63/F DIN69893 H.120 CM2 FRESE	2	32	120
66FMF103	63/F	HSK63/F DIN69893 H.140 CM3 FRESE	3	40	140
66FMF104	63/F	HSK63/F DIN69893 H.160 CM4 FRESE	4	48	160

COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

CM	Vite	Q.tà	Ghiera Interna	Q.tà
				
1	110603501	1	-	-
2	111003014	1	121500802	1
3	111204016	1	122000903	1
4	111604516	1	122501204	1



STANDARD

Codice	Descrizione	D1	D2	D3	H	L1	L2	M	G2.5 20000
66FAF106	HSK63/F DIN69893 P/F AT.FIL.M6x59	6.5	9.7	9.7	33	59	33	M6	●
66FAF108	HSK63/F DIN69893 P/F AT.FIL.M8x59	8.5	13	15	10	59	33	M8	●
66FAF110	HSK63/F DIN69893 P/F AT.FIL.M10x59	10.5	18	20	10	59	33	M10	●
66FAF112	HSK63/F DIN69893 P/F AT.FIL.M12x59	12.5	21	24	10	59	33	M12	●
66FAF116	HSK63/F DIN69893 P/F AT.FIL.M16x59	17.0	29	34	10	59	33	M16	●

L = 84

Codice	Descrizione	D1	D2	D3	H	L1	L2	M	G2.5 20000
66FAF206	HSK63/F DIN69893 P/F AT.FIL.M6x84	6.5	9.7	20	10	84	58	M6	●
66FAF208	HSK63/F DIN69893 P/F AT.FIL.M8x84	8.5	13	23	10	84	58	M8	●
66FAF210	HSK63/F DIN69893 P/F AT.FIL.M10x84	10.5	18	25	10	84	58	M10	●
66FAF212	HSK63/F DIN69893 P/F AT.FIL.M12x84	12.5	21	24	10	84	58	M12	●
66FAF216	HSK63/F DIN69893 P/F AT.FIL.M16x84	17.0	29	34	10	84	58	M16	●

L = 109

Codice	Descrizione	D1	D2	D3	H	L1	L2	M	G2.5 20000
66FAF306	HSK63/F DIN69893 P/F AT.FIL.M6x109	6.5	9.7	23	10	109	83	M6	●
66FAF308	HSK63/F DIN69893 P/F AT.FIL.M8x109	8.5	13	23	10	109	83	M8	●
66FAF310	HSK63/F DIN69893 P/F AT.FIL.M10x109	10.5	18	28	10	109	83	M10	●
66FAF312	HSK63/F DIN69893 P/F AT.FIL.M12x109	12.5	21	31	10	109	83	M12	●
66FAF316	HSK63/F DIN69893 P/F AT.FIL.M16x109	17.0	29	34	10	109	83	M16	●

L = 134

Codice	Descrizione	D1	D2	D3	H	L1	L2	M	G2.5 20000
66FAF408	HSK63/F DIN69893 P/F AT.FIL.M8x134	8.5	13	25	10	134	108	M8	●
66FAF410	HSK63/F DIN69893 P/F AT.FIL.M10x134	10.5	18	30	10	134	108	M10	●
66FAF412	HSK63/F DIN69893 P/F AT.FIL.M12x134	12.5	21	31	10	134	108	M12	●
66FAF416	HSK63/F DIN69893 P/F AT.FIL.M16x134	17.0	29	39	10	134	108	M16	●


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

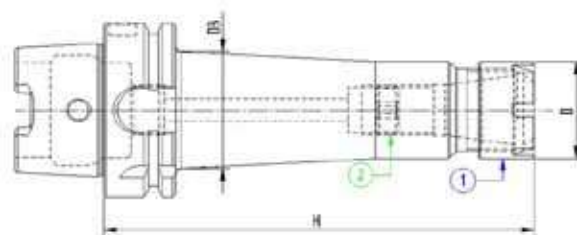


DIN 69893



Codice	HSK	Descrizione	D	L
66FST263	63/F	HSK63/F DIN69893 ST.TENERO D.63x200	63	200
66FST380	63/F	HSK63/F DIN69893 ST.TENERO D.80x250	80	250

HSK 1000/A



STANDARD

Codice	HSK	Descrizione	ER	D	H	D3	G6.3 15000
61APM210	100/A	HSK100/A DIN69893 P/P H100 ER16MINI	16	22	100	28	●
61APM213	100/A	HSK100/A DIN69893 P/P H100 ER20MINI	20	28	100	28	●
61APM216	100/A	HSK100/A DIN69893 P/P H100 ER25MINI	25	35	100	35	●

L=160

Codice	HSK	Descrizione	ER	D	H	D3	G6.3 15000
61APM410	100/A	HSK100/A DIN69893 P/P H160 ER16MINI	16	22	160	30	●
61APM413	100/A	HSK100/A DIN69893 P/P H160 ER20MINI	20	28	160	35	●
61APM416	100/A	HSK100/A DIN69893 P/P H160 ER25MINI	25	35	160	48	●

L=200

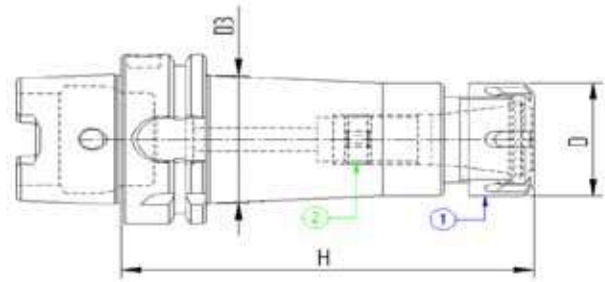
Codice	HSK	Descrizione	ER	D	H	D3	G6.3 15000
61APM510	100/A	HSK100/A DIN69893 P/P H200 ER16MINI	16	22	200	32	●
61APM513	100/A	HSK100/A DIN69893 P/P H200 ER20MINI	20	28	200	38	●
61APM516	100/A	HSK100/A DIN69893 P/P H200 ER25MINI	25	35	200	45	●

COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

ER MINI	Ghiera	Q.tà	Grano Interno	Q.tà
---------	--------	------	---------------	------



16	916GHRMN	1	101001601	1
20	920GHRMN	1	101001601	1
25	925GHRMN	1	101815801	1



L=100

Codice	HSK	Descrizione	ER	D	H	D3	G6.3 15000
61APP210	100/A	HSK100/A DIN69893 P/P H.100 ER16	16	32	100	32	●
61APP213	100/A	HSK100/A DIN69893 P/P H.100 ER20	20	35	100	35	●
61APP216	100/A	HSK100/A DIN69893 P/P H.100 ER25	25	42	100	42	●
61APP220	100/A	HSK100/A DIN69893 P/P H.100 ER32	32	50	100	50	●
61APP226	100/A	HSK100/A DIN69893 P/P H.100 ER40	40	63	100	63	●

L=120

Codice	HSK	Descrizione	ER	D	H	D3	G6.3 15000
61APP310	100/A	HSK100/A DIN69893 P/P H120 ER16	16	32	120	37	●
61APP313	100/A	HSK100/A DIN69893 P/P H120 ER20	20	35	120	42	●
61APP316	100/A	HSK100/A DIN69893 P/P H120 ER25	25	42	120	42	●
61APP320	100/A	HSK100/A DIN69893 P/P H120 ER32	32	50	120	53	●
61APP326	100/A	HSK100/A DIN69893 P/P H120 ER40	40	63	120	63	●

COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

ER	Ghiera	Q.tà	Grano Interno	Q.tà
----	--------	------	---------------	------

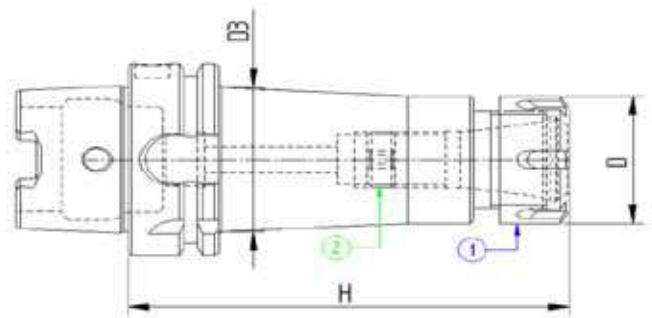
1



2



16	916GHREQ	1	101001601	1
20	920GHREQ	1	101001601	1
25	925GHREQ	1	101815801	1
32	932GHREQ	1	102215901	1
40	940GHREQ	1	102215901	1



L=160

Codice	HSK	Descrizione	ER	D	H	D3	G6.3 15000
61APP410	100/A	HSK100/A DIN69893 P/P H160 ER16	16	32	160	38	●
61APP413	100/A	HSK100/A DIN69893 P/P H160 ER20	20	35	160	42	●
61APP416	100/A	HSK100/A DIN69893 P/P H160 ER25	25	42	160	48	●
61APP420	100/A	HSK100/A DIN69893 P/P H160 ER32	32	50	160	50	●
61APP426	100/A	HSK100/A DIN69893 P/P H160 ER40	40	63	160	63	●

L=200

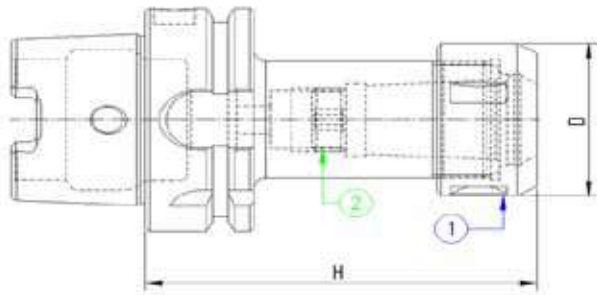
Codice	HSK	Descrizione	ER	D	H	D3	G6.3 15000
61APP510	100/A	HSK100/A DIN69893 P/P H200 ER16	16	32	200	40	●
61APP513	100/A	HSK100/A DIN69893 P/P H200 ER20	20	35	200	45	●
61APP516	100/A	HSK100/A DIN69893 P/P H200 ER25	25	42	200	48	●
61APP520	100/A	HSK100/A DIN69893 P/P H200 ER32	32	50	200	50	●
61APP526	100/A	HSK100/A DIN69893 P/P H200 ER40	40	63	200	63	●

COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

ER	Ghiera	Q.tà	Grano Interno	Q.tà
----	--------	------	---------------	------





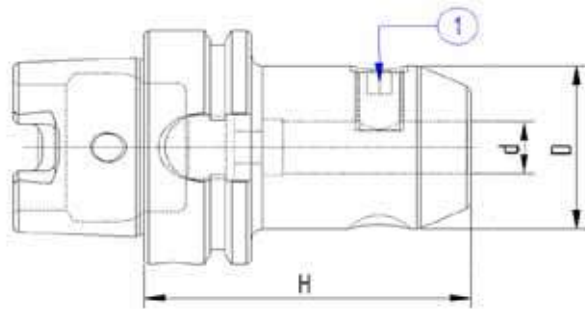
16	916GHREQ	1	101001601	1
20	920GHREQ	1	101001601	1
25	925GHREQ	1	101815801	1
32	932GHREQ	1	102215901	1
40	940GHREQ	1	102215901	1



Codice	HSK	Descrizione	EOC	D	H	G6.3 15000
61APO216	100/A	HSK100/A DIN69893 P/P H110 EOC16	16	43	110	●
61APO225	100/A	HSK100/A DIN69893 P/P H120 EOC25	25	60	120	●
61APO232	100/A	HSK100/A DIN69893 P/P H130 EOC32	32	72	130	●

COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

EOC	Grano Interno	Q.tà	Ghiera	Q.tà
				
	2		1	
16	101815801	1	916GHROS	1
25	102215901	1	925GHROS	1
32	102215901	1	932GHROS	1



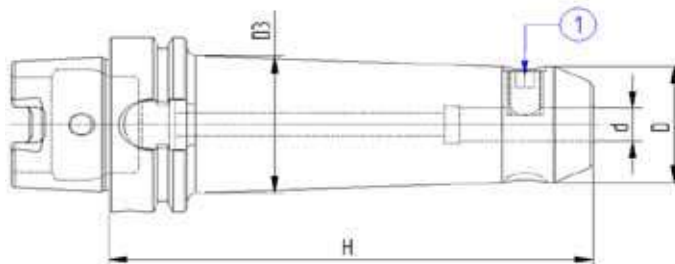
Codice	HSK	Descrizione	d	D	H	G6.3 15000
61AWLD06	100/A	HSK100/A DIN69893 WELDON H.80 D6	6	25	80	●
61AWLD08	100/A	HSK100/A DIN69893 WELDON H.80 D8	8	28	80	●
61AWLD10	100/A	HSK100/A DIN69893 WELDON H.80 D10	10	35	80	●
61AWLD12	100/A	HSK100/A DIN69893 WELDON H.80 D12	12	42	80	●
61AWLD14	100/A	HSK100/A DIN69893 WELDON H.80 D14	14	44	80	●
61AWLD16	100/A	HSK100/A DIN69893 WELDON H.100 D16	16	48	100	●
61AWLD18	100/A	HSK100/A DIN69893 WELDON H.100 D18	18	48	100	●
61AWLD20	100/A	HSK100/A DIN69893 WELDON H.100 D20	20	52	100	●
61AWLD25	100/A	HSK100/A DIN69893 WELDON H.100 D25	25	65	100	●
61AWLD32	100/A	HSK100/A DIN69893 WELDON H.100 D32	32	72	100	●
61AWLD40	100/A	HSK100/A DIN69893 WELDON H.105 D40	40	80	105	●
61AWLD50	100/A	HSK100/A DIN69893 WELDON H.160 D50	50	100	160	●

COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

d	Grano	Q.tà
---	-------	------



6	100601002	1
8	100801002	1
10	101001202	1
12 - 14	101201602	1
16 - 18	101401602	1
20	101601602	1
25	101802002	2
32 - 40	102002002	2
50	102422504	2



L=160

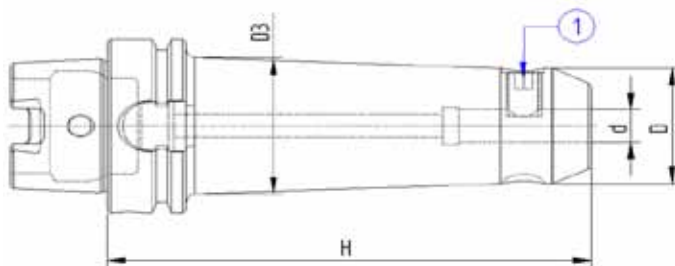
Codice	HSK	Descrizione	d	D	H	D3	G6.3 15000
61AWE406	100/A	HSK100/A DIN69893 WELDON H.160 D6	6	25	160	32	●
61AWE408	100/A	HSK100/A DIN69893 WELDON H.160 D8	8	28	160	35	●
61AWE410	100/A	HSK100/A DIN69893 WELDON H.160 D10	10	35	160	42	●
61AWE412	100/A	HSK100/A DIN69893 WELDON H.160 D12	12	42	160	49	●
61AWE414	100/A	HSK100/A DIN69893 WELDON H.160 D14	14	44	160	52	●
61AWE416	100/A	HSK100/A DIN69893 WELDON H.160 D16	16	48	160	55	●
61AWE418	100/A	HSK100/A DIN69893 WELDON H.160 D18	18	50	160	57	●
61AWE420	100/A	HSK100/A DIN69893 WELDON H.160 D20	20	52	160	60	●
61AWE425	100/A	HSK100/A DIN69893 WELDON H.160 D25	25	65	160	72	●
61AWE432	100/A	HSK100/A DIN69893 WELDON H.160 D32	32	72	160	80	●
61AWE440	100/A	HSK100/A DIN69893 WELDON H.160 D40	40	80	160	80	●

COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

d	Grano	Q.tà
---	-------	------



6	100601002	1
8	100801002	1
10	101001202	1
12 - 14	101201602	1
16 - 18	101401602	1
20	101601602	1
25	101802002	2
32 - 40	102002002	2



L=200

Codice	HSK	Descrizione	d	D	H	D3	G6.3 15000
61AWE506	100/A	HSK100/A DIN69893 WELDON H200 D6	6	25	200	35	●
61AWE508	100/A	HSK100/A DIN69893 WELDON H200 D8	8	28	200	37	●
61AWE510	100/A	HSK100/A DIN69893 WELDON H200 D10	10	35	200	44	●
61AWE512	100/A	HSK100/A DIN69893 WELDON H200 D12	12	42	200	51	●
61AWE514	100/A	HSK100/A DIN69893 WELDON H200 D14	14	44	200	53	●
61AWE516	100/A	HSK100/A DIN69893 WELDON H200 D16	16	48	200	57	●
61AWE518	100/A	HSK100/A DIN69893 WELDON H200 D18	18	50	200	59	●
61AWE520	100/A	HSK100/A DIN69893 WELDON H200 D20	20	52	200	61	●
61AWE525	100/A	HSK100/A DIN69893 WELDON H200 D25	25	65	200	72	●
61AWE532	100/A	HSK100/A DIN69893 WELDON H200 D32	32	72	200	82	●
61AWE540	100/A	HSK100/A DIN69893 WELDON H200 D40	40	80	200	80	●
61AWE550	100/A	HSK100/A DIN69893 WELDON H200 D50	50	100	200	-	●

COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

d	Grano	Q.tà
---	-------	------



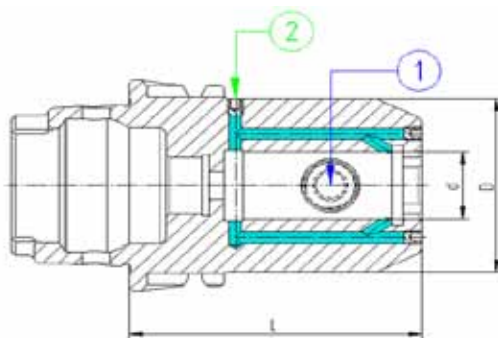
6	100601002	1
8	100801002	1
10	101001202	1
12 - 14	101201602	1
16 - 18	101401602	1
20	101601602	1
25	101802002	2
32 - 40	102002002	2
50	102422504	2

MANDRINO 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





DIN 69893

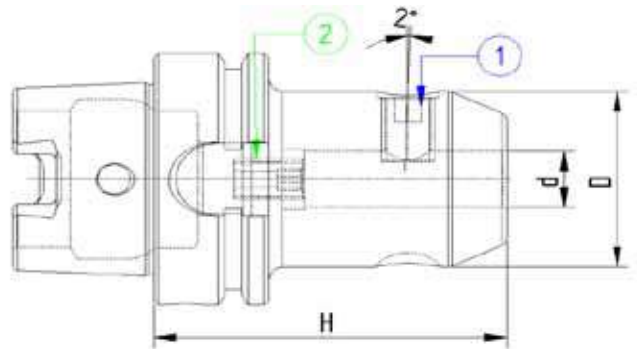
DIN 1835 B



Codice	HSK	Descrizione	d	D	L	G.3 15000
61AWLK06	100/A	HSK100/A DIN69893 WELDON/C H80 D.6	6	25	80	●
61AWLK08	100/A	HSK100/A DIN69893 WELDON/C H80 D.8	8	28	80	●
61AWLK10	100/A	HSK100/A DIN69893 WELDON/C H80 D.10	10	35	80	●
61AWLK12	100/A	HSK100/A DIN69893 WELDON/C H80 D.12	12	42	80	●
61AWLK14	100/A	HSK100/A DIN69893 WELDON/C H80 D.14	14	44	80	●
61AWLK16	100/A	HSK100/A DIN69893 WELDON/C H100 D.16	16	48	100	●
61AWLK18	100/A	HSK100/A DIN69893 WELDON/C H100 D.18	18	50	100	●
61AWLK20	100/A	HSK100/A DIN69893 WELDON/C H100 D.20	20	52	100	●
61AWLK25	100/A	HSK100/A DIN69893 WELDON/C H100 D.25	25	65	100	●
61AWLK32	100/A	HSK100/A DIN69893 WELDON/C H100 D.32	32	72	100	●
61AWLK40	100/A	HSK100/A DIN69893 WELDON/C H105 D.40	40	80	105	●



COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

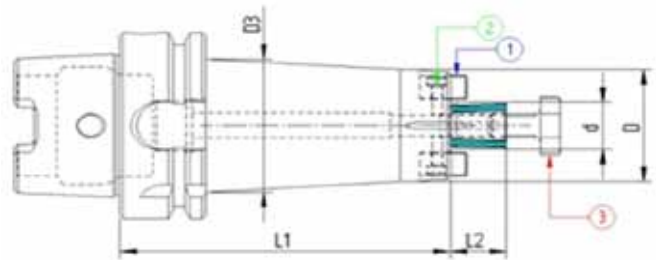
d	Grano	Q.tà	Grano	Q.tà
			 1	 2
6	100601002	1	100300404 M3x4	2
8	100801002	1	100400504 M4x5	2
10	101001202	1	100400504 M4x5	2
12 - 14	101201602	1	100400504 M4x5	2
16 - 18	101401602	1	100400504 M4x5	3
20	101601602	1	100400504 M4x5	3
25	101802002	2	100400504 M4x5	3
32 - 40	102002002	2	100400504 M4x5	3



Codice	HSK	Descrizione	d	D	H	G6.3 15000
61AWHN06	100/A	HSK100/A DIN69893 W/NOTCH H90 D6	6	25	90	●
61AWHN08	100/A	HSK100/A DIN69893 W/NOTCH H90 D8	8	28	90	●
61AWHN10	100/A	HSK100/A DIN69893 W/NOTCH H90 D10	10	35	90	●
61AWHN12	100/A	HSK100/A DIN69893 W/NOTCH H100 D12	12	42	100	●
61AWHN14	100/A	HSK100/A DIN69893 W/NOTCH H100 D14	14	44	100	●
61AWHN16	100/A	HSK100/A DIN69893 W/NOTCH H100 D16	16	48	100	●
61AWHN18	100/A	HSK100/A DIN69893 W/NOTCH H100 D18	18	50	100	●
61AWHN20	100/A	HSK100/A DIN69893 W/NOTCH H110 D20	20	52	110	●
61AWHN25	100/A	HSK100/A DIN69893 W/NOTCH H120 D25	25	65	120	●
61AWHN32	100/A	HSK100/A DIN69893 W/NOTCH H120 D32	32	72	120	●
61AWHN40	100/A	HSK100/A DIN69893 W/NOTCH H120 D40	40	80	120	●

COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

d	Grano	Q.tà	Grano Interno	Q.tà
				
	1		2	
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 - 18	101401602	1	101002501	1
20	101601602	1	101204001	1
25	101802002	2	101204001	1
32 - 40	102002002	2	101204001	1



STANDARD

Codice	HSK	Descrizione	d	L1	L2	D	D3	G6.3 15000
61APF116	100/A	HSK100/A DIN69893 P/F FISSO H50 D16	16	50	17	38	-	●
61APF122	100/A	HSK100/A DIN69893 P/F FISSO H50 D22	22	50	19	48	-	●
61APF127	100/A	HSK100/A DIN69893 P/F FISSO H50 D27	27	50	24	58	-	●
61APF132	100/A	HSK100/A DIN69893 P/F FISSO H50 D32	32	50	24	66	-	●
61APF140	100/A	HSK100/A DIN69893 P/F FISSO H60 D40	40	60	27	80	-	●




L = 100

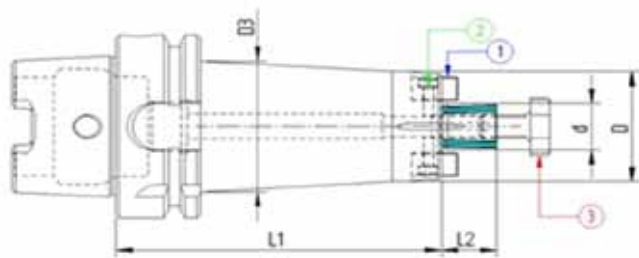
Codice	HSK	Descrizione	d	L1	L2	D	D3	G6.3 15000
61APF216	100/A	HSK100/A DIN69893 P/F FISSO H100 D16	16	100	17	38	43	●
61APF222	100/A	HSK100/A DIN69893 P/F FISSO H100 D22	22	100	19	48	53	●
61APF227	100/A	HSK100/A DIN69893 P/F FISSO H100 D27	27	100	21	58	-	●
61APF232	100/A	HSK100/A DIN69893 P/F FISSO H100 D32	32	100	24	66	-	●
61APF240	100/A	HSK100/A DIN69893 P/F FISSO H100 D40	40	100	27	80	-	●

L = 130

Codice	HSK	Descrizione	d	L1	L2	D	D3	G6.3 15000
61APF316	100/A	HSK100/A DIN69893 P/F FISSO H130 D16	16	130	17	38	44	●
61APF322	100/A	HSK100/A DIN69893 P/F FISSO H130 D22	22	130	19	48	55	●
61APF327	100/A	HSK100/A DIN69893 P/F FISSO H130 D27	27	130	21	58	65	●
61APF332	100/A	HSK100/A DIN69893 P/F FISSO H130 D32	32	130	24	66	73	●
61APF340	100/A	HSK100/A DIN69893 P/F FISSO H130 D40	40	130	27	80	-	●

COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

d / D	Tassello	Q.tà	Vite Tassello	Q.tà	Vite Croce	Q.tà
						
	1		2		3	
16 / 38	916TSL01	2	110301001	2	916VTC02	1
22 / 48	922TSL01	2	110301201	2	922VTC02	1
27 / 58	927TSL01	2	110401601	2	927VTC02	1
32 / 66	932TSL01	2	110601601	2	932VTC02	1
40 / 80	940TSL01	2	110601601	2	940VTC02	1



L=160

Codice	HSK	Descrizione	d	L1	L2	D	D3	G6.3 15000
61APF416	100/A	HSK100/A DIN69893 P/F FISSO H160 D16	16	160	17	38	43	●
61APF422	100/A	HSK100/A DIN69893 P/F FISSO H160 D22	22	160	19	48	56	●
61APF427	100/A	HSK100/A DIN69893 P/F FISSO H160 D27	27	160	21	58	66	●
61APF432	100/A	HSK100/A DIN69893 P/F FISSO H160 D32	32	160	24	66	74	●
61APF440	100/A	HSK100/A DIN69893 P/F FISSO H160 D40	40	160	27	80	-	●




L = 200

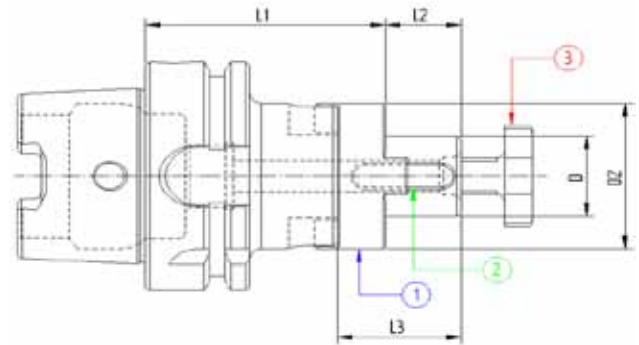
Codice	HSK	Descrizione	d	L1	L2	D	D3	G6.3 15000
61APF516	100/A	HSK100/A DIN69893 P/F FISSO H200 D16	16	200	17	38	47	●
61APF522	100/A	HSK100/A DIN69893 P/F FISSO H200 D22	22	200	19	48	58	●
61APF527	100/A	HSK100/A DIN69893 P/F FISSO H200 D27	27	200	21	58	67	●
61APF532	100/A	HSK100/A DIN69893 P/F FISSO H200 D32	32	200	24	66	75	●
61APF540	100/A	HSK100/A DIN69893 P/F FISSO H200 D40	40	200	27	80	-	●

L = 250

Codice	HSK	Descrizione	d	L1	L2	D	D3	G6.3 15000
61APF616	100/A	HSK100/A DIN69893 P/F FISSO H250 D16	16	250	17	38	48	●
61APF622	100/A	HSK100/A DIN69893 P/F FISSO H250 D22	22	250	19	48	58	●
61APF627	100/A	HSK100/A DIN69893 P/F FISSO H250 D27	27	250	21	58	68	●
61APF632	100/A	HSK100/A DIN69893 P/F FISSO H250 D32	32	250	24	66	77	●
61APF640	100/A	HSK100/A DIN69893 P/F FISSO H250 D40	40	250	27	80	-	●




COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

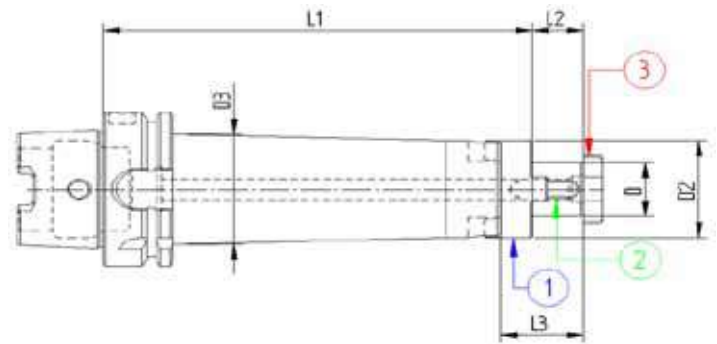
d / D	Tassello	Q.tà	Vite Tassello	Q.tà	Vite Croce	Q.tà
						
	1		2		3	
16 / 38	916TSL01	2	110301001	2	916VTC02	1
22 / 48	922TSL01	2	110301201	2	922VTC02	1
27 / 58	927TSL01	2	110401601	2	927VTC02	1
32 / 66	932TSL01	2	110601601	2	932VTC02	1
40 / 80	940TSL01	2	110601601	2	940VTC02	1



Codice	HSK	Descrizione	D	L1	L2	L3	D2
61APU116	100/A	HSK100/A DIN69893 P/F UNIV.H60 D16	16	60	17	27	32
61APU122	100/A	HSK100/A DIN69893 P/F UNIV.H60 D22	22	60	19	31	40
61APU127	100/A	HSK100/A DIN69893 P/F UNIV.H60 D27	27	60	21	33	48
61APU132	100/A	HSK100/A DIN69893 P/F UNIV.H60 D32	32	60	24	38	58
61APU140	100/A	HSK100/A DIN69893 P/F UNIV.H70 D40	40	70	27	41	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






L = 100


Codice	HSK	Descrizione	D	L1	L2	L3	D2	D3
61APU216	100/A	HSK100/A DIN69893 P/F UNIV.H100 D16	16	100	17	27	32	44
61APU222	100/A	HSK100/A DIN69893 P/F UNIV.H100 D22	22	100	19	31	40	50
61APU227	100/A	HSK100/A DIN69893 P/F UNIV.H100 D27	27	100	21	33	48	60
61APU232	100/A	HSK100/A DIN69893 P/F UNIV.H100 D32	32	100	24	38	58	58
61APU240	100/A	HSK100/A DIN69893 P/F UNIV.H100 D40	40	100	27	41	70	70

L = 160

Codice	HSK	Descrizione	D	L1	L2	L3	D2	D3
61APU416	100/A	HSK100/A DIN69893 P/F UNIV.H160 D16	16	160	17	27	32	44
61APU422	100/A	HSK100/A DIN69893 P/F UNIV.H160 D22	22	160	19	31	40	50
61APU427	100/A	HSK100/A DIN69893 P/F UNIV.H160 D27	27	160	21	33	48	60
61APU432	100/A	HSK100/A DIN69893 P/F UNIV.H160 D32	32	160	24	38	58	58
61APU440	100/A	HSK100/A DIN69893 P/F UNIV.H160 D40	40	160	27	41	70	70

COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

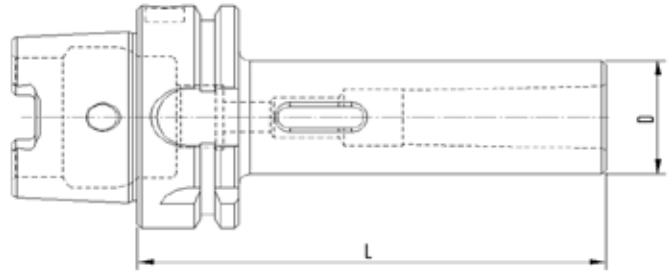
D	Giunto	Q.tà	Linguetta	Q.tà	Vite Croce	Q.tà
						
16	916GNT01	1	170402004	1	916VTC02	1
22	922GNT01	1	170602506	1	922VTC02	1
27	927GNT01	1	170702507	1	927VTC02	1
32	932GNT01	1	170802807	1	932VTC02	1
40	940GNT01	1	171003208	1	940VTC02	1


MANDRINI ATTACCO CONO MORSE PER PUNTE
MORSE TAPER ADAPTOR FOR DRILLS
DOUILLES POUR CONE MORSE A TENON
ZWISCHENHULSEN FUER MORSEKEGEL MIT AUSTREIBLAPPEN



DIN 69893

DIN 228 - 2



Codice	HSK	Descrizione	D	L
61AMP101	100/A	HSK100/A DIN69893 H.110 CM1 PUNTE	25	110
61AMP102	100/A	HSK100/A DIN69893 H.120 CM2 PUNTE	32	120
61AMP103	100/A	HSK100/A DIN69893 H.150 CM3 PUNTE	40	150
61AMP104	100/A	HSK100/A DIN69893 H.170 CM4 PUNTE	48	170
61AMP105	100/A	HSK100/A DIN69893 H.200 CM5 PUNTE	63	200

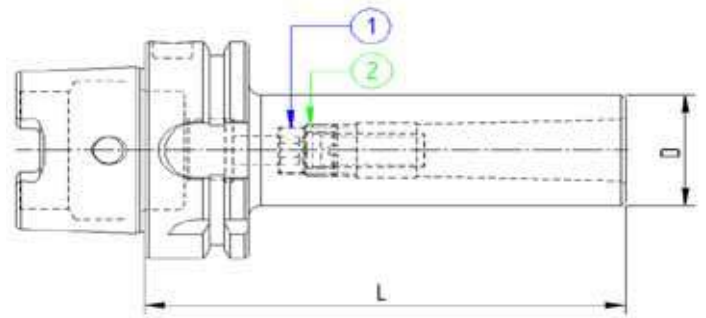


MANDRINI ATTACCO CONO MORSE FRESE CON REFRIGERAZIONE INTERNA
 MORSE TAPER MILL ADAPTER WITH THREAD AND INTERNAL COOLANT SUPPLY
 DOUILLES POUR CONE MORSE AVEC TARAUDAGE ET ARROSAGE INTERNE
 ZWISCHENHULSEN FÜR MORSEKEGEL MIT ZENTRALER KÜHLMITTELZUFUHR





DIN 69893

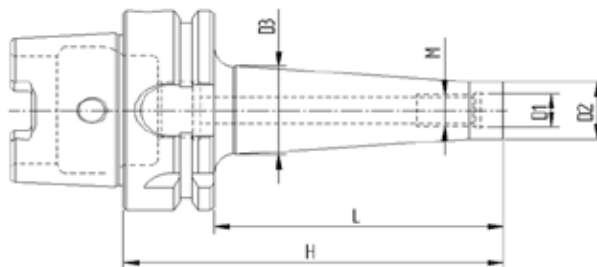
DIN 228 - 2



Codice	HSK	Descrizione	D	L
61AMF101	100/A	HSK100/A DIN69893 H.110 CM1 FRESE	25	110
61AMF102	100/A	HSK100/A DIN69893 H.120 CM2 FRESE	32	120
61AMF103	100/A	HSK100/A DIN69893 H.150 CM3 FRESE	40	150
61AMF104	100/A	HSK100/A DIN69893 H.170 CM4 FRESE	48	170
61AMF105	100/A	HSK100/A DIN69893 H.200 CM5 FRESE	63	200

COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

MORSE	Vite	Q.tà	Ghiera	Q.tà
				
1	110603501	1	121206502	1
2	111003014	1	121500802	1
3	111204003	1	122000903	1
4	111604514	1	122501204	1
5	112005003	1	123601104	1



L = 87

Codice	HSK	Descrizione	D1	D2	D3	H	L	M	G2.5 20000
61AAF212	100/A	HSK100/A DIN69893 P/F AT.FIL.M12X87	12.5	21	24	87	58	12	●
61AAF216	100/A	HSK100/A DIN69893 P/F AT.FIL.M16X87	17	29	32	87	58	16	●

L = 137

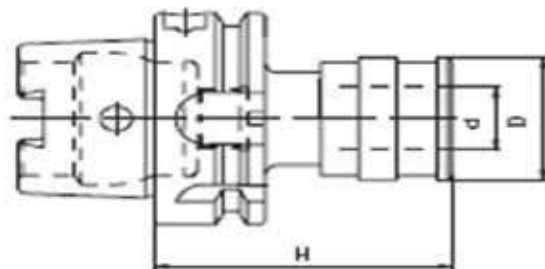
Codice	HSK	Descrizione	D1	D2	D3	H	L	M	G2.5 20000
61AAF312	100/A	HSK100/A DIN69893 P/F AT.FIL.M12X137	12.5	21	47	137	108	12	●
61AAF316	100/A	HSK100/A DIN69893 P/F AT.FIL.M16X137	17	29	42	137	108	16	●

L = 187

Codice	HSK	Descrizione	D1	D2	D3	H	L	M	G2.5 20000
61AAF412	100/A	HSK100/A DIN69893 P/F AT.FIL.M12X187	12.5	21	55	187	158	12	●
61AAF416	100/A	HSK100/A DIN69893 P/F AT.FIL.M16X187	17	29	55	187	158	16	●

L = 237

Codice	HSK	Descrizione	D1	D2	D3	H	L	M	G2.5 20000
61AAF516	100/A	HSK100/A DIN69893 P/F AT.FIL.M16X237	17	29	55	237	208	16	●



Codice	HSK	Descrizione	D	d	H
61APCRM1	100/A	HSK100/A M/PORTAM/C/R H80 GR.1	48	19	80
61APCRM2	100/A	HSK100/A M/PORTAM/C/R H100 GR.2	60	31	100

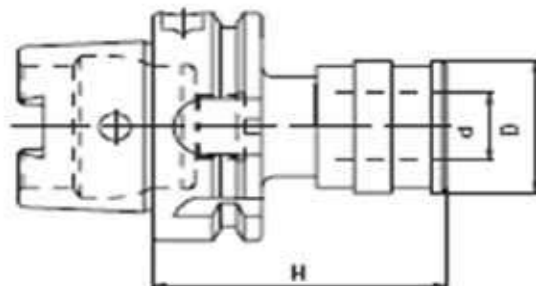
ACCESSORI - ACCESSORIES - ACCESSOIRES - ZUBEHÖR



RIF. PAGINA **312**



RIF. PAGINA **313**



Codice	HSK	Descrizione	D	d	H
61APRRM1	100/A	HSK100/A M/PORTAM/C/R/R H80 GR.1	48	19	80
61APRRM2	100/A	HSK100/A M/PORTAM/C/R/R H100 GR.2	60	31	100

ACCESSORI - ACCESSORIES - ACCESSOIRES - ZUBEHÖR



RIF. PAGINA **312**



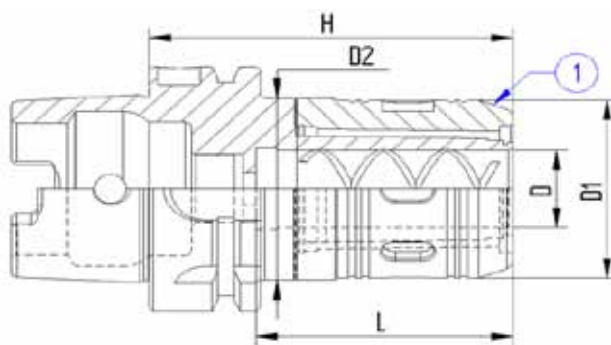
RIF. PAGINA **313**



MANDRINI A FORTE SERRAGGIO
MILLING CHUCK
MANDRINS A FORT SERRAGE
KRAFTSPANNFUTTER



DIN 69893




Codice	HSK	Descrizione	H	D	D1	D2	L	G6.3 12000
61AFS220	100/A	HSK100/A FORTE SERRAGGIO Ø20 H105	105	20	46	47	60	●
61AFS232	100/A	HSK100/A FORTE SERRAGGIO Ø32 H115	115	32	62	63	80	●

ACCESSORI - ACCESSORIES - ACCESSOIRES - ZUBEHÖR

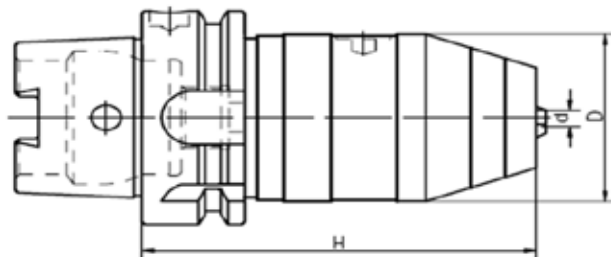


RIF. PAGINA **315**


MANDRINI INTEGRALI CON CHIAVE ESAGONALE
DRILL CHUCK WITH EXAGONAL KEY LOCK SYSTEM
MANDRIN MONOBLOC-SERRAGE PAR CLÉ 6 PANS
NC-KURZBOHRFUTTER-SPANNED DURCH 6 KANTSCHLUSSEL



DIN 69893



CON REFRIGERANTE CENTRALE - WITH INTERNAL COOLANT SUPPLY - AVEC ARROSAGE INTERNE - MIT ZENTRALER KÜHLMITTEL

Codice	HSK	Descrizione	D	H	d
61AMAZ13	100/A	HSK100/A M/AUTOS./FORI H108 D13	50	108	1-13
61AMAZ16	100/A	HSK100/A M/AUTOS./FORI H113 D16	50	113	3-16


MANDRINI SEMILAVORATI CON STELO TENERO
BLANK TOOLHOLDERS WITH SOFT SHANK
BARRE D'ALEPAGE SEMI-FINIES
ROHLINGE MIT WEICHEM SCHAFT



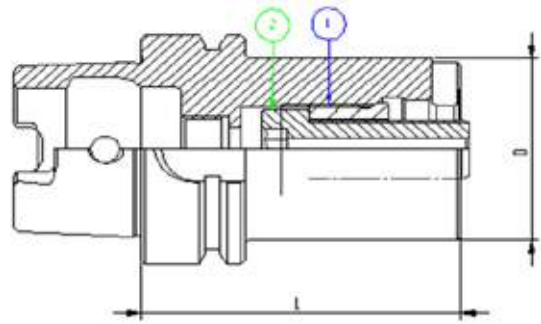
DIN 69893



Codice	HSK	Descrizione	D	L
61AST397	100/A	HSK100/A DIN69893 ST. TENERO D97x315	97	315



HSK 63/A

ATTACCHI BASE MODULARI



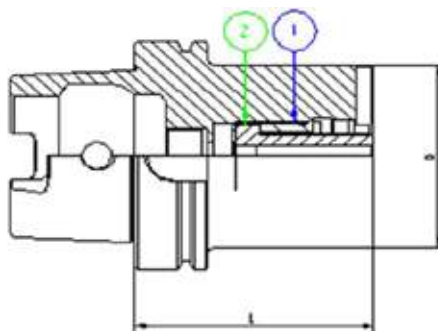
Codice	Descrizione	L	D
66AVL150	HSK63/A DIN69893 MODULARE H.80 D.50	80	50
66AVL163	HSK63/A DIN69893 MODULARE H.90 D.63	90	63

COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

∅	VITE	Q.tà	GHIERA	Q.tà
				
	1		2	
50	111604011	1	122502007	1
63	112005011	1	123002408	1



HSK 100/A

ATTACCHI BASE MODULARI

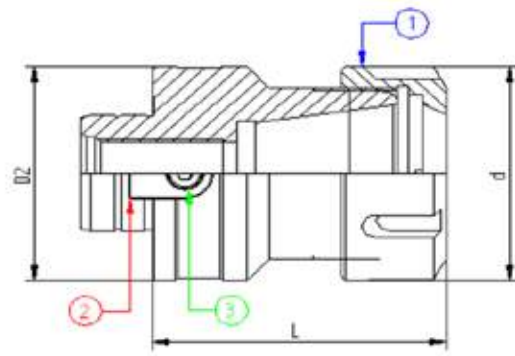


Codice	Descrizione	L	D
61AVL150	HSK100/A DIN69893 MODULARE H.85 D.50	85	50
61AVL163	HSK100/A DIN69893 MODULARE H.95 D.63	95	63
61AVL180	HSK100/A DIN69893 MODULARE H.95 D.80	95	80

COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE



Ø	Vite	Q.tà	Ghiera	Q.tà
				
	1		2	
50	111604011	1	122502007	1
63	112005011	1	123002408	1
80	112005011	1	123002408	1

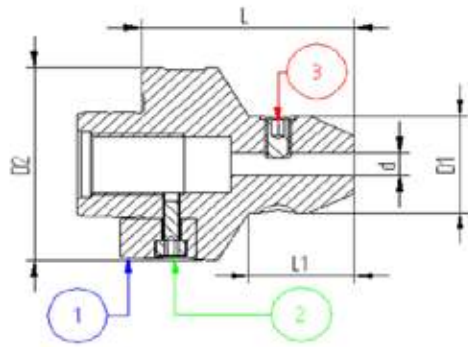
INSERTI MODULARI 50



Codice	Descrizione	D2	L	d
VL5PP113	MODULARE D50 P/PINZE ER20 H=63	50	63	35
VL5PP116	MODULARE D50 P/PINZE ER25 H=63	50	63	42
VL5PP120	MODULARE D50 P/PINZE ER32 H=65	50	65	50




COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

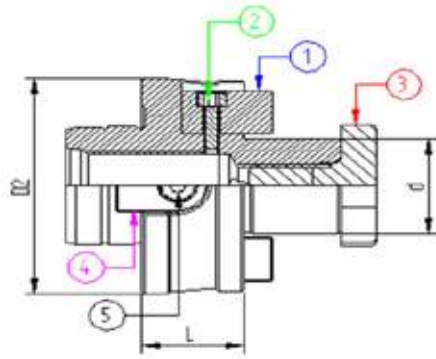
ER	Ghiera	Q.tà	Tassello	Q.tà	Vite	Q.tà
						
20	920GHREQ	1	927TSL03	1	110401601	1
25	925GHREQ	1	927TSL03	1	110401601	1
32	932GHREQ	1	927TSL03	1	110401601	1



Codice	Descrizione	D2	L	d	L1	D1
VL5WLD06	MOD. D50 WELDON D.6 H=50	50	50	6	25	25
VL5WLD08	MOD. D50 WELDON D.8 H=50	50	50	8	25	28
VL5WLD10	MOD. D50 WELDON D.10 H=50	50	50	10	28	35
VL5WLD12	MOD. D50 WELDON D.12 H=60	50	60	12	36	42
VL5WLD14	MOD. D50 WELDON D.14 H=60	50	60	14	37	44
VL5WLD16	MOD. D50 WELDON D.16 H=60	50	60	16	39	48
VL5WLD18	MOD. D50 WELDON D.18 H=60	50	60	18	45	50
VL5WLD20	MOD. D50 WELDON D.20 H=62	50	62	20	47	52
VL5WLD25	MOD. D50 WELDON D.25 H=80	50	80	25	66	65






COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

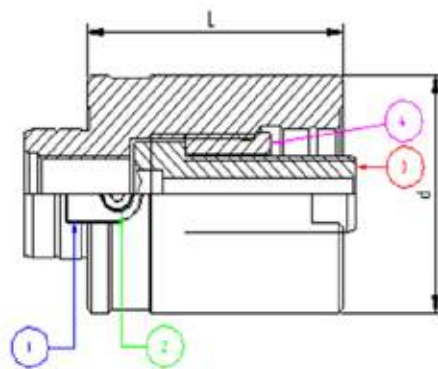
d	Tassello	Q.tà	Vite	Q.tà	Grano	Q.tà
						
	1		2		3	
6	927TSL03	1	110401201	1	100601002	1
8	927TSL03	1	110401201	1	100801002	1
10	927TSL03	1	110401201	1	101001202	1
12	927TSL03	1	110401201	1	101201602	1
14	927TSL03	1	110401201	1	101201602	1
16	927TSL03	1	110401201	1	101401602	1
18	927TSL03	1	110401201	1	101401602	1
20	927TSL03	1	110401201	1	101601602	1
25	927TSL03	1	110401201	1	101802002	2



Codice	Descrizione	D2	L	d
VL5PF116	MODULARE D50 P/FRESA D.16 H=30	50	30	16
VL5PF122	MODULARE D50 P/FRESA D.22 H=20	50	20	22
VL5PF127	MODULARE D50 P/FRESA D.27 H=20	50	20	27
VL5PF132	MODULARE D50 P/FRESA D.32 H=25	50	25	32





COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

d	Tassello	Q.tà	Vite	Q.tà	Vite Croce	Q.tà	Tassello	Q.tà	Vite	Q.tà
										
	1		2		3		4		5	
16	916TSL01	2	110301001	2	916VTC02	1	927TSL03	1	110401201	1
22	922TSL01	2	110301001	2	922VTC02	1	927TSL03	1	110401201	1
27	927TSL01	2	110401601	2	927VTC02	1	927TSL03	1	110401201	1
32	932TSL01	2	110601601	2	932VTC02	1	927TSL03	1	110401201	1

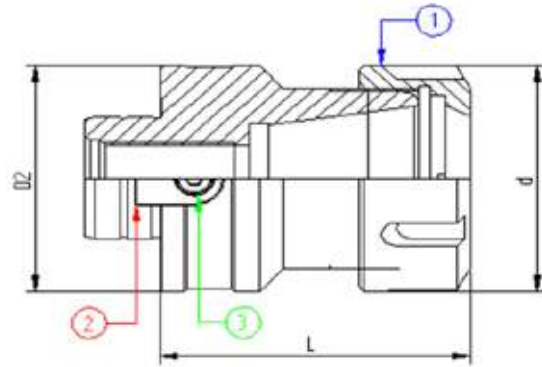


Codice	Descrizione	L	d
VL5PR060	MODULARE D50 PROLUNGA H=60	60	50
VL5PR080	MODULARE D50 PROLUNGA H=80	80	50
VL5PR100	MODULARE D50 PROLUNGA H=100	100	50

COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE




L	Tassello	Q.tà	Vite	Q.tà	Vite	Q.tà	Ghiera	Q.tà
								
	1		2		3		4	
60	927TSL03	1	111604011	1	110401201	1	122502007	1
80	927TSL03	1	111604011	1	110401201	1	122502007	1
100	927TSL03	1	111604011	1	110401201	1	122502007	1

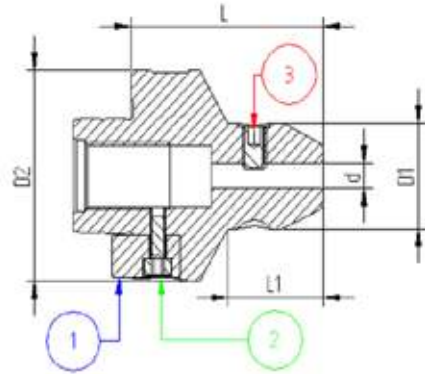
INSERTI MODULARI 63



Codice	Descrizione	D2	L	d
VL6PP120	MODULARE D63 P/PINZE ER32 H=77	63	77	50
VL6PP126	MODULARE D63 P/PINZE ER40 H=86	63	86	63




COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

ER	Ghiera	Q.tà	Tassello	Q.tà	Vite	Q.tà
						
32	932GHREQ	1	940TSL06	1	110601201	1
40	940GHREQ	1	940TSL06	1	110601201	1



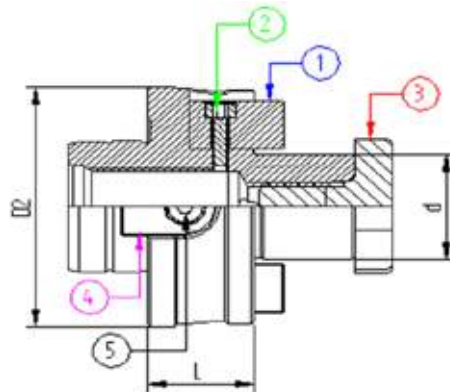
Codice	Descrizione	D2	L	d	L1	D1
VL6WLD10	MOD. D63 WELDON D.10 H=70	63	70	10	36	35
VL6WLD12	MOD. D63 WELDON D.12 H=70	63	70	12	39,5	42
VL6WLD14	MOD. D63 WELDON D.14 H=70	63	70	14	40,5	44
VL6WLD16	MOD. D63 WELDON D.16 H=70	63	70	16	42,5	48
VL6WLD18	MOD. D63 WELDON D.18 H=70	63	70	18	43,5	50
VL6WLD20	MOD. D63 WELDON D.20 H=70	63	70	20	44,5	52
VL6WLD25	MOD. D63 WELDON D.25 H=80	63	80	25	59,5	62
VL6WLD32	MOD. D63 WELDON D.32 H=80	63	80	32	64,5	63
VL6WLD40	MOD. D63 WELDON D.40 H=90	63	90	40	70	80

COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

d	Tassello	Q.tà	Vite	Q.tà	Grano	Q.tà
						
10	940TSL06	1	110601201	1	101001202	1
12	940TSL06	1	110601201	1	101201602	1
14	940TSL06	1	110601201	1	101201602	1
16	940TSL06	1	110601201	1	101401602	1
18	940TSL06	1	110601201	1	101401602	1
20	940TSL06	1	110601201	1	101601602	1
25	940TSL06	1	110601201	1	101802002	2
32	940TSL06	1	110601201	1	102002002	2
40	940TSL06	1	110601201	1	102002002	2



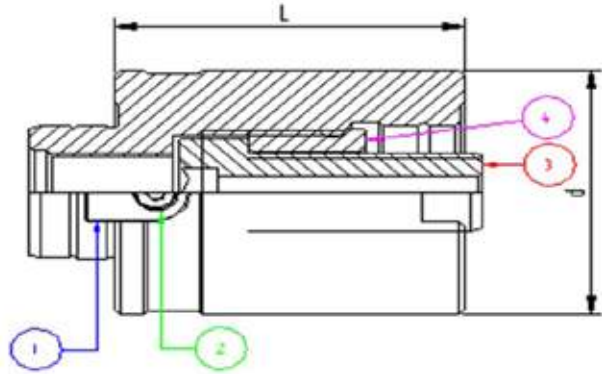
ADATTATORE PORTA FRESA
shell mill HOLDER ADAPTERS
ADAPTATEURS PORTE FRAISES
ADAPTER FUER FRAESER



Codice	Descrizione	D2	L	d
VL6PF122	MODULARE D63 P/FRESA D.22 H=30	63	30	22
VL6PF127	MODULARE D63 P/FRESA D.27 H=30	63	30	27
VL6PF132	MODULARE D63 P/FRESA D.32 H=30	63	30	32
VL6PF140	MODULARE D63 P/FRESA D.40 H=30	63	30	40





COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

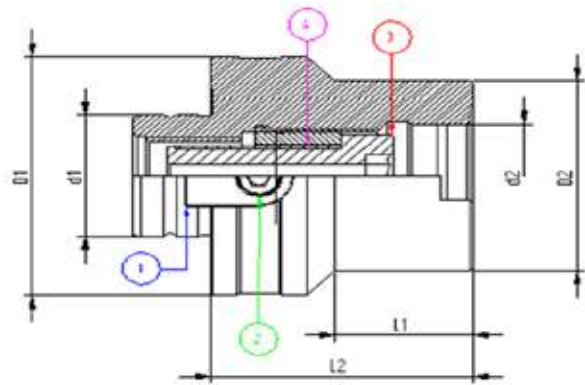
d	Tassello	Q.tà	Vite	Q.tà	Vite Croce	Q.tà	Tassello	Q.tà	Vite	Q.tà
22	922TSL01	2	110301201	2	922VTC02	1	940TSL06	1	110601201	1
27	927TSL01	2	110401601	2	927VTC02	1	940TSL06	1	110601201	1
32	932TSL01	2	110601601	2	932VTC02	1	940TSL06	1	110601201	1
40	940TSL01	2	110601601	2	940VTC02	1	940TSL06	1	110601201	1



Codice	Descrizione	L	d
VL6PR080	MODULARE D63 PROLUNGA H=80	80	63
VL6PR120	MODULARE D63 PROLUNGA H=120	120	63





COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

L	Tassello	Q.tà	Vite	Q.tà	Vite	Q.tà	Ghiera	Q.tà
								
	1		2		3		4	
80	940TSL06	1	110601201	1	112005012	1	123002408	1
120	940TSL06	1	110601201	1	112005012	1	123002408	1

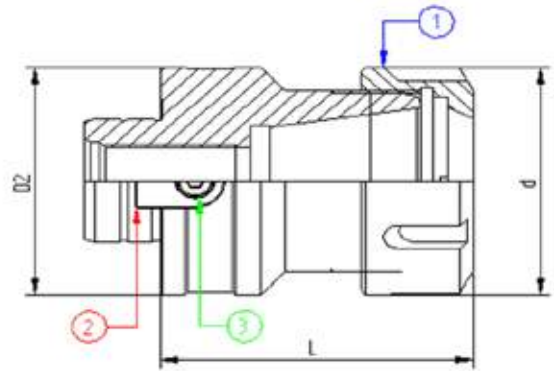


Codice	Descrizione	D1	d1	L2	L1	d2	D2
VL6RD050	MODULARE D63 RIDUZIONE D.50 H=60	63	32	60	31,5	27	50

COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

D	Tassello	Q.tà	Vite	Q.tà	Vite	Q.tà	Ghiera	Q.tà
								
50	940TSL03	1	110601201	1	111604011	1	122502007	1

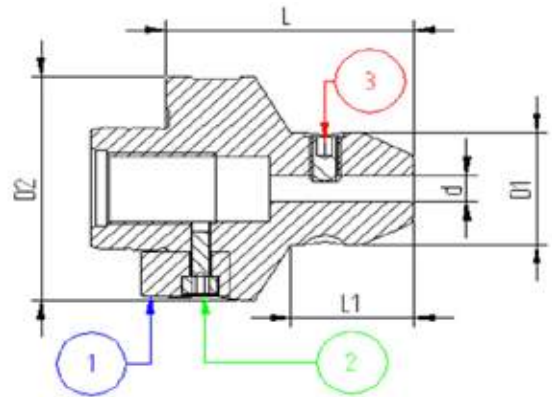
INSERTI MODULARI 80



Codice	Descrizione	D2	L	d
VL8PP126	MODULARE D80 P/PINZE ER40 H=90	80	90	63




COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

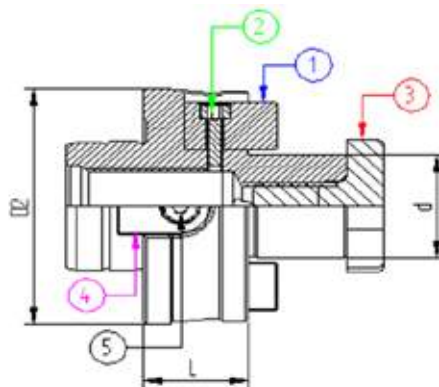
ER	Ghiera	Q.tà	Tassello	Q.tà	Vite	Q.tà
1						
40	940GHREQ	1	940TSL01	1	110601601	1



Codice	Descrizione	D2	L	d	L1	D1
VL8WLD16	MOD. D80 WELDON D.16 H=70	80	70	16	32	48
VL8WLD20	MOD. D80 WELDON D.20 H=70	80	70	20	34	52
VL8WLD25	MOD. D80 WELDON D.25 H=80	80	80	25	50,5	65
VL8WLD32	MOD. D80 WELDON D.32 H=80	80	80	32	54	72
VL8WLD40	MOD. D80 WELDON D.40 H=90	80	90	40	67,5	79






COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

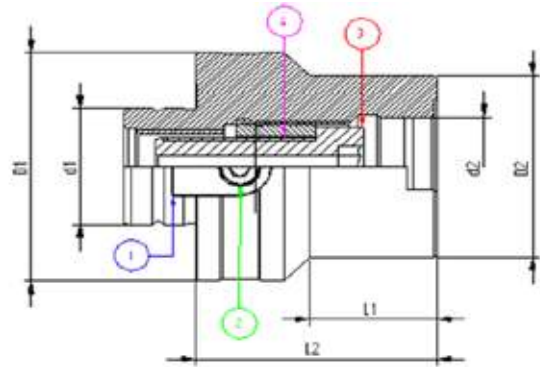
d	Tassello	Q.tà	Vite	Q.tà	Grano	Q.tà
						
16	940TSL01	1	110601601	1	101401602	1
20	940TSL01	1	110601601	1	101601602	1
25	940TSL01	1	110601601	1	101802002	2
32	940TSL01	1	110601601	1	102002002	2
40	940TSL01	1	110601601	1	102002002	2



Codice	Descrizione	D2	L	d
VL8PF127	MODULARE D80 P/FRESA D.27 H=30	80	30	27
VL8PF132	MODULARE D80 P/FRESA D.32 H=30	80	30	32
VL8PF140	MODULARE D80 P/FRESA D.40 H=30	80	30	40





COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

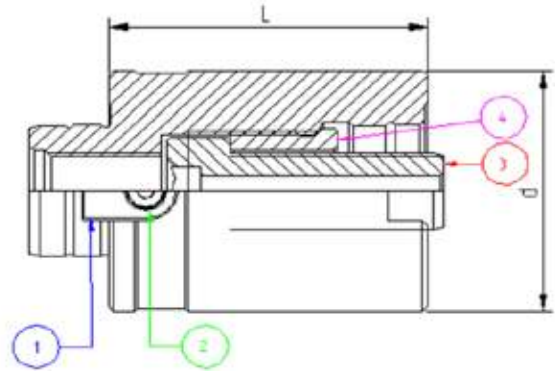
Ø	Tassello	Q.tà	Vite	Q.tà	Vite Croce	Q.tà	Tassello	Q.tà	Vite	Q.tà
										
	1		2		3		4		5	
27	927TSL01	2	110401201	2	927VTC02	1	940TSL01	1	110601601	1
32	932TSL01	2	110601601	2	932VTC02	1	940TSL01	1	110601601	1
40	940TSL01	2	110601601	2	940VTC02	1	940TSL01	1	110601601	1



Codice	Descrizione	D1	d1	L2	L1	d2	D2
VL8RD163	MODULARE D80 RIDUZIONE D.63 H=80	80	32	80	49,5	32	63





COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

Ø	Vite	Q.tà	Ghiera	Q.tà	Vite	Q.tà	Tassello	Q.tà
		3		4		2		1
63	112005011	1	123002408	1	110601601	1	940TSL01	1



Codice	Descrizione	L	d
VL8PR080	MODULARE D80 PROLUNGA H=80	80	80
VL8PR100	MODULARE D80 PROLUNGA H=100	100	80
VL8PR120	MODULARE D80 PROLUNGA H=120	120	80
VL8PR140	MODULARE D80 PROLUNGA H=140	140	80
VL8PR160	MODULARE D80 PROLUNGA H=160	160	80

COMPONENTI - SPARE PARTS - PIECES DETACHEES - ERSATZTEILE

L	Tassello	Q.tà	Vite	Q.tà	Vite	Q.tà	Ghiera	Q.tà
								
80	940TSL01	1	110601601	1	112005011	1	123002408	1
100	940TSL01	1	110601601	1	112005011	1	123002408	1
120	940TSL01	1	110601601	1	112005011	1	123002408	1
140	940TSL01	1	110601601	1	112005011	1	123002408	1
160	940TSL01	1	110601601	1	112005011	1	123002408	1