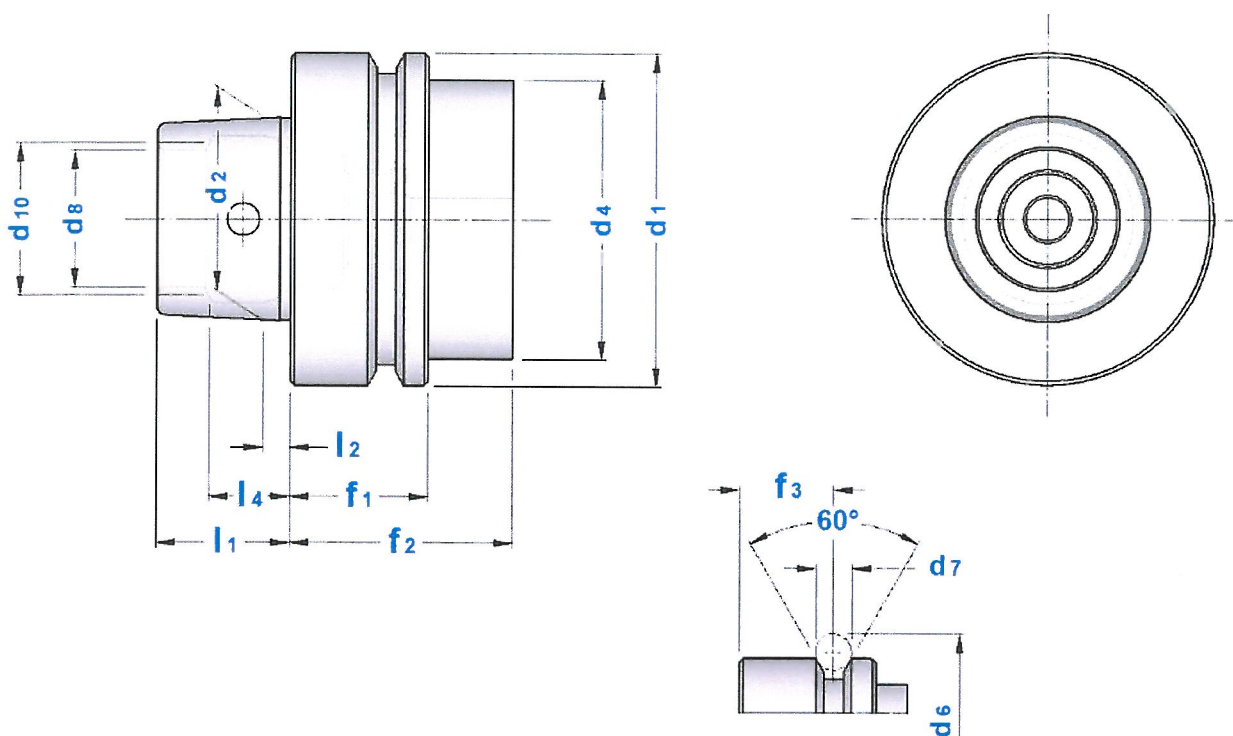


## CARATTERISTICHE TECNICHE DIN 69893 - HSK F

DIN 69893 - HSK F STANDARD FEATURES



CONO	d1	d2	d4	d6	d7	d8	d10	f1	f2	f3	l1	l2	l4	OR
HSK 50 F	50	30	42	59,3	7	21	23	26	42	18	20	4,0	11,42	6976
HSK 63 F	63	38	53	72,3	7	26	29	26	42	18	25	5,0	14,13	6977

## ADDUTTORI PER REFRIGERANTE COOLANT TUBES

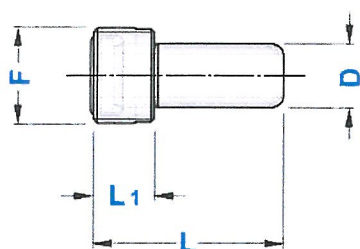


OR  
O-RING



CHIAVE  
WRENCH

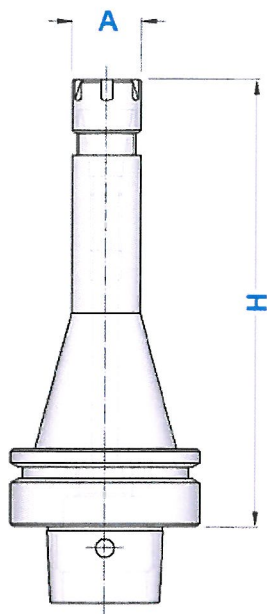
TIPO	Art.	F	D	L	L1	OR	CHIAVE
HSK 50 F	0414	M 12 x 1	8	29,3	7,5	5672	0471
HSK 63 F	0415	M 16 x 1	10	33,0	9,5	5673	0472






# HSK F

## PORTAPINZA ER - GHIERA MINI ER - DIN 6499 COLLET CHUCKS WITH MINI NUT

Balanced G 2.5  
23.000 rpm

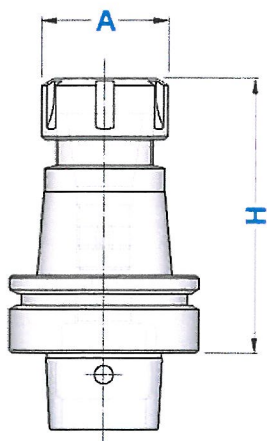





TIPO	Art.	A	CAPACITA'			
HSK 50 F - ER 16 GM/H 80 HSK 50 F - ER 16 GM/H 100 HSK 50 F - ER 16 GM/H 160	6756 6854 6757	22	1 ÷ 10	1229	5719	0364
HSK 63 F - ER 16 GM/H 100 HSK 63 F - ER 16 GM/H 160	6759 6760	22	1 ÷ 10	1229	5719	0364
HSK 63 F - ER 20 GM/H 100	6856	28	1 ÷ 13	1230	5720	0787
HSK 63 F - ER 25 GM/H 100 HSK 63 F - ER 25 GM/H 160	6858 6761	35	1 ÷ 16	1231	5721	0996

# HSK F

## PORTAPINZE ER - GHIERA STANDARD ER - DIN 6499 COLLET CHUCKS WITH STANDARD NUT

Balanced G 2.5  
23.000 rpm



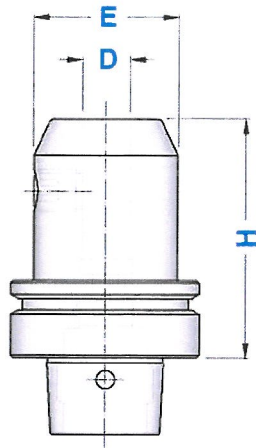
TIPO	Art.	A	CAPACITA'			
HSK 50 F - ER 16/H 100	6745	32	1 ÷ 10	4993	3698	0364
HSK 50 F - ER 20/H 100	6749	35	1 ÷ 13	4994	3699	0787
HSK 50 F - ER 25/H 80 HSK 50 F - ER 25/H 100	6762 6791	42	1 ÷ 16	4995	3669	0996
HSK 50 F - ER 32/H 100	6763	50	2 ÷ 20	4996	3670	0988
HSK 50 F - ER 40/H 100	6764	63	3 ÷ 30	4997	3671	0821
HSK 63 F - ER 16/H 100 HSK 63 F - ER 16/H 120 HSK 63 F - ER 16/H 160	6792 6793 6794	32	1 ÷ 10	4993	3698	0364
HSK 63 F - ER 20/H 100 HSK 63 F - ER 20/H 120 HSK 63 F - ER 20/H 160	6795 6796 6797	35	1 ÷ 13	4994	3699	0787
HSK 63 F - ER 25/H 100 HSK 63 F - ER 25/H 120 HSK 63 F - ER 25/H 160	6765 6798 6799	42	1 ÷ 16	4995	3669	0996
HSK 63 F - ER 32/H 100 HSK 63 F - ER 32/H 120 HSK 63 F - ER 32/H 160	6766 6809 6767	50	2 ÷ 20	4996	3670	0988
HSK 63 F - ER 40/H 80 HSK 63 F - ER 40/H 120 HSK 63 F - ER 40/H 160	6768 6769 6810	63	3 ÷ 30	4997	3671	0821

# HSK F

## PORTAFRESE WELDON END MILL HOLDERS FOR DIN 1835-B SHANKS



Balanced G 2,5  
20.000 rpm



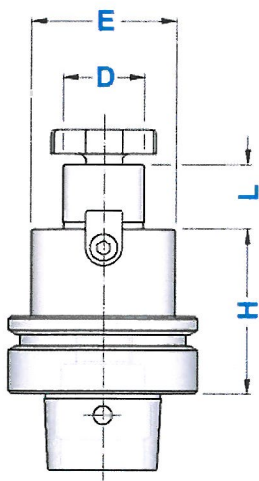
TIPO	Art.	D	H	E	
HSK 50 F - WE 6 / H 65	6077	6	65	25	4970
HSK 50 F - WE 8 / H 65	6078	8	65	28	4971
HSK 50 F - WE 10 / H 65	6079	10	65	35	4972
HSK 50 F - WE 12 / H 80	6080	12	80	42	4973
HSK 50 F - WE 16 / H 80	6081	16	80	48	4974
HSK 50 F - WE 20 / H 80	6082	20	80	52	4975
HSK 63 F - WE 6 / H 65	6083	6	65	25	4970
HSK 63 F - WE 6 / H 100	6824		100		
HSK 63 F - WE 6 / H 160	6825		160		
HSK 63 F - WE 8 / H 65	6084	8	65	28	4971
HSK 63 F - WE 8 / H 100	6826		100		
HSK 63 F - WE 8 / H 160	6827		160		
HSK 63 F - WE 10 / H 65	6085	10	65	35	4972
HSK 63 F - WE 10 / H 100	6828		100		
HSK 63 F - WE 10 / H 160	6829		160		
HSK 63 F - WE 12 / H 80	6086	12	80	42	4973
HSK 63 F - WE 12 / H 100	6830		100		
HSK 63 F - WE 12 / H 160	6831		160		
HSK 63 F - WE 14 / H 80	6832	14	80	44	4973
HSK 63 F - WE 16 / H 80	6087	16	80	48	4974
HSK 63 F - WE 16 / H 100	6833		100		
HSK 63 F - WE 16 / H 160	6834		160		
HSK 63 F - WE 18 / H 80	6835	18	80	50	4974
HSK 63 F - WE 20 / H 80	6088	20	80	52	4975
HSK 63 F - WE 20 / H 100	6836		100		
HSK 63 F - WE 20 / H 160	6837		160		
HSK 63 F - WE 25 / H 110	6089	25	110	65	4976
HSK 63 F - WE 25 / H 160	6838		160		
HSK 63 F - WE 32 / H 110	6839	32	110	72	4977
HSK 63 F - WE 32 / H 160	6840		160		

# HSK F

## PORTAFRESE FISSI DIN 6357 FACE MILL HOLDERS



Balanced G 6,3  
18.000 rpm

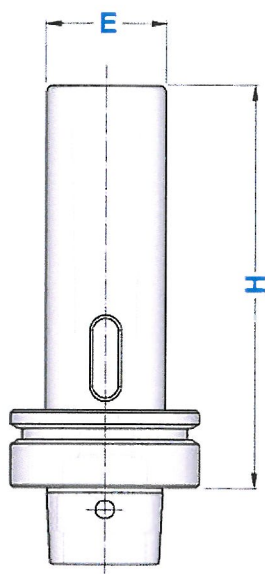


TIPO	Art.	D	H	L	E		
HSK 50 F - D. 16 FISSO/ 50	6267	16	50	17	38	4985	4562
HSK 50 F - D. 22 FISSO/ 50	6268	22	50	19	48	4986	4563
HSK 50 F - D. 27 FISSO/ 60	6269	27	60	21	58	4987	4564
HSK 50 F - D. 32 FISSO/ 60	6501	32	60	24	66	4988	4565
HSK 63 F - D. 16 FISSO/ 50	6270	16	50	17	38	4985	4562
HSK 63 F - D. 16 FISSO/ 100	6503		100				
HSK 63 F - D. 22 FISSO/ 50	6271	22	50	19	48	4986	4563
HSK 63 F - D. 22 FISSO/ 100	6504		100				
HSK 63 F - D. 27 FISSO/ 60	6272	27	60	21	58	4987	4564
HSK 63 F - D. 27 FISSO/ 100	6505		100				
HSK 63 F - D. 32 FISSO/ 60	6273	32	60	24	63	4988	4565
HSK 63 F - D. 32 FISSO/ 100	6506		100		66		
HSK 63 F - D. 40 FISSO/ 60	6274	40	60	27	80	4989	4566
HSK 63 F - D. 40 FISSO/ 100	6507		100				

**HSK  
F****RIDUZIONI A CONO MORSE PER PUNTE**  
MORSE TAPER ADAPTERS FOR TWIST DRILLS DIN 228 FORM B SHANK

Balanced G 4,3

8.000 rpm

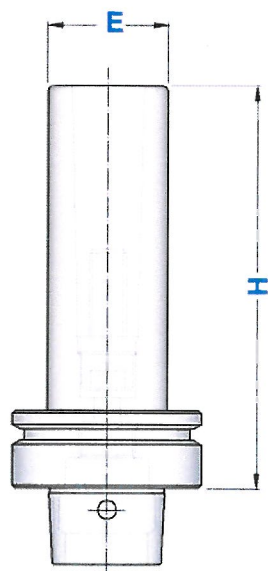


TIPO	Art.	CM	H	E
HSK 50 F - CM 1 PUNTE	6290	1	100	25
HSK 50 F - CM 2 PUNTE	6291	2	120	32
HSK 50 F - CM 3 PUNTE	6292	3	140	40
HSK 63 F - CM 1 PUNTE	6293	1	100	25
HSK 63 F - CM 2 PUNTE	6294	2	120	32
HSK 63 F - CM 3 PUNTE	6295	3	140	40
HSK 63 F - CM 4 PUNTE	6296	4	165	48

**HSK  
F****RIDUZIONI A CONO MORSE PER FRESE**  
MORSE TAPER ADAPTERS FOR MILLING CUTTERS DIN 228 FORM A SHANK

Balanced G 6,3

8.000 rpm

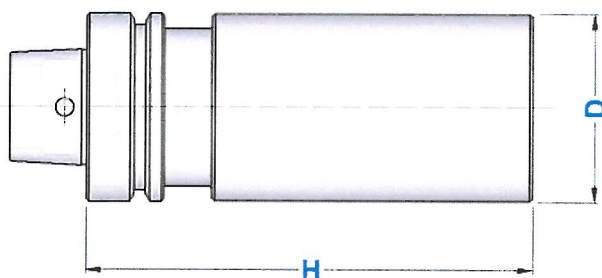


TIPO	Art.	CM	H	E	
HSK 50 F - CM 1 FRESE	6433	1	100	25	—
HSK 50 F - CM 2 FRESE	6434	2	120	32	4569
HSK 50 F - CM 3 FRESE	6435	3	140	40	4570
HSK 63 F - CM 1 FRESE	6436	1	100	25	—
HSK 63 F - CM 2 FRESE	6437	2	120	32	4569
HSK 63 F - CM 3 FRESE	6438	3	140	40	4570
HSK 63 F - CM 4 FRESE	6439	4	160	48	4571

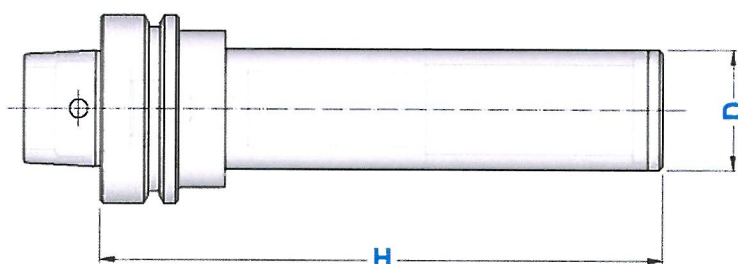


**HSK  
F****BARRE A STELO TENERO**  
BLANK BARS**HSK**

TIPO	Art.	H	D
HSK 50 F - D. 63	6786	200	63
HSK 63 F - D. 63	6787	200	63
HSK 63 F - D. 80	6908	250	80

**HSK  
F****BARRE DI CONTROLLO**  
TEST ARBORS

TIPO	Art.	H	D
HSK 50 F - D. 40 SC	6788	300	40
HSK 63 F - D. 40 SC	6789	380	40

**Tolleranze della barra**

- Rettilineità = 0,003
- Rotondità in rotazione = 0,003
- Cilindricità = 0,003

*Bars tolerance*

- Straightness = 0,003
- Runout accuracy = 0,003
- Cylindricity = 0,003

**Dati costruttivi**

- Costruite in acciaio da cementazione certificato
- Cementate con profondità 0,4 - 0,5 mm
- Temprate, rinvenute, brunite
- Durezza HRC 58 $\pm$ 2, resistenza 800-1000 N/mm<sup>2</sup>
- Finitura di rettifica esterna
- Collaudate 100% con strumenti di misura certificati

*Constructive Features*

- Manufactured with casehardening steel
- Casehardened with depth 0,4 - 0,5 mm
- Hardened, tempered, black oxidized
- Hardnes HRC 58 $\pm$ 2, strenght 800-1000 N/mm<sup>2</sup>
- External grinding finish
- Tested 100% with certified measuring instruments

