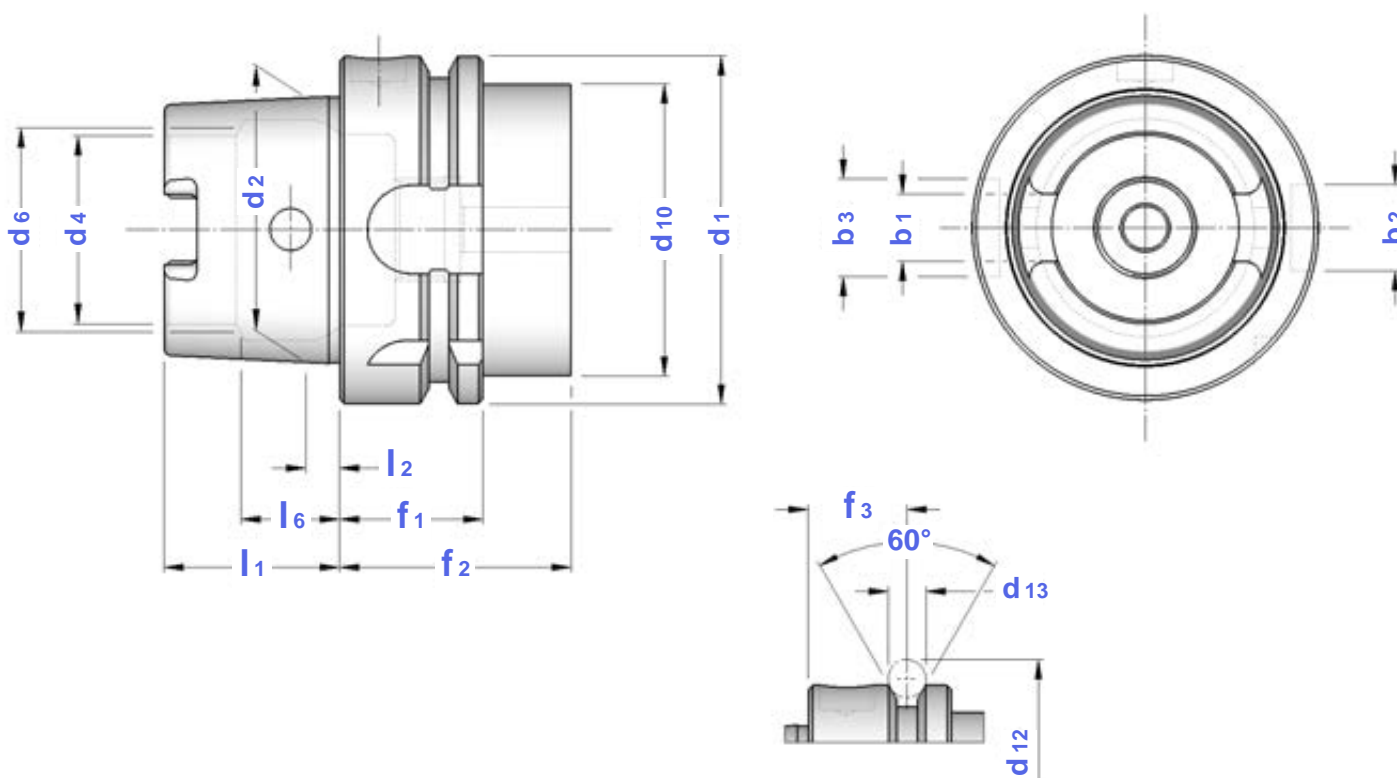


CARATTERISTICHE TECNICHE DIN 69893 - HSK A+C

DIN 69893 - HSK A+C STANDARD FEATURES



CONO	b1	b2	b3	d1	d2	d4	d6	d10	d12	d13	f1	f2	f3	l1	l2	l6	OR
HSK 32	7,05	7	9	32	24	17	19	26	37,00	4	20	35	16	16	3,2	8,92	6975
HSK 40	8,05	9	11	40	30	21	23	34	45,00	4	20	35	16	20	4,0	11,42	6976
HSK 50	10,54	12	14	50	38	26	29	42	59,30	7	26	42	18	25	5,0	14,13	6977
HSK 63	12,54	16	18	63	48	34	37	53	72,30	7	26	42	18	32	6,3	18,13	6978
HSK 100	20,02	20	22	100	75	53	58	85	109,75	7	29	45	20	50	10,0	28,56	6979

ADDUTTORI PER REFRIGERANTE

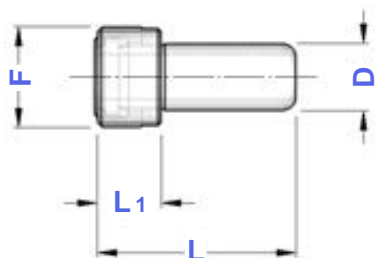
COOLANT TUBES



OR
O-RING



CHIAVE
WRENCH

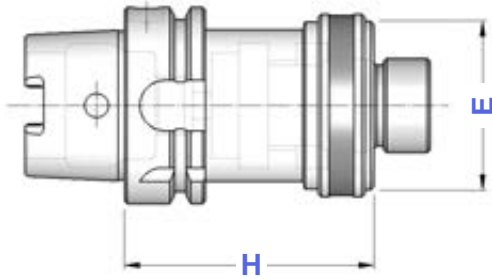


TIPO	Art.	F	D	L	L1	OR	CHIAVE
HSK 32 A+C	0413	M 10 x 1	6	26,0	5,5	5668	0470
HSK 40 A+C	0414	M 12 x 1	8	29,3	7,5	5672	0471
HSK 50 A+C	0415	M 16 x 1	10	33,0	9,5	5673	0472
HSK 63 A+C	0416	M 18 x 1	12	36,6	11,5	5674	0473
HSK 100 A+C	0418	M 24 x 1,5	16	44,0	15,5	5675	0474

HSK A + C

RIDUZIONI A HSK A+C REDUCTIONS TO HSK A+C

TIPO	Art.	H	E
HSK 50 A - HSK 32 A+C	6193	60	32
HSK 50 A - HSK 40 A+C	6194	70	40
HSK 63 A - HSK 32 A+C	6195	70	32
HSK 63 A - HSK 40 A+C	6196	70	40
HSK 63 A - HSK 50 A+C	6197	80	50
HSK100 A - HSK 50 A+C	6198	90	50
HSK100 A - HSK 63 A+C	6199	100	63



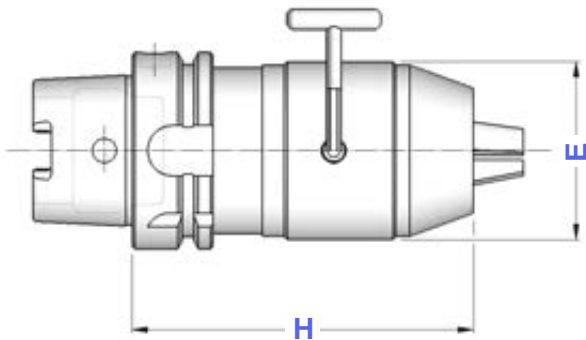
HSK A + C

MANDRINI AUTOSERRANTI INTEGRALI ROTAZIONE DESTRA E SINISTRA MONOLITHIC DRILL CHUCKS - RIGHT & LEFT SPIN



Balanced G 6,3
12.000 rpm

TIPO	Art.	CAPACITA'	E	H	
HSK 50 A - DCU 13	8830	1 ÷ 13	50	105	2372
HSK 63 A - DCU 13	8831	1 ÷ 13	50	130	2372
HSK 63 A - DCU 16	8832	3 ÷ 16	57	140	
HSK 100 A - DCU 13	8833	1 ÷ 13	50	108	2372
HSK 100 A - DCU 16	8834	3 ÷ 16	57	113	



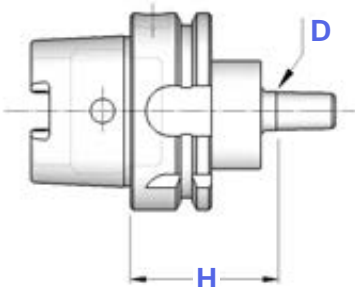
Precisione di rotazione: 0,05 mm
Runout accuracy: 0,05 mm

HSK A + C

ATTACCHI PER MANDRINI PORTAPUNTA DIN 238 SHANKS FOR DRILL CHUCKS DIN 238 TYPE

Balanced G 6,3
8.000 rpm

TIPO	Art.	D	H
HSK 63 A - B12	6014	12,065	45
HSK 63 A - B16	6015	15,733	45
HSK 63 A - B18	6016	17,780	45



I Mandrini Autoserranti
si trovano a pagina 69
del Catalogo Generale

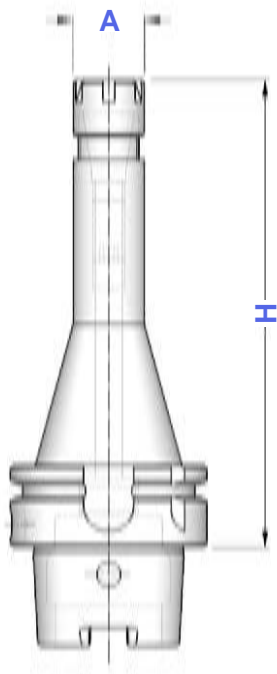
Keyless Drill Chucks
you can find on
General Catalogue page 69

HSK A + C

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

Balanced G 6,3

15.000 rpm



TIPO	Art.	A	CAPACITA'			
HSK 32 A - ER 16 GM/H 65	6000	22	1 ÷ 10	1229	5719	0364
HSK 32 A - ER 16 GM/H 90	6001					
HSK 32 A - ER 25 GM/H 70	6004	35	1 ÷ 16	1231	5721	0996
HSK 40 A - ER 11 GM/H 70	6027	16	1 ÷ 7	0432	5718	5573
HSK 40 A - ER 11 GM/H 100	6028					
HSK 40 A - ER 11 GM/H 160	6029					
HSK 40 A - ER 16 GM/H 70	6006	22	1 ÷ 10	1229	5719	0364
HSK 40 A - ER 16 GM/H 120	6007					
HSK 40 A - ER 25 GM/H 120	6011	35	1 ÷ 16	1231	5721	0996
HSK 50 A - ER 11 GM/H 100	6010	16	1 ÷ 7	0432	5718	5573
HSK 50 A - ER 16 GM/H 80	6012	22	1 ÷ 10	1229	5719	0364
HSK 50 A - ER 16 GM/H 100	6002					
HSK 50 A - ER 16 GM/H 150	6013					
HSK 50 A - ER 25 GM/H 150	6017	35	1 ÷ 16	1231	5721	0996
HSK 63 A - ER 11 GM/H 70	6003	16	1 ÷ 7	0432	5718	5573
HSK 63 A - ER 11 GM/H 100	6073					
HSK 63 A - ER 11 GM/H 130	6005					
HSK 63 A - ER 11 GM/H 160	6074					
HSK 63 A - ER 16 GM/H 70	6008	22	1 ÷ 10	1229	5719	0364
HSK 63 A - ER 16 GM/H 100	6018					
HSK 63 A - ER 16 GM/H 130	6009					
HSK 63 A - ER 16 GM/H 160	6019					
HSK 63 A - ER 16 GM/H 200	6109					
HSK 63 A - ER 20 GM/H 70	6119	28	1 ÷ 13	1230	5720	0787
HSK 63 A - ER 20 GM/H 100	6020					
HSK 63 A - ER 20 GM/H 130	6301					
HSK 63 A - ER 20 GM/H 160	6021					
HSK 63 A - ER 20 GM/H 200	6303					
HSK 63 A - ER 25 GM/H 70	6121	35	1 ÷ 16	1231	5721	0996
HSK 63 A - ER 25 GM/H 100	6022					
HSK 63 A - ER 25 GM/H 130	6123					
HSK 63 A - ER 25 GM/H 160	6023					
HSK 63 A - ER 25 GM/H 200	6129					
HSK100 A - ER 16 GM/H 100	6024	22	1 ÷ 10	1229	5719	0364
HSK100 A - ER 16 GM/H 160	6025					
HSK100 A - ER 16 GM/H 200	6305					
HSK100 A - ER 20 GM/H 100	6307	28	1 ÷ 13	1230	5720	0787
HSK100 A - ER 20 GM/H 160	6308					
HSK100 A - ER 20 GM/H 200	6310					
HSK100 A - ER 25 GM/H 100	6311	35	1 ÷ 16	1231	5721	0996
HSK100 A - ER 25 GM/H 160	6026					
HSK100 A - ER 25 GM/H 200	6313					



Pinze ER da pag. 8
ER Collets from page 8



Ghiere ER - da pag. 20
ER Nuts - from page 20



Grani di presettaggio da pag. 197
Presetting screws from page 197



Chiavi ER - pag. 25
ER Wrenches - page 25

HSK A + C

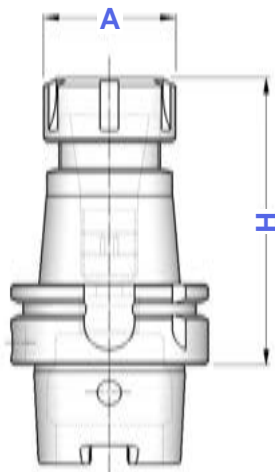
PORTAPINZE ER - GHIERA STANDARD

ER - DIN 6499 COLLET CHUCKS WITH STANDARD NUT



Balanced G 6,3

15.000 rpm

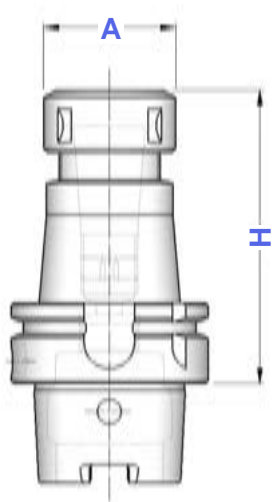





TIPO	Art.	A	CAPACITA'			
HSK 40 A - ER 25/H 65	6030	42	1 ÷ 16	4995	3669	0996
HSK 40 A - ER 25/H 80	6031					
HSK 40 A - ER 25/H 160	6075					
HSK 40 A - ER 32/H 65	6032	50	2 ÷ 20	4996	3670	0988
HSK 40 A - ER 32/H 100	6033					
HSK 40 A - ER 32/H 160	6034					
HSK 50 A - ER 16/H 70	6934	32	1 ÷ 10	4993	3698	0364
HSK 50 A - ER 16/H 100	6035					
HSK 50 A - ER 16/H 160	6935					
HSK 50 A - ER 20/H 70	6036	35	1 ÷ 13	4994	3699	0787
HSK 50 A - ER 20/H 100	6037					
HSK 50 A - ER 20/H 160	6936					
HSK 50 A - ER 25/H 70	6038	42	1 ÷ 16	4995	3669	0996
HSK 50 A - ER 25/H 100	6039					
HSK 50 A - ER 25/H 160	6042					
HSK 50 A - ER 32/H 70	6040	50	2 ÷ 20	4996	3670	0988
HSK 50 A - ER 32/H 100	6041					
HSK 50 A - ER 32/H 160	6043					
HSK 50 A - ER 40/H 75	6247	63	3 ÷ 30	4997	3671	0821
HSK 50 A - ER 40/H 100	6248					
HSK 50 A - ER 40/H 160	6249					
HSK 63 A - ER 16/H 70	6044	32	1 ÷ 10	4993	3698	0364
HSK 63 A - ER 16/H 100	6045					
HSK 63 A - ER 16/H 130	6046					
HSK 63 A - ER 16/H 160	6047					
HSK 63 A - ER 16/H 200	6747					
HSK 63 A - ER 20/H 70	6048	35	1 ÷ 13	4994	3699	0787
HSK 63 A - ER 20/H 100	6049					
HSK 63 A - ER 20/H 130	6050					
HSK 63 A - ER 20/H 160	6051					
HSK 63 A - ER 20/H 200	6751					
HSK 63 A - ER 25/H 70	6052	42	1 ÷ 16	4995	3669	0996
HSK 63 A - ER 25/H 100	6053					
HSK 63 A - ER 25/H 130	6054					
HSK 63 A - ER 25/H 160	6055					
HSK 63 A - ER 25/H 200	6755					
HSK 63 A - ER 32/H 75	6056	50	2 ÷ 20	4996	3670	0988
HSK 63 A - ER 32/H 100	6057					
HSK 63 A - ER 32/H 130	6058					
HSK 63 A - ER 32/H 160	6059					
HSK 63 A - ER 32/H 200	6785					
HSK 63 A - ER 40/H 80	6060	63	3 ÷ 30	4997	3671	0821
HSK 63 A - ER 40/H 120	6061					
HSK 63 A - ER 40/H 160	6062					
HSK 63 A - ER 40/H 200	6790					
HSK 63 A - ER 50/H 105	6064	78	6 ÷ 34	4998	3668	4055
HSK 100 A - ER 16/H 100	6464	32	1 ÷ 10	4993	3698	0364
HSK 100 A - ER 16/H 160	6465					
HSK 100 A - ER 16/H 200	6466					
HSK 100 A - ER 20/H 100	6467	35	1 ÷ 13	4994	3699	0787
HSK 100 A - ER 20/H 160	6468					
HSK 100 A - ER 20/H 200	6469					
HSK 100 A - ER 25/H 100	6063	42	1 ÷ 16	4995	3669	0996
HSK 100 A - ER 25/H 160	6065					
HSK 100 A - ER 25/H 200	6066					
HSK 100 A - ER 32/H 100	6067	50	2 ÷ 20	4996	3670	0988
HSK 100 A - ER 32/H 160	6069					
HSK 100 A - ER 32/H 200	6070					
HSK 100 A - ER 40/H 120	6071	63	3 ÷ 30	4997	3671	0821
HSK 100 A - ER 40/H 160	6072					
HSK 100 A - ER 40/H 200	6076					
HSK 100 A - ER 50/H 130	6068	78	6 ÷ 34	4998	3668	4055

HSK A + C

MANDRINI PER PINZE EOC DIN 6388 DIN 6388 COLLET CHUCKS

Balanced G 6,3
15.000 rpm



TIPO	Art.	A	CAPACITA'			
HSK 50 A - EOC 16 / H 100	6090	43	2 ÷ 16	4067	2883	0768
HSK 50 A - EOC 25 / H 100	6091	60	2 ÷ 25	4068	2909	0769
HSK 63 A - EOC 16 / H 100	6092	43	2 ÷ 16	4067	2883	0768
HSK 63 A - EOC 25 / H 100	6093	60	2 ÷ 25	4068	2909	0769
HSK 63 A - EOC 32 / H 120	6094	72	3 ÷ 32	4069	2910	0770
HSK 100 A - EOC 16 / H 110	6095	43	2 ÷ 16	4067	2883	0768
HSK 100 A - EOC 25 / H 120	6096	60	2 ÷ 25	4068	2909	0769
HSK 100 A - EOC 32 / H 130	6097	72	3 ÷ 32	4069	2910	0770

Dove trovare questi Articoli

Where to find those Items



Pinze EOC - DIN 6388 - pag. 28
EOC - DIN 6388 Collets - page 28



Ghiere EOC - DIN 6388 - pag. 30
EOC - DIN 6388 Nuts - page 30

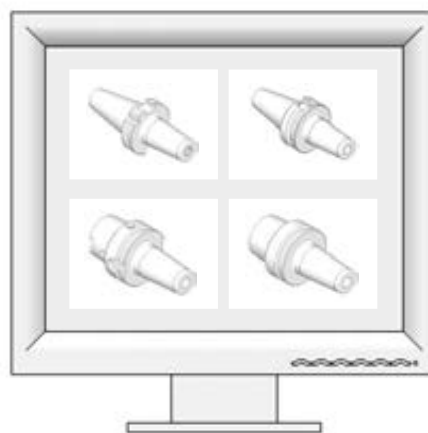
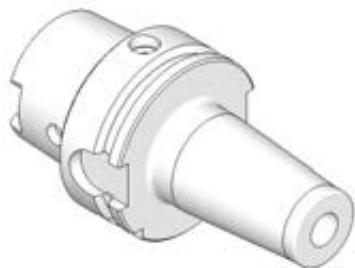


Chiavi per ghiere EOC - pag. 30
EOC Wrenches - page 30

HSK A + C

MANDRINI CON CALETTAMENTO A CALDO SHRINK FIT CHUCKS

Balanced G 6,3
15.000 rpm

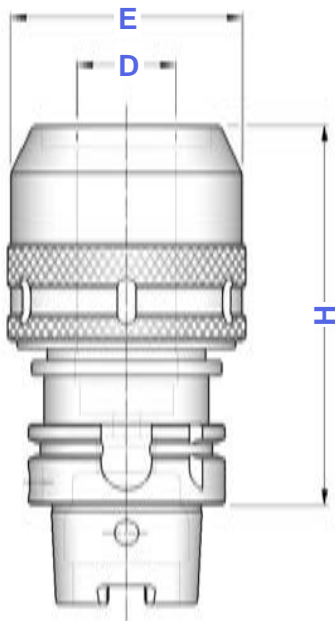


Brochure in preparazione
Brochure under preparation

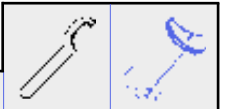
HSK A + C

MANDRINI A FORTE SERRAGGIO HIGH GRIP CHUCKS

Balanced G 6,3
12.000 rpm



TIPO	Art.	H	D	E		
HSK 40 A - PC 20	6240	100	20	54	2900	0809
HSK 50 A - PC 20	6241	105	20	54	2900	0809
HSK 63 A - PC 20	6243	105	20	54	2900	0809
HSK 63 A - PC 32	6244	120	32	72	2910	0810
HSK 100 A - PC 20	6245	110	20	54	2900	0809
HSK 100 A - PC 32	6246	120	32	72	2910	0810



Pinze cilindriche di riduzione
per Mandrini a Forte Serraggio
Pag. 31 del Catalogo Generale

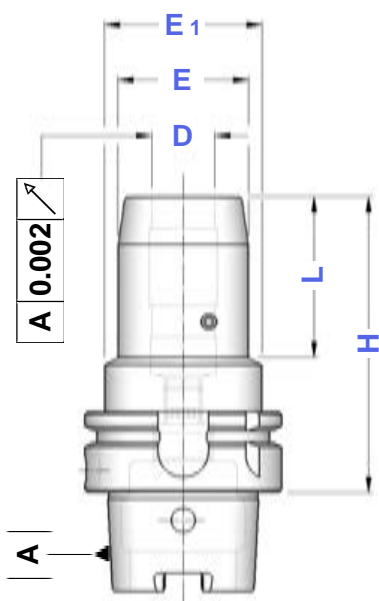
Reduction cylindrical collets
for High Grip Chucks on
General Catalogue page 31



HSK A + C

MANDRINI A SERRAGGIO IDRAULICO HYDRAULIC CHUCKS

Balanced G 2,5
20.000 rpm



TIPO	Art.	D	H	E	E1	L	
HSK 50 A - HYDRO 20	6411	20	90	42	60	29	0521
HSK 63 A - HYDRO 6	6412	6	70	26	50	24	—
HSK 63 A - HYDRO 8	6413	8	70	28	50	24	—
HSK 63 A - HYDRO 10	6414	10	80	30	50	32	—
HSK 63 A - HYDRO 12	6415	12	85	32	50	40	0520
HSK 63 A - HYDRO 16	6417	16	90	38	50	46	—
HSK 63 A - HYDRO 20	6419	20	90	42	50	48	0521
HSK 63 A - HYDRO 25	6420	25	120	57	53	63	—
HSK 63 A - HYDRO 32	6421	32	125	63	59	61	0522



Applicazioni: consente il bloccaggio ad alta precisione di utensili a gambo cilindrico DIN 1835 Forma A e B, con tolleranza di gambo h 6 e rugosità Ra < 0,3 micron

Attenzione: non azionare il sistema idraulico se l'utensile non è inserito nel mandrino

Applications: allows high precision locking of DIN 1835 shank tools Form A and B, with shank tolerance h 6 and surface roughness Ra < 0,3 micron.

Warning: do not start Hydraulic System without any tool fit inside



Balanced G 6,3
15.000 rpm

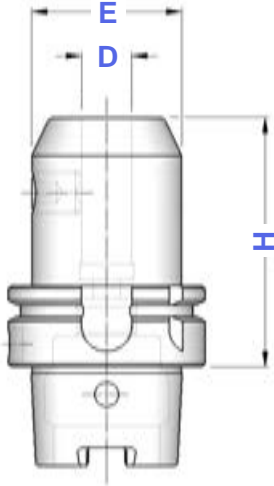


Figura 1

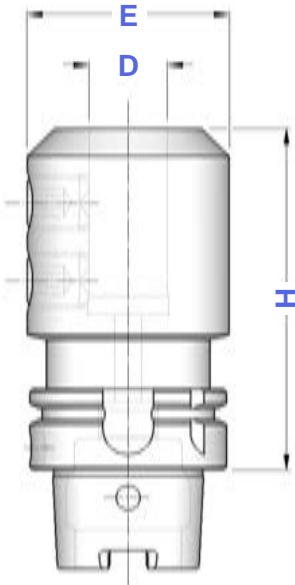


Figura 2

TIPO	Art.	D	H	E	Fig.	
HSK 32 A - WE 6/H 60	6100	6	60	25	1	4970
HSK 32 A - WE 8/H 60	6101	8	60	28	1	4971
HSK 32 A - WE 10/H 65	6102	10	65	35	1	4972
HSK 32 A - WE 12/H 75	6103	12	75	42	1	4973
HSK 32 A - WE 14/H 75	6104	14	75	44	1	4973
HSK 32 A - WE 16/H 75	6105	16	75	48	1	4974
HSK 40 A - WE 6/H 60	6110	6	60	25	1	4970
HSK 40 A - WE 6/H 100	6111		100	18		0020
HSK 40 A - WE 6/H 160	6125		160			
HSK 40 A - WE 8/H 60	6112	8	60	28	1	4971
HSK 40 A - WE 8/H 100	6113		100	22		0021
HSK 40 A - WE 8/H 160	6126		160			
HSK 40 A - WE 10/H 65	6114	10	65	35	1	4972
HSK 40 A - WE 10/H 100	6127		100	30		0060
HSK 40 A - WE 10/H 160	6115		160			
HSK 40 A - WE 12/H 70	6116	12	70	42	1	4973
HSK 40 A - WE 12/H 100	6128		100	34		0260
HSK 40 A - WE 12/H 160	6117		160			
HSK 40 A - WE 14/H 70	6118	14	70	44	1	4973
HSK 40 A - WE 16/H 80	6120	16	80	48	1	4974
HSK 40 A - WE 18/H 80	6122	18	80	50	1	4974
HSK 40 A - WE 20/H 80	6124	20	80	52	1	4975
HSK 50 A - WE 6/H 65	6130	6	65	25	1	4970
HSK 50 A - WE 6/H 100	6131		100	18		0020
HSK 50 A - WE 6/H 160	6937		160			
HSK 50 A - WE 8/H 65	6132	8	65	28	1	4971
HSK 50 A - WE 8/H 100	6133		100	22		0021
HSK 50 A - WE 8/H 160	6938		160			
HSK 50 A - WE 10/H 65	6134	10	65	35	1	4972
HSK 50 A - WE 10/H 100	6939		100	30		0060
HSK 50 A - WE 10/H 160	6135		160			
HSK 50 A - WE 12/H 80	6136	12	80	42	1	4973
HSK 50 A - WE 12/H 100	6956		100	34		0260
HSK 50 A - WE 12/H 160	6137		160			
HSK 50 A - WE 14/H 80	6138	14	80	44	1	4973
HSK 50 A - WE 14/H 100	6139		100	36		0260
HSK 50 A - WE 14/H 160	6957		160			
HSK 50 A - WE 16/H 80	6140	16	80	48	1	4974
HSK 50 A - WE 16/H 100	6958		100	42		0261
HSK 50 A - WE 16/H 160	6141		160			
HSK 50 A - WE 18/H 80	6142	18	80		1	
HSK 50 A - WE 18/H 100	6143		100	50		4974
HSK 50 A - WE 18/H 160	6959		160			
HSK 50 A - WE 20/H 80	6144	20	80		1	
HSK 50 A - WE 20/H 100	6145		100	52		4975
HSK 50 A - WE 20/H 160	6148		160			
HSK 50 A - WE 25/H 105	6146	25	105		2	
HSK 50 A - WE 25/H 160	6149		160	65		4976
HSK 50 A - WE 32/H 120	6147	32	120	72	2	4977

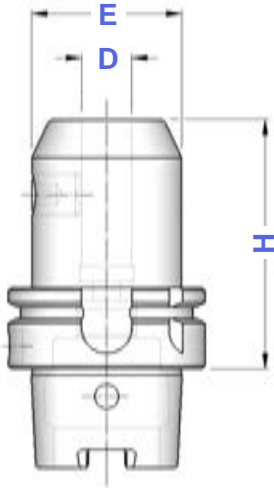


Figura 1

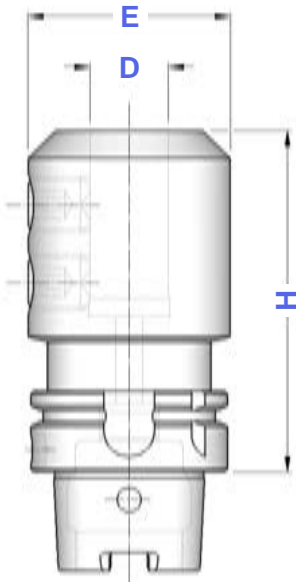


Figura 2

TIPO	Art.	D	H	E	Fig.			
HSK 63 A - WE 6/H 65	6150	6	65	25	1	4970		
HSK 63 A - WE 6/H 100	6966			18		0020		
HSK 63 A - WE 6/H 160	6151			160				
HSK 63 A - WE 8/H 65	6152	8	65	28	1	4971		
HSK 63 A - WE 8/H 100	6967			22		0021		
HSK 63 A - WE 8/H 160	6153			160				
HSK 63 A - WE 10/H 65	6154	10	65	35	1	4972		
HSK 63 A - WE 10/H 100	6968			30		0060		
HSK 63 A - WE 10/H 160	6155			160				
HSK 63 A - WE 12/H 80	6156	12	80	42	1	4973		
HSK 63 A - WE 12/H 100	6969			34		0260		
HSK 63 A - WE 12/H 160	6157			160				
HSK 63 A - WE 14/H 80	6158	14	80	44	1	4973		
HSK 63 A - WE 14/H 100	6159			36		0260		
HSK 63 A - WE 14/H 160	6970			160				
HSK 63 A - WE 16/H 80	6160	16	80	48	1	4974		
HSK 63 A - WE 16/H 100	6971			42		0261		
HSK 63 A - WE 16/H 160	6161			160				
HSK 63 A - WE 18/H 80	6162	18	80	50	1	4974		
HSK 63 A - WE 18/H 100	6163			44		0261		
HSK 63 A - WE 18/H 160	6972			160				
HSK 63 A - WE 20/H 80	6164	20	80	52	1	4975		
HSK 63 A - WE 20/H 100	6973			45		0070		
HSK 63 A - WE 20/H 160	6165			160				
HSK 63 A - WE 25/H 110	6166	25	110	65	2	4976		
HSK 63 A - WE 25/H 160	6167						160	
HSK 63 A - WE 32/H 110	6168	32	110	72	2	4977		
HSK 63 A - WE 32/H 160	6169						160	
HSK 63 A - WE 40/H 120	6974	40	120	80	2	4977		
HSK 63 A - WE 40/H 160	6980						160	
HSK 100 A - WE 6/H 80	6170	6	80	25	1	4970		
HSK 100 A - WE 6/H 160	6171						160	
HSK 100 A - WE 8/H 80	6172	8	80	28	1	4971		
HSK 100 A - WE 8/H 160	6173						160	
HSK 100 A - WE 10/H 80	6174	10	80	35	1	4972		
HSK 100 A - WE 10/H 160	6175						160	
HSK 100 A - WE 12/H 80	6176	12	80	42	1	4973		
HSK 100 A - WE 12/H 160	6177						160	
HSK 100 A - WE 14/H 80	6178	14	80	44	1	4973		
HSK 100 A - WE 14/H 160	6179						160	
HSK 100 A - WE 16/H 100	6180	16	100	48	1	4974		
HSK 100 A - WE 16/H 160	6181						160	
HSK 100 A - WE 18/H 100	6182	18	100	50	1	4974		
HSK 100 A - WE 18/H 160	6183						160	
HSK 100 A - WE 20/H 100	6184	20	100	52	1	4975		
HSK 100 A - WE 20/H 160	6185						160	
HSK 100 A - WE 20/H 200	6239						200	
HSK 100 A - WE 25/H 100	6186	25	100	65	2	4976		
HSK 100 A - WE 25/H 160	6187						160	
HSK 100 A - WE 25/H 200	6242						200	
HSK 100 A - WE 32/H 100	6188	32	100	72	2	4977		
HSK 100 A - WE 32/H 160	6189						160	
HSK 100 A - WE 32/H 200	6265						200	
HSK 100 A - WE 40/H 105	6190	40	105	80	2	4977		
HSK 100 A - WE 40/H 160	6192						160	
HSK 100 A - WE 40/H 200	6266						200	
HSK 100 A - WE 50/H 130	6191	50	130	95	2	4978		
HSK 100 A - WE 50/H 160	6285						160	

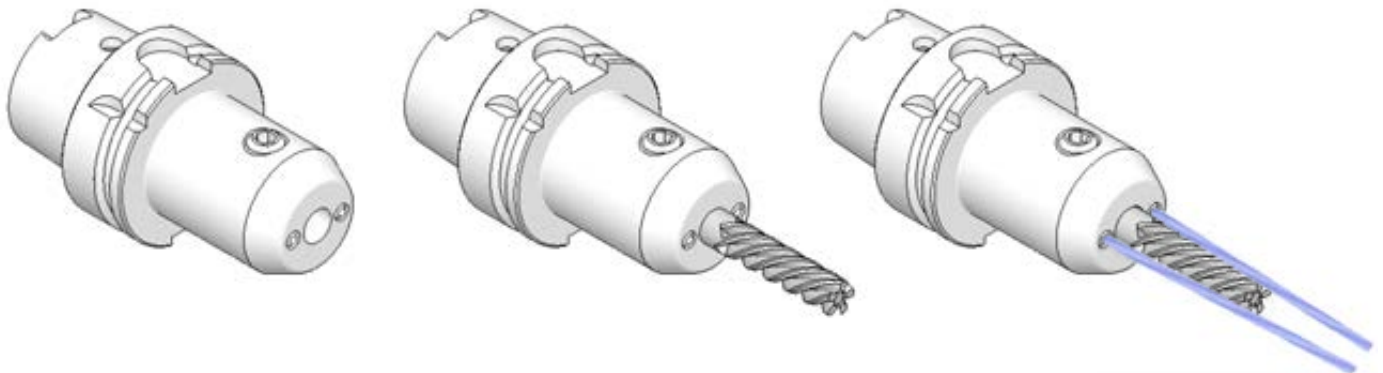
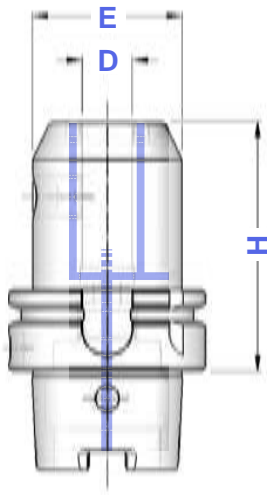
HSK A + C

PORTAFRESE WELDON CON SFERE DI LUBRIFICAZIONE TOOLHOLDERS FOR DIN 1835-B SHANKS WITH FRONT COOLANT



Balanced G 6,3
15.000 rpm

TIPO	Art.	D	H	E	
HSK 63A - WEC 6 / H 65	6912	6	65	25	4970
HSK 63A - WEC 8 / H 65	6913	8	65	28	4971
HSK 63A - WEC 10 / H 65	6914	10	65	35	4972
HSK 63A - WEC 12 / H 80	6915	12	80	42	4973
HSK 63A - WEC 14 / H 80	6916	14	80	44	4973
HSK 63A - WEC 16 / H 80	6917	16	80	48	4974
HSK 63A - WEC 18 / H 80	6918	18	80	50	4974
HSK 63A - WEC 20 / H 80	6919	20	80	52	4975
HSK 63A - WEC 25 / H 110	6920	25	110	65	4976
HSK 63A - WEC 32 / H 110	6921	32	110	72	4977



HSK A + C

MANDRINI PER UTENSILI ATTACCO WHISTLE NOTCH

END MILL HOLDERS FOR DIN 1835-E SHANKS



Balanced G 6,3
15.000 rpm

TIPO	Art.	D	H	E	Fig.	G1	G2
HSK 63 A - WN 6 / H 80	6218	6	80	25	1	0233	4970
HSK 63 A - WN 8 / H 80	6219	8	80	28	1	0235	4971
HSK 63 A - WN 10 / H 80	6220	10	80	35	1	0238	4972
HSK 63 A - WN 12 / H 90	6221	12	90	42	1	0240	4973
HSK 63 A - WN 14 / H 90	6222	14	90	44	1	0240	4973
HSK 63 A - WN 16 / H 100	6223	16	100	48	1	0245	4974
HSK 63 A - WN 18 / H 100	6224	18	100	50	1	0245	4974
HSK 63 A - WN 20 / H 100	6225	20	100	52	1	0245	4975
HSK 63 A - WN 25 / H 110	6226	25	110	65	2	0247	4976
HSK 63 A - WN 32 / H 115	6227	32	115	72	2	0247	4977
HSK 100 A - WN 6 / H 90	6228	6	90	25	1	0233	4970
HSK 100 A - WN 8 / H 90	6229	8	90	28	1	0235	4971
HSK 100 A - WN 10 / H 90	6230	10	90	35	1	0238	4972
HSK 100 A - WN 12 / H 100	6231	12	100	42	1	0240	4973
HSK 100 A - WN 14 / H 100	6232	14	100	44	1	0240	4973
HSK 100 A - WN 16 / H 100	6233	16	100	48	1	0245	4974
HSK 100 A - WN 18 / H 100	6234	18	100	50	1	0245	4974
HSK 100 A - WN 20 / H 110	6235	20	110	52	1	0245	4975
HSK 100 A - WN 25 / H 120	6236	25	120	65	2	0247	4976
HSK 100 A - WN 32 / H 120	6237	32	120	72	2	0247	4977
HSK 100 A - WN 40 / H 120	6238	40	120	80	2	0247	4977

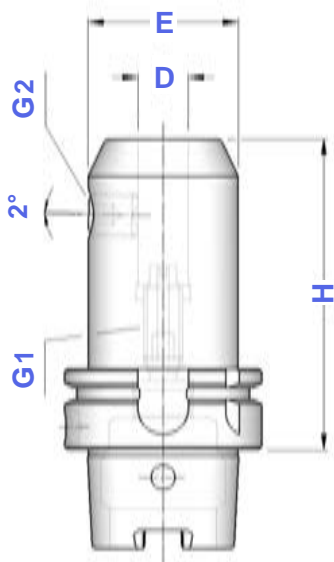


Figura 1

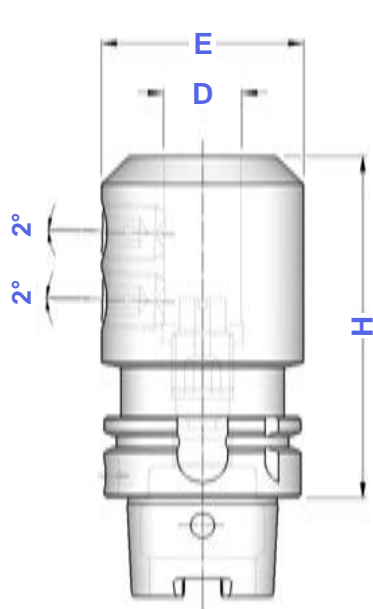
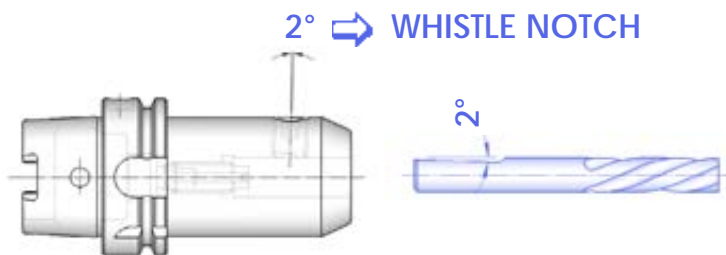
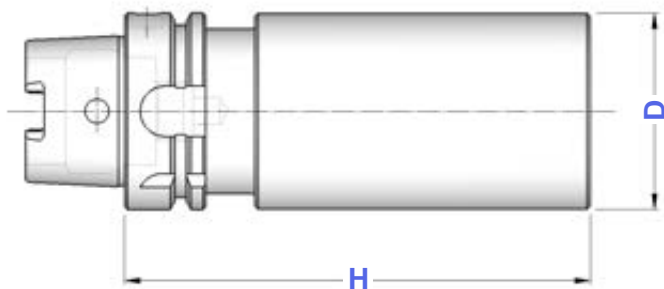


Figura 2



**HSK
A + C****BARRE A STELO TENERO**
BLANK BARS**HSK**

TIPO	Art.	H	D
HSK 32 A - D. 35	6440	150	35
HSK 40 A - D. 40	6441	150	40
HSK 40 A - D. 52	6442	200	52
HSK 50 A - D. 52	6443	200	52
HSK 50 A - D. 63	6444	200	63
HSK 63 A - D. 63	6445	250	63
HSK 63 A - D. 80	6446	250	80
HSK 100 A - D. 63	6447	200	63
HSK 100 A - D. 80	6448	250	80
HSK 100 A - D. 90	6449	300	90

**HSK
A + C****BARRE DI CONTROLLO**
TEST ARBORS

TIPO	Art.	H	D
HSK 32 A - D. 32 SC	6495	300	32
HSK 40 A - D. 32 SC	6496	300	32
HSK 50 A - D. 40 SC	6497	300	40
HSK 63 A - D. 40 SC	6498	380	40
HSK 100 A - D. 40 SC	6499	350	40

Tolleranze della barra

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

Bars tolerance

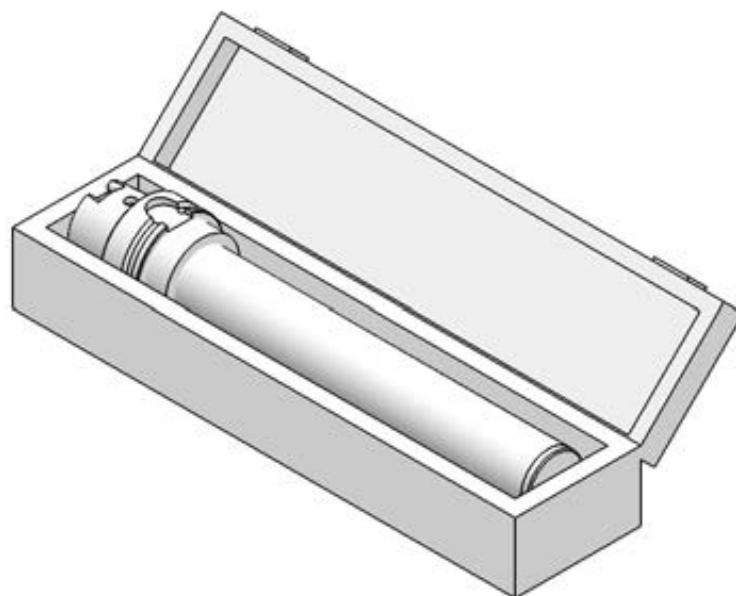
- Straightness = 0,003
- Runout accuracy = 0,003
- Cylindricity = 0,003

Dati costruttivi

- Costruite in acciaio da cementazione certificato
- Cementate con profondità 0,4 - 0,5 mm
- Temperate, rinvenute, brunite
- Durezza HRC 58 \pm 2, resistenza 800-1000 N/mm²
- 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/mm²
- External grinding finish
- Tested 100% with certified measuring instruments



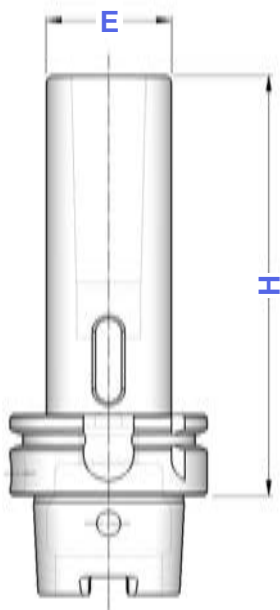
HSK A + C

RIDUZIONI A CONO MORSE PER PUNTE

MORSE TAPER ADAPTERS FOR TWIST DRILLS DIN 228 FORM B SHANK

Balanced G 6,3

8.000 rpm



TIPO	Art.	CM	H	E
HSK 40 A - CM 1 PUNTE	6250	1	95	25
HSK 40 A - CM 2 PUNTE	6251	2	110	32
HSK 40 A - CM 3 PUNTE	6252	3	135	38
HSK 50 A - CM 1 PUNTE	6253	1	100	25
HSK 50 A - CM 2 PUNTE	6254	2	120	32
HSK 50 A - CM 3 PUNTE	6255	3	140	40
HSK 63 A - CM 1 PUNTE	6256	1	100	25
HSK 63 A - CM 2 PUNTE	6257	2	115	32
HSK 63 A - CM 3 PUNTE	6258	3	135	40
HSK 63 A - CM 4 PUNTE	6259	4	160	48
HSK 100 A - CM 1 PUNTE	6260	1	110	25
HSK 100 A - CM 2 PUNTE	6261	2	120	32
HSK 100 A - CM 3 PUNTE	6262	3	150	40
HSK 100 A - CM 4 PUNTE	6263	4	170	48
HSK 100 A - CM 5 PUNTE	6264	5	200	63

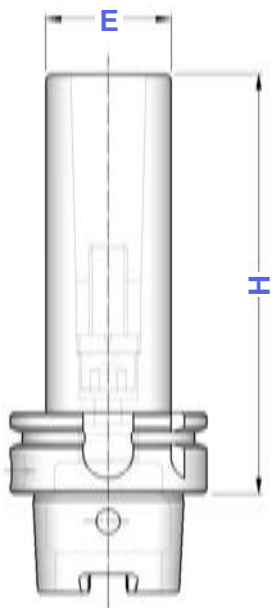
HSK A + C

RIDUZIONI A CONO MORSE PER FRESE

MORSE TAPER ADAPTERS FOR MILLING CUTTERS DIN 228 FORM A SHANK

Balanced G 6,3

8.000 rpm

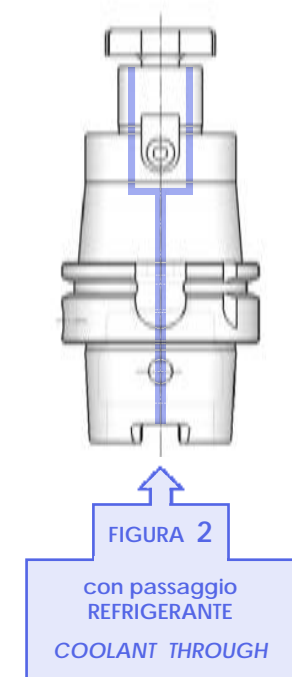
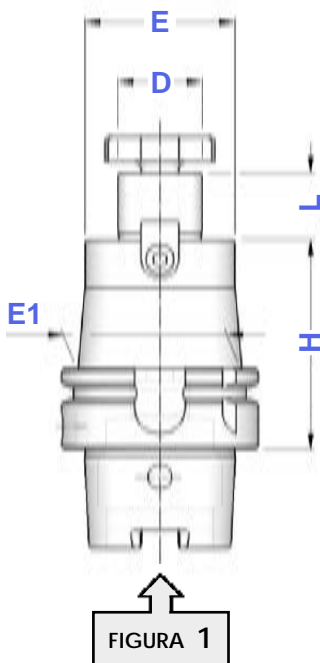


TIPO	Art.	CM	H	E	
HSK 40 A - CM 1 FRESE	6275	1	95	25	—
HSK 40 A - CM 2 FRESE	6276	2	110	32	4569
HSK 40 A - CM 3 FRESE	6277	3	135	38	4570
HSK 50 A - CM 1 FRESE	6278	1	100	25	—
HSK 50 A - CM 2 FRESE	6279	2	120	32	4569
HSK 50 A - CM 3 FRESE	6280	3	140	40	4570
HSK 63 A - CM 1 FRESE	6281	1	100	25	—
HSK 63 A - CM 2 FRESE	6282	2	115	32	4569
HSK 63 A - CM 3 FRESE	6283	3	135	40	4570
HSK 63 A - CM 4 FRESE	6284	4	160	48	4571
HSK 100 A - CM 2 FRESE	6286	2	120	32	4569
HSK 100 A - CM 3 FRESE	6287	3	150	40	4570
HSK 100 A - CM 4 FRESE	6288	4	170	48	4571
HSK 100 A - CM 5 FRESE	6289	5	200	63	4572

HSK A + C

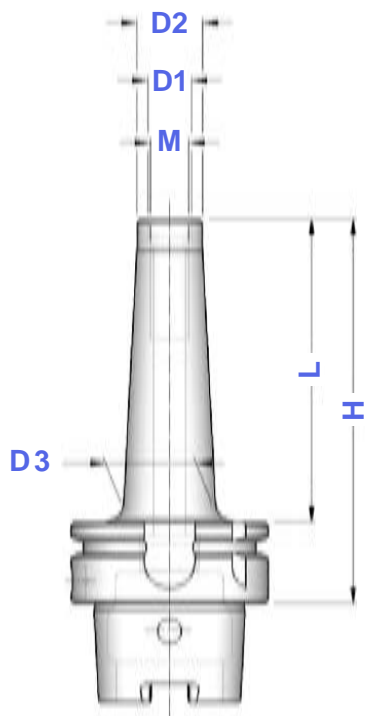
PORTAFRESE FISSI DIN 6357 FACE MILL HOLDERS

Balanced	G 6,3
≤ H160	15.000 rpm
> H160	8.000 rpm



TIPO	FIGURA		D	L	E	E1	4985	4562						
	Art.	Art.												
HSK 32 A - D. 16 FISSO/ H 45	6298	—	16	17	38	38	4985	4562						
HSK 32 A - D. 22 FISSO/ H 50	6299	—	22	19	48	48	4986	4563						
HSK 40 A - D. 16 FISSO/ H 45	6300	6556	16	17	38	38	4985	4562						
HSK 40 A - D. 22 FISSO/ H 50	6302	6557	22	19	48	48	4986	4563						
HSK 40 A - D. 27 FISSO/ H 55	6304	6558	27	21	58	58	4987	4564						
HSK 50 A - D. 16 FISSO/ H 50	6306	6559	16	17	38	38	4985	4562						
HSK 50 A - D. 22 FISSO/ H 60	6309	6560	22	19	48	48	4986	4563						
HSK 50 A - D. 27 FISSO/ H 60	6312	6561	27	21	58	58	4987	4564						
HSK 50 A - D. 32 FISSO/ H 60	6315	6562	32	24	66	66	4988	4565						
HSK 50 A - D. 40 FISSO/ H 70	6316	6540	40	27	80	80	4989	4566						
HSK 63 A - D. 16 FISSO/ H 50	6317	6563	16	17	38	38	4985	4562						
HSK 63 A - D. 16 FISSO/ H100	6318	6547												
HSK 63 A - D. 16 FISSO/ H160	6319	6549												
HSK 63 A - D. 16 FISSO/ H200	6519	6811												
HSK 63 A - D. 22 FISSO/ H 50	6320	6564	22	19	48	48	4986	4563						
HSK 63 A - D. 22 FISSO/ H100	6321	6554												
HSK 63 A - D. 22 FISSO/ H160	6322	6555												
HSK 63 A - D. 22 FISSO/ H200	6522	6812												
HSK 63 A - D. 27 FISSO/ H 60	6323	6565	27	21	58	58	4987	4564						
HSK 63 A - D. 27 FISSO/ H100	6324	6601												
HSK 63 A - D. 27 FISSO/ H160	6325	6603												
HSK 63 A - D. 27 FISSO/ H200	6525	6813												
HSK 63 A - D. 32 FISSO/ H 60	6326	6566	32	24	66	66	4988	4565						
HSK 63 A - D. 32 FISSO/ H100	6327	6605												
HSK 63 A - D. 32 FISSO/ H160	6328	6607												
HSK 63 A - D. 40 FISSO/ H 60	6329	6567												
HSK 63 A - D. 40 FISSO/ H100	6330	6609	40	27	88	88	4989	4566						
HSK 63 A - D. 40 FISSO/ H160	6331	6611												
HSK 100 A - D. 16 FISSO/ H 50	6332	6568							16	17	38	38	4985	4562
HSK 100 A - D. 16 FISSO/ H100	6333	6613										43		
HSK 100 A - D. 16 FISSO/ H160	6334	6615	47											
HSK 100 A - D. 16 FISSO/ H200	6349	6617	48											
HSK 100 A - D. 16 FISSO/ H250	6351	6618												
HSK 100 A - D. 22 FISSO/ H 50	6335	6569	22	19	48	48	4986	4563						
HSK 100 A - D. 22 FISSO/ H100	6336	6620				53								
HSK 100 A - D. 22 FISSO/ H160	6337	6621				56								
HSK 100 A - D. 22 FISSO/ H200	6353	6623				58								
HSK 100 A - D. 22 FISSO/ H250	6355	6624												
HSK 100 A - D. 27 FISSO/ H 50	6338	6570	27	21	58	58	4987	4564						
HSK 100 A - D. 27 FISSO/ H100	6339	6626				66								
HSK 100 A - D. 27 FISSO/ H160	6340	6627				67								
HSK 100 A - D. 27 FISSO/ H200	6357	6629				68								
HSK 100 A - D. 27 FISSO/ H250	6358	6630												
HSK 100 A - D. 32 FISSO/ H 50	6341	6571	32	24	66	66	4988	4565						
HSK 100 A - D. 32 FISSO/ H100	6342	6632				74								
HSK 100 A - D. 32 FISSO/ H160	6343	6633				75								
HSK 100 A - D. 32 FISSO/ H200	6360	6635				77								
HSK 100 A - D. 32 FISSO/ H250	6361	6636												
HSK 100 A - D. 40 FISSO/ H 60	6344	6572	40	27	80	80	4989	4566						
HSK 100 A - D. 40 FISSO/ H100	6345	6638												
HSK 100 A - D. 40 FISSO/ H160	6346	6639												
HSK 100 A - D. 40 FISSO/ H200	6347	6642												
HSK 100 A - D. 40 FISSO/ H250	6348	6644												

Balanced G 2,5
20.000 rpm



TIPO	Art.	M	D1	D2	D3	H	L
HSK 50 A - M 6 / H 59	6645	M 6	6,5	10	10	59	33
HSK 50 A - M 6 / H 84	6647				20	84	58
HSK 50 A - M 6 / H 109	6648				23	109	83
HSK 50 A - M 8 / H 59	6650	M 8	8,5	13	15	59	33
HSK 50 A - M 8 / H 84	6651				23	84	58
HSK 50 A - M 8 / H 109	6653				23	109	83
HSK 50 A - M 8 / H 134	6654				25	134	108
HSK 50 A - M 10 / H 59	6656	M 10	10,5	18	20	59	33
HSK 50 A - M 10 / H 84	6657				25	84	58
HSK 50 A - M 10 / H 109	6659				28	109	83
HSK 50 A - M 10 / H 134	6660				30	134	108
HSK 50 A - M 12 / H 59	6662	M 12	12,5	21	24	59	33
HSK 50 A - M 12 / H 84	6663				24	84	58
HSK 50 A - M 12 / H 109	6665				31	109	83
HSK 50 A - M 12 / H 134	6666				31	134	108
HSK 63 A - M 6 / H 59	6669	M 6	6,5	10	10	59	33
HSK 63 A - M 6 / H 84	6671				20	84	58
HSK 63 A - M 6 / H 109	6672				23	109	83
HSK 63 A - M 8 / H 59	6673	M 8	8,5	13	15	59	33
HSK 63 A - M 8 / H 76	6674				23	76	50
HSK 63 A - M 8 / H 101	6675				23	101	75
HSK 63 A - M 8 / H 126	6676				26	126	100
HSK 63 A - M 10 / H 59	6677	M 10	10,5	18	19,5	59	33
HSK 63 A - M 10 / H 76	6678				23	76	50
HSK 63 A - M 10 / H 101	6679				28	101	75
HSK 63 A - M 10 / H 126	6680				32	126	100
HSK 63 A - M 10 / H 159	6681				34	159	133
HSK 63 A - M 12 / H 59	6682	M 12	12,5	21	24	59	33
HSK 63 A - M 12 / H 76	6683				24	76	50
HSK 63 A - M 12 / H 101	6684				31	101	75
HSK 63 A - M 12 / H 126	6685				33	126	100
HSK 63 A - M 12 / H 159	6686				31	159	133
HSK 63 A - M 12 / H 184	6687				39	184	158
HSK 63 A - M 12 / H 209	6701				42	209	183
HSK 63 A - M 16 / H 59	6688	M 16	17,0	29	34	59	33
HSK 63 A - M 16 / H 76	6689				34	76	50
HSK 63 A - M 16 / H 101	6690				34	101	75
HSK 63 A - M 16 / H 126	6691				36	126	100
HSK 63 A - M 16 / H 159	6692				39	159	133
HSK 63 A - M 16 / H 184	6693				39	184	158
HSK 63 A - M 16 / H 209	6703				42	209	183
HSK 100 A - M 12 / H 87	6694	M 12	12,5	21	24	87	58
HSK 100 A - M 12 / H 137	6695				47	137	108
HSK 100 A - M 12 / H 187	6696				55	187	158
HSK 100 A - M 16 / H 87	6697	M 16	17,0	29	32	87	58
HSK 100 A - M 16 / H 137	6698				42	137	108
HSK 100 A - M 16 / H 187	6699				55	187	158
HSK 100 A - M 16 / H 237	6705				55	237	208

HSK A + C

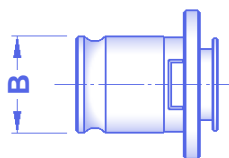
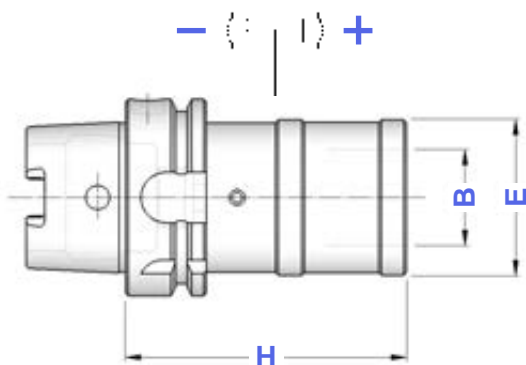
MASCHIATORI A CAMBIO RAPIDO CON DOPPIA COMPENSAZIONE

DOUBLE COMPENSATION QUICK CHANGE TAP HOLDERS



TIPO	Art.	H	E	B	COMPENSAZIONE	
HSK 40 A - B. 1	6450	80	36	19	- 7,5 + 7,5	M 3 ÷ M 12 (*M16)
HSK 40 A - B. 2	6451	100	53	31	- 10,0 +10,0	M 6 ÷ M 20 (*M30)
HSK 50 A - B. 1	6452	80	36	19	- 7,5 + 7,5	M 3 ÷ M 12 (*M16)
HSK 50 A - B. 2	6453	130	53	31	- 10,0 +10,0	M 6 ÷ M 20 (*M30)
HSK 63 A - B. 1	6454	80	36	19	- 7,5 + 7,5	M 3 ÷ M 12 (*M16)
HSK 63 A - B. 2	6455	130	53	31	- 10,0 +10,0	M 6 ÷ M 20 (*M30)
HSK 63 A - B. 3	6456	165	78	48	- 17,5 +17,5	M14 ÷ M 33 (*M48)
HSK 100 A - B. 1	6457	80	36	19	- 7,5 + 7,5	M 3 ÷ M 12 (*M16)
HSK 100 A - B. 2	6458	110	53	31	- 10,0 +10,0	M 6 ÷ M 20 (*M30)
HSK 100 A - B. 3	6459	160	78	48	- 17,5 +17,5	M14 ÷ M 33 (*M48)

* Bussole con grani
Adapters with screws



HSK A + C

MASCHIATORI A CAMBIO RAPIDO SENZA COMPENSAZIONE

QUICK CHANGE TAP HOLDERS WITHOUT COMPENSATION



TIPO	Art.	H	E	B	
HSK 40 A - B. 1 FISSO	6470	55	33	19	M 3 ÷ M 12 (*M16)
HSK 40 A - B. 2 FISSO	6471	90	50	31	M 6 ÷ M 20 (*M30)
HSK 50 A - B. 1 FISSO	6472	60	33	19	M 3 ÷ M 12 (*M16)
HSK 50 A - B. 2 FISSO	6473	100	50	31	M 6 ÷ M 20 (*M30)
HSK 63 A - B. 1 FISSO	6474	60	33	19	M 3 ÷ M 12 (*M16)
HSK 63 A - B. 2 FISSO	6475	90	50	31	M 6 ÷ M 20 (*M30)
HSK 63 A - B. 3 FISSO	6476	130	72	48	M14 ÷ M 33 (*M48)
HSK 100 A - B. 1 FISSO	6477	70	33	19	M 3 ÷ M 12 (*M16)
HSK 100 A - B. 2 FISSO	6478	90	50	31	M 6 ÷ M 20 (*M30)
HSK 100 A - B. 3 FISSO	6479	115	72	48	M14 ÷ M 33 (*M48)

* Bussole con grani
Adapters with screws

