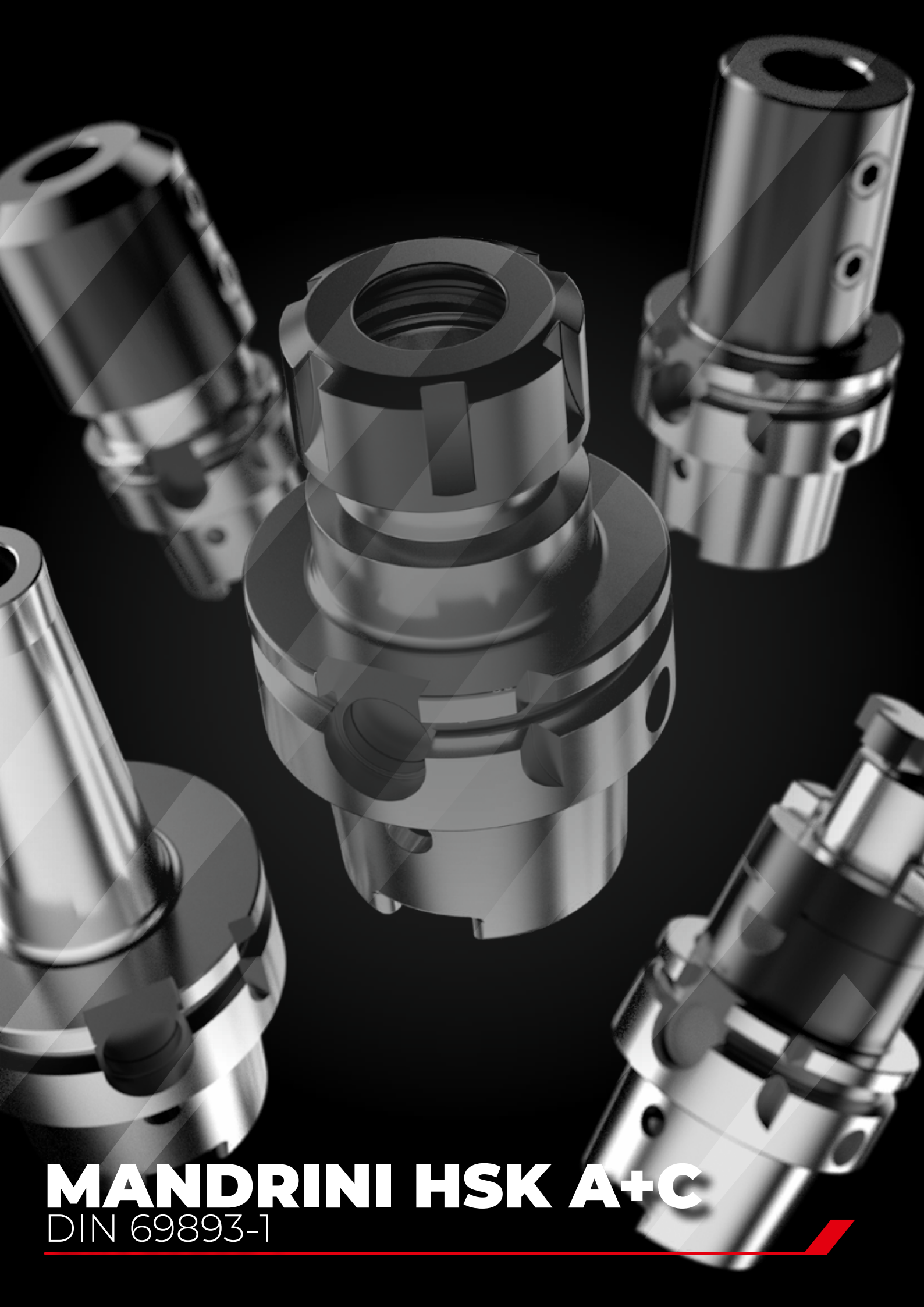




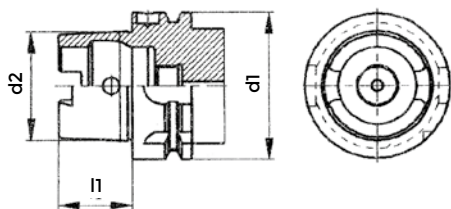
MANDRINI HSK A+C

DIN 69893-1

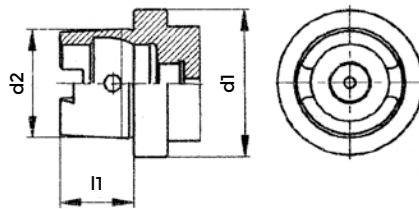


TAVOLA RIASSUNTIVA DELLE GRANDEZZE E DELLE FORME SECONDO DIN 69893

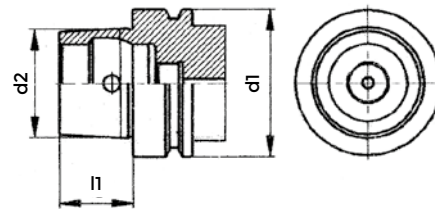
HSK A



HSK C



HSK E

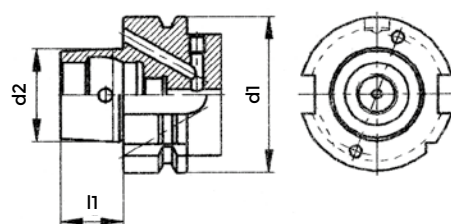


DIN 69893

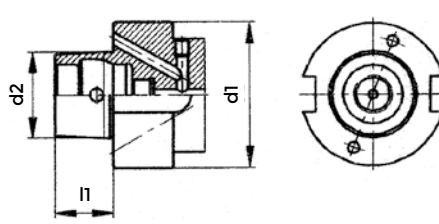
HSK A - C - E

DIAMETRO NOMINALE d1	DIAMETRO CONO d2	LUNGHEZZA CONO l1
32	24	16
40	30	20
50	38	25
63	48	32
100	75	50
125	95	63

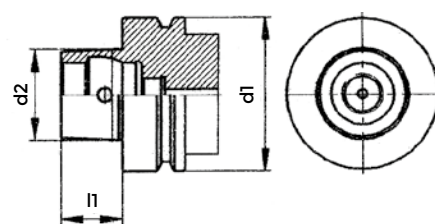
HSK B



HSK D



HSK F

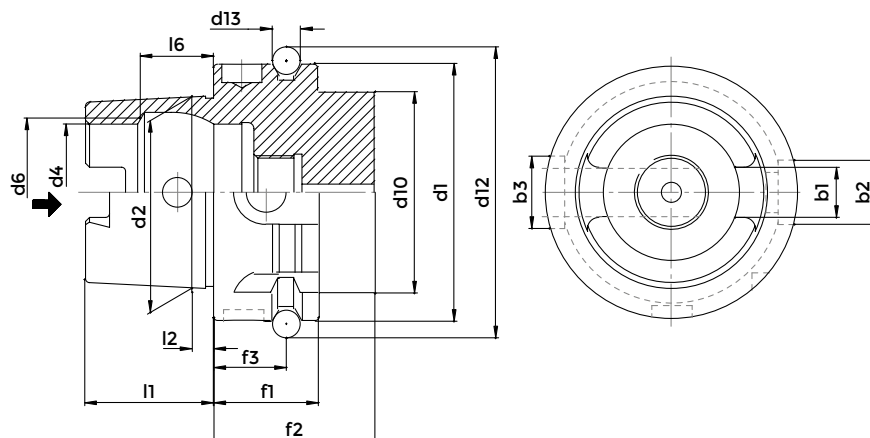


DIN 69893

HSK B - D - F

DIAMETRO NOMINALE d1	DIAMETRO CONO d2	LUNGHEZZA CONO l1
40	24	16
50	30	20
63	38	25
100	60	40

DATI TECNICI CONI D'ATTACCO



DIN 69893 A+C

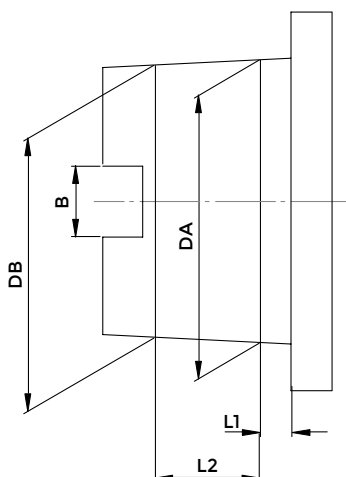
	HSK 32	HSK 40	HSK 50	HSK 63	HSK 100	HSK 125
b1	7,05	8,05	10,54	12,54	20,02	25,02
b2	7	9	12	16	20	25
b3	9	11	14	18	22	28
d1	32	40	50	63	100	125
d2	24	30	38	48	75	95
d4	17	21	26	34	53	67
d6	19	23	29	37	58	73
d10	26	34	42	53	88	111
d12	37	45	59,3	72,3	109,75	134,75
d13	4	4	7	7	7	7
f1	20	20	26	26	29	29
f2	35	35	42	42	45	45
f3	16	16	18	18	20	20
l1	16	20	25	32	50	63
l2	3,2	4	5	6,3	10	12,5
l6	8,92	11,42	14,13	18,13	28,56	36,27

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 69893 sull'esterno flangia.

TOLLERANZA DEL CONO



DIN 69893 A+C

HSK	L1	L2	DA	DB	B (solo tipo A+C)
32 A+C	3,2	7,3	24 +0.005 +0,007	23,27 +0.003 +0,005	7.05 +/- 0.04
40 A+C+E	4	9,5	30 +0.005 +0,007	29,05 +0.003 +0,005	8.05 +/- 0.04
40 B+D	3,2	7,3	24 +0.005 +0,007	23,27 +0.003 +0,005	-
50 A+C+E	5	11	38 +0.006 +0,009	36,9 +0.003 +0,006	10.54 +/- 0.04
50 B+D+F	4	9,5	30 +0.005 +0,007	29,05 +0.003 +0,005	-
63 A+C+E	6,3	14,7	48 +0.007 +0,011	46,53 +0.003 +0,007	12.54 +/- 0.04
63 B+D+F	5	11	38 +0.006 +0,009	36,9 +0.003 +0,006	-
100 A+C	10	24	75 +0.009 +0,015	72,6 +0.003 +0,009	20.02 +/- 0.04
100 B+D	8	19	60 +0.008 +0,013	58,1 +0.003 +0,008	-
125 A+C	12,5	30,5	95 +0.008 +0,013	91,9 +0.003 +0,008	25,02 +/- 0,04

DATI TECNICI MANDRINI KINTEK CON ATTACCO ISO

Tutti i mandrini portautensili KINTEK vengono prodotti secondo le normative DIN (dette normative prevedono le stesse classi di tolleranza per gli attacchi DIN69893 A+C, B+D, E, F)

COASSIALITÀ PORTAPINZA

La normativa DIN 69882-6. ammette un'errore massimo di 0,005 mm per i portapinzze DIN6499/ISO15488

COASSIALITÀ PORTAFRESE FISSI E COMBINATI

I portafrese fissi e combinati rispondono ai criteri prescritti dalla norma DIN 69882-2 la quale prevede per i Ø 16,22,27,32 una coassialità di 0,01

COASSIALITÀ PORTAFRESE WELDON

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

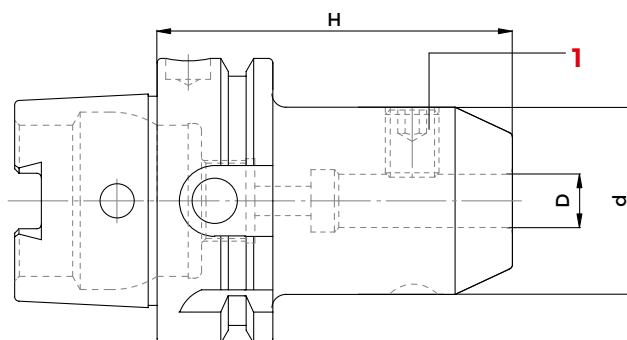
FORO: H5

COASSIALITÀ: 0.005.

DATI COSTRUTTIVI

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

MANDRINI PORTAFRESE TIPO WELDON

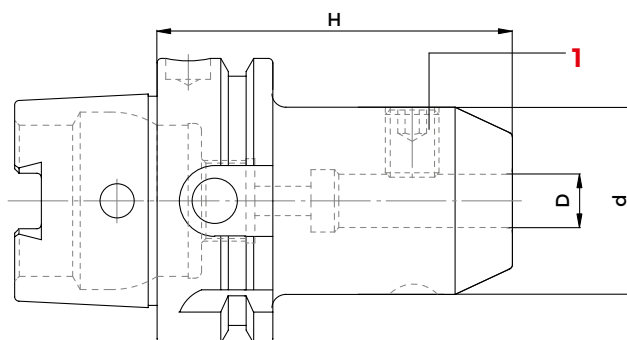


DIN 69893 A+C - DIN 1835/B

COD.	DESCRIZIONE	HSK	H	D	d	G6.3 15000	1
							GRANO
							
6110	HSK40AH60WE06	40	60	6	25	•	4970
6112	HSK40AH60WE08	40	60	8	28	•	4971
6114	HSK40AH65WE10	40	65	10	35	•	4972
6116	HSK40AH70WE12	40	70	12	42	•	4973
6120	HSK40AH80WE16	40	80	16	48	•	0074
6124	HSK40AH80WE20	40	80	20	52	•	4975
6140	HSK50AH80WE16	50	80	16	48	•	4974
6144	HSK50AH80WE20	50	80	20	52	•	4975
6146	HSK50AH105WE25	50	105	25	65	•	4976
6150	HSK63AH65WE06	63	65	6	25	•	4970
6993	HSK63AH130WE06	63	130	6	18	•	0020
6152	HSK63AH65WE08	63	65	8	28	•	4971
6994	HSK63AH130WE08	63	130	8	22	•	0372
6154	HSK63AH65WE10	63	65	10	35	•	4972
6995	HSK63AH130WE10	63	130	10	30	•	0060
6156	HSK63AH80WE12	63	80	12	42	•	4973
6996	HSK63AH130WE12	63	130	12	34	•	0200
6158	HSK63AH80WE14	63	80	14	44	•	4973
6160	HSK63AH80WE16	63	80	16	48	•	0074
6997	HSK63AH130WE16	63	130	16	42	•	0261
6162	HSK63AH80WE18	63	80	18	50	•	4974
6164	HSK63AH80WE20	63	80	20	52	•	4975
6998	HSK63AH130WE20	63	130	20	45	•	0070
6166	HSK63AH110WE25	63	110	25	65	•	4976
6999	HSK63AH130WE25	63	130	25	65	•	4976
6168	HSK63AH110WE32	63	110	32	72	•	4977
6974	HSK63AH120WE40	63	120	40	80	•	4977

segue >>

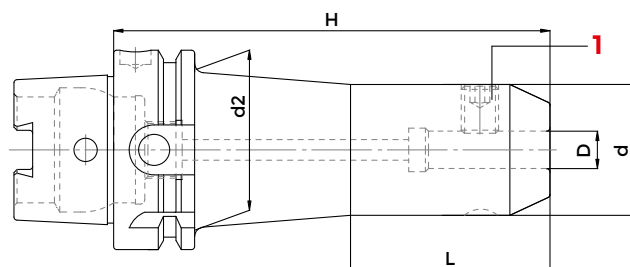
MANDRINI PORTAFRESE TIPO WELDON



DIN 69893 A+C - DIN 1835/B

COD.	DESCRIZIONE	HSK	H	D	d	G6.3 15000	1
							GRANO
							
6170	HSK100AH90WE06	100	90	6	25	•	4970
6172	HSK100AH90WE08	100	90	8	28	•	4971
6174	HSK100AH90WE10	100	90	10	35	•	4972
6176	HSK100AH100WE12	100	100	12	42	•	4973
6178	HSK100AH100WE14	100	100	14	44	•	4973
6180	HSK100AH100WE16	100	100	16	48	•	0074
6177	HSK100AH200WE16	100	200	16	48	•	0074
6182	HSK100AH100WE18	100	100	18	50	•	0074
6184	HSK100AH110WE20	100	110	20	52	•	4975
6186	HSK100AH120WE25	100	120	25	65	•	4976
6720	HSK100AH200WE25	100	200	25	65	•	4976
6188	HSK100AH120WE32	100	120	32	72	•	4977
6190	HSK100AH120WE40	100	120	40	80	•	4977
6191	HSK100AH130WE50	100	130	50	100	•	811-106011

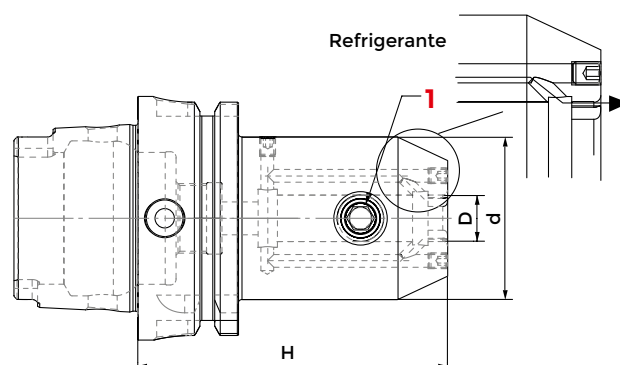
MANDRINI PORTAFRESE TIPO WELDON, PROLUNGATI



DIN 69893 A+C - DIN 1835/B

COD.	DESCRIZIONE	HSK	H	D	d	L	d2	G6.3 15000	1 GRANO
									
6132	HSK50AH65WE08	50	65	8	20	39	28	•	4971
6136	HSK50AH80WE12	50	80	12	30	54	42	•	4973
6147	HSK50AH120WE32	50	120	32	56	94	72	•	4977
6966	HSK63AH100WE06	63	100	6	18	50	26	•	0020
6967	HSK63AH100WE08	63	100	8	22	50	30	•	0372
6968	HSK63AH100WE10	63	100	10	30	-	-	•	0060
6969	HSK63AH100WE12	63	100	12	34	-	-	•	0200
6159	HSK63AH100WE14	63	100	14	24	74	36	•	4973
6971	HSK63AH100WE16	63	100	16	42	-	-	•	0261
6973	HSK63AH100WE20	63	100	20	45	-	-	•	0070
6151	HSK63AH160WE06	63	160	6	18	50	34	•	0020
6153	HSK63AH160WE08	63	160	8	22	50	38	•	0372
6155	HSK63AH160WE10	63	160	10	30	65	46	•	0060
6157	HSK63AH160WE12	63	160	12	34	70	50	•	0200
6161	HSK63AH160WE16	63	160	16	42	70	50	•	0261
6165	HSK63AH160WE20	63	160	20	45	70	53	•	0070
6167	HSK63AH160WE25	63	160	25	45	70	53	•	0076
6169	HSK63AH160WE32	63	160	32	64,5	80	52	•	811-106022
6171	HSK100AH160WE06	100	160	6	18	50	46	•	0020
6173	HSK100AH160WE08	100	160	8	22	50	50	•	0372
6175	HSK100AH160WE10	100	160	10	30	65	48	•	0060
6177	HSK100AH160WE12	100	160	12	34	70	51	•	0200
6181	HSK100AH160WE16	100	160	16	42	70	59	•	0261
6185	HSK100AH160WE20	100	160	20	45	70	55	•	0070
6187	HSK100AH160WE25	100	160	25	55	80	66	•	0075
6189	HSK100AH160WE32	100	160	32	71,5	-	-	•	4977

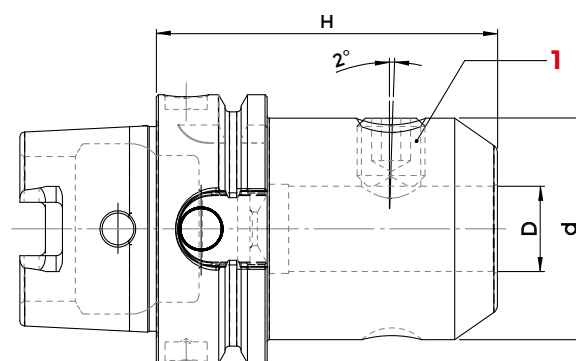
PORTAFRESE TIPO WELDON CON LUBRIFICAZIONE



DIN 69893 A+C - DIN 1835/B

COD.	DESCRIZIONE	HSK	H	D	d	G6.3 15000	1
							GRANO
							
6912	HSK63AH65WE06-IK	63	65	6	25	•	4970
6913	HSK63AH65WE08-IK	63	65	8	28	•	4971
6914	HSK63AH65WE10-IK	63	65	10	35	•	4972
6915	HSK63AH80WE12-IK	63	80	12	42	•	4973
6917	HSK63AH80WE16-IK	63	80	16	48	•	4974
6919	HSK63AH80WE20-IK	63	80	20	52	•	4975
6920	HSK63AH110WE25-IK	63	110	25	65	•	4976
6921	HSK63AH110WE32-IK	63	110	32	72	•	4977
6922	HSK63AH125WE40-IK	63	125	40	80	•	4977

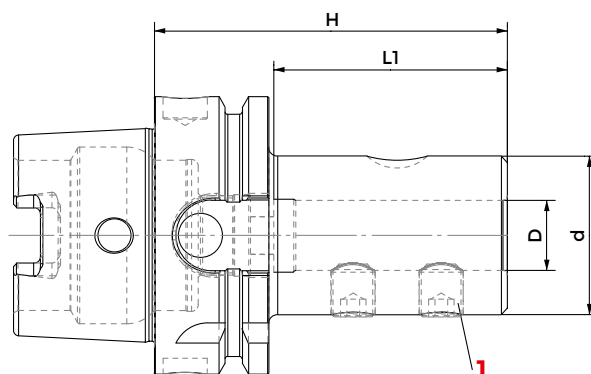
MANDRINI PER UTENSILI ATTACCO WHISTLE NOTCH



DIN 69893 A+C - DIN 1835/B

COD.	DESCRIZIONE	HSK	H	d	D	G6.3 12000	1
							GRANO
							
6225	HSK63AH100WN20	63	100	51,5	20	•	4975
6226	HSK63AH110WN25	63	110	64,5	25	•	4976
6227	HSK63AH110WN32	63	110	71,5	32	•	4977
6233	HSK100AH100WN16	100	100	47,5	16	•	4974
6235	HSK100AH110WN20	100	110	51,5	20	•	4975

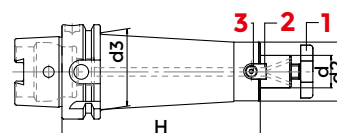
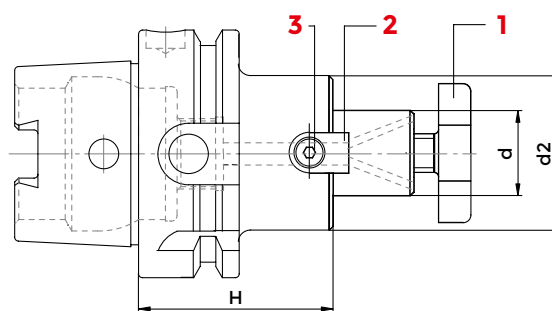
PORTAPUNTE



DIN 69893 A+C

COD.	DESCRIZIONE	HSK	H	D	d	L1	G6.3 8000	¹ GRANO
								
6403	HSK63AH80D16-E1	63	80	16	36	54	•	0403
6404	HSK63AH80D20-E1	63	80	20	40	54	•	0403
6405	HSK63AH90D25-E1	63	90	25	45	59	•	0417
6406	HSK63AH90D32-E1	63	90	32	52	63	•	0417

MANDRINI PORTAFRESE A TRASCINAMENTO FISSO



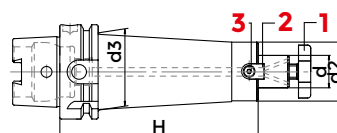
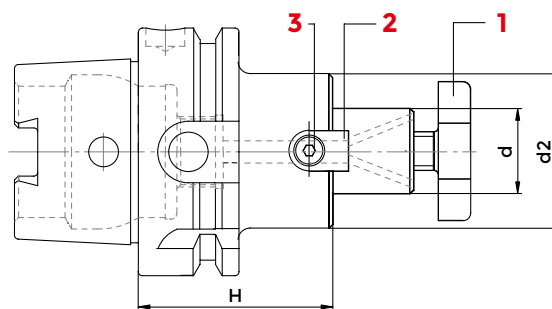
DIN 69893 A+C - ISO 3937

VERSIONE F SOLO FORMA A-D

COD.	DESCRIZIONE	HSK	H	d	d2	d3	G6.3 15000	1	1	2	3	CHIAVE
								VITE TESTA A CROCE	VITE TESTA A CROCE A RICHIESTA	TASSELLO	VITE	
6298	HSK32AH45D16F	32	45	16	38	-	•					4562
6299	HSK32AH50D22F	32	50	22	48	-	•	4985	2739	7421	0255	4563
6300	HSK40AH45D16F	40	45	16	38	-	•	4985	2739	7421	0255	4562
6302	HSK40AH50D22F	40	50	22	48	-	•	4986	2740	7427	0256	4563
6309	HSK50AH60D22F	60	55	22	48	-	•	4986	2740	7427	0256	4563
6317	HSK63AH45D16F-L	63	45	16	38	-	•	4985	2739	7421	0255	4562
6318	HSK63AH100D16F-L	63	100	16	38	40	•	4985	2739	7421	0255	4562
6319	HSK63AH160D16F-L	63	160	16	32	38	•	4985	2739	7421	0255	4562
6811	HSK63AH200D16F-L	63	200	16	38	-	•	4985	-	7421	0255	4562
6320	HSK63AH50D22F-L	63	50	22	48	-	•	4986	2740	7427	0256	4563
6321	HSK63AH100D22F-L	63	100	22	48	-	•	4986	2740	7427	0256	4563
6322	HSK63AH160D22F-L	63	160	22	40	48	•	4986	2740	7435	0203	4563
6812	HSK63AH200D22F-L	63	200	22	48	-	•	4986	-	7427	0256	4563
6323	HSK63AH55D27F-L	63	55	27	58	-	•	4987	2741	7428	7414	4564
6324	HSK63AH100D27F-L	63	100	27	58	-	•	4987	2741	7428	7414	4564
6325	HSK63AH160D27F-L	63	160	27	48	50	•	4987	2741	7436	0205	4564
6326	HSK63AH60D32F-L	63	60	32	78	-	•	4988	2742	7439	0099	4565
6327	HSK63AH100D32F-L	63	100	32	78	-	•	4988	2742	7439	0099	4565
6328	HSK63AH160D32F-L	63	160	32	58	-	•	4988	2742	7437	0482	4565
6567	HSK63AH60D40F-L	63	60	40	88	-	•	4989	-	7430	0099	4566
6329	HSK63AH65D40F-L	63	65	40	88	-	•	4989	2743	7430	0099	4566
6330	HSK63AH100D40F-L	63	100	40	88	-	•	4989	-	7430	0099	4566
6331	HSK63AH160D40F-L	63	160	40	88	-	•	4989	-	7430	0099	4566
6568	HSK100AH50D16F-L	100	50	16	38	-	•	4985	-	7421	0255	4562
6332	HSK100AH55D16F-L	100	55	16	38	-	•	4985	2739	7421	0255	4562
6613	HSK100H100D16F-L	100	100	16	38	-	•	4985	-	7421	0255	4562
6334	HSK100AH160D16F-L	100	160	16	32	42	•	4985	2739	7421	0255	4562
6569	HSK100AH50D22F-L	100	50	22	48	-	•	4986	-	7427	0256	4563

segue >>

MANDRINI PORTAFRESE A TRASCINAMENTO FISSO



DIN 69893 A+C - ISO 3937

VERSIONE F SOLO FORMA A-D

COD.	DESCRIZIONE	HSK	H	d	d2	d3	G6.3 15000	1 VITE TESTA A CROCE	1 VITE TESTA A CROCE A RICHIESTA	2 TASSELLO	3 VITE	CHIAVE
6335	HSK100AH55D22F-L	100	55	22	48	-	•	4986	2740	7427	0256	4563
6336	HSK100AH100D22F-L	100	100	22	48	50	•	4986	2740	7427	0256	4563
6337	HSK100AH160D22F-L	100	160	22	40	50	•	4986	2740	7435	0203	4563
6623	HSK100AH200D22F-L	100	200	22	48	-	•	4986	-	7427	0256	4563
6570	HSK100AH50D27F-L	100	50	27	58	-	•	4987	-	7428	7414	4564
6338	HSK100AH55D27F-L	100	55	27	58	-	•	4987	2741	7428	7414	4564
6339	HSK100AH100D27F-L	100	100	27	58	60	•	4987	2741	7428	7414	4564
6340	HSK100AH160D27F-L	100	160	27	48	68	•	4987	2741	7436	0205	4564
6629	HSK100AH200D27F-L	100	200	27	58	-	•	4987	-	7428	7414	4564
6630	HSK100AH250D27F-L	100	250	27	58	-	•	4987	-	7428	7414	4564
6571	HSK100AH50D32F-L	100	50	32	66	-	•	4988	-	7429	0099	4565
6341	HSK100AH60D32F-L	100	60	32	66	-	•	4988	2742	7439	0099	4565
6342	HSK100AH100D32F-L	100	100	32	78	80	•	4988	2742	7439	0099	4565
6343	HSK100AH160D32F-L	100	160	32	58	76	•	4988	2742	7437	0482	4565
6360	HSK100AH200D32F-L	100	200	32	66	-	•	4988	-	7439	0099	4565
6344	HSK100AH60D40F-L	100	60	40	88	-	•	4989	2743	7430	0099	4566
6346	HSK100AH160D40F-L	100	160	40	70	84	•	4986	2740	7435	0203	4563

ACCESSORI



p. 674



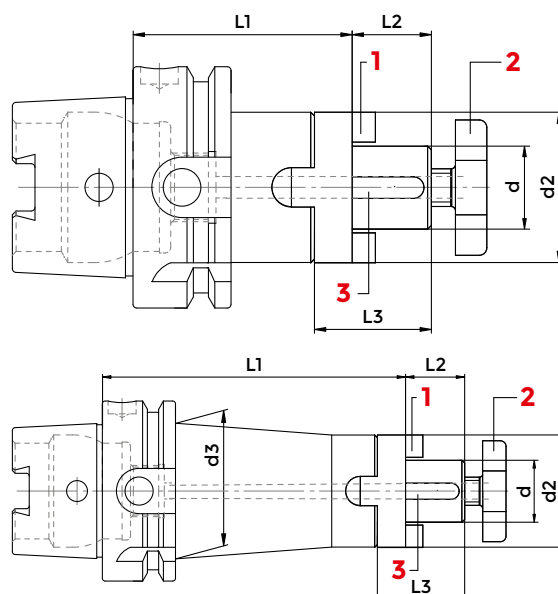
p. 676



p. 675



MANDRINI PORTAFRESE COMBINATI



DIN 69893 A+C - DIN 6358

										1	2	3	
COD.	DESCRIZIONE	HSK	d	L1	L2	L3	d2	d3	G6.3 8000	GIUNTO DI TRASCINAMENTO	VITE TESTA A CROCE	CHIAVETTA	CHIAVE
													
6368	HSK63AH60D16C	63	16	60	17	27	32	-	•	4090	4985	0115	4562
6369	HSK63AH100D16C	63	16	100	17	27	32	40	•	4090	4985	0115	4562
6370	HSK63AH160D16C	63	16	160	17	27	32	-	•	4090	4985	0115	4562
6371	HSK63AH60D22C	63	22	60	19	31	40	-	•	4091	4986	0116	4563
6372	HSK63AH100D22C	63	22	100	19	31	40	-	•	4091	4986	0116	4563
6373	HSK63AH160D22C	63	22	160	19	31	40	50	•	4091	4986	0116	4563
6374	HSK63AH60D27C	63	27	60	21	33	48	-	•	4092	4987	0122	4564
6375	HSK63AH100D27C	63	27	100	21	33	48	-	•	4092	4987	0122	4564
6376	HSK63AH160D27C	63	27	160	21	33	48	-	•	4092	4987	0122	4564
6377	HSK63AH65D32C	63	32	65	24	38	58	-	•	4093	4988	0125	4565
6378	HSK63AH100D32C	63	32	100	24	38	58	-	•	4093	4988	0125	4565
6380	HSK63AH70D40C	63	40	70	27	41	70	-	•	4094	4989	0133	4566
6381	HSK63AH100D40C	63	40	100	27	41	70	-	•	4094	4989	0133	4566
6379	HSK63AH160D32C	100	32	160	24	38	58	-	•	4093	4988	0125	4565
6387	HSK100AH100D22C	100	22	100	19	31	40	46	•	4091	4986	0116	4563
6390	HSK100AH100D27C	100	27	100	21	33	48	54	•	4092	4987	0122	4564
6393	HSK100AH100D32C	100	32	100	24	38	58	64	•	4093	4988	0125	4565

ACCESSORI

p. 675



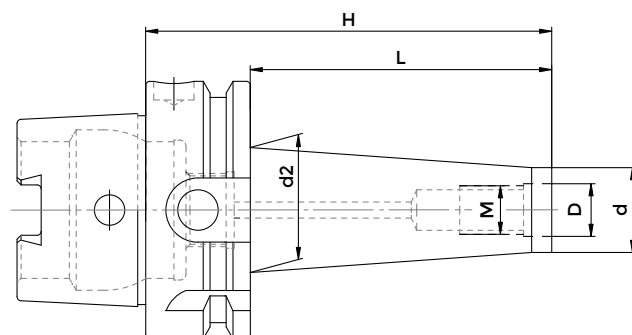
p. 674



p. 675



MANDRINI PER FRESE CON ATTACCO FILETTATO

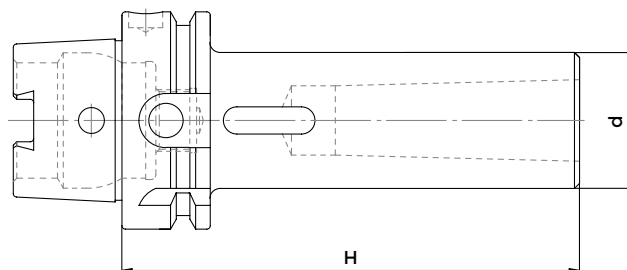


DIN 69893 A+C

LINEA ALTA VELOCITÀ

COD.	DESCRIZIONE	HSK	M	D	d	d2	H	L	G2.5 25000
6669	HSK63AH59M6	63	M6	6,5	10	10	59	33	•
6671	HSK63AH84M6	63	M6	6,5	10	20	84	58	•
6672	HSK63AH109M6	63	M6	6,5	10	23	109	83	•
6673	HSK63AH59M8	63	M8	8,5	13	15	59	33	•
6674	HSK63AH76M8	63	M8	8,5	13	23	76	50	•
6675	HSK63AH101M8	63	M8	8,5	13	23	101	75	•
6676	HSK63AH126M8	63	M8	8,5	13	26	126	100	•
6677	HSK63AH59M10	63	M10	10,5	18	19,5	59	33	•
6678	HSK63AH76M10	63	M10	10,5	18	23	76	50	•
6679	HSK63AH101M10	63	M10	10,5	18	28	101	75	•
6680	HSK63AH126M10	63	M10	10,5	18	28	126	100	•
6681	HSK63AH159M10	63	M10	10,5	18	34	159	133	•
6682	HSK63AH59M12	63	M12	12,5	21	24	59	33	•
6683	HSK63AH76M12	63	M12	12,5	21	24	76	50	•
6684	HSK63AH101M12	63	M12	12,5	21	31	101	75	•
6685	HSK63AH126M12	63	M12	12,5	21	31	126	100	•
6686	HSK63AH159M12	63	M12	12,5	21	31	159	133	•
6687	HSK63AH184M12	63	M12	12,5	21	39	184	158	•
6701	HSK63AH209M12	63	M12	12,5	21	42	209	183	•
6688	HSK63AH59M16	63	M16	17	29	34	59	33	•
6689	HSK63AH76M16	63	M16	17	29	34	76	50	•
6690	HSK63AH101M16	63	M16	17	29	34	101	75	•
6691	HSK63AH126M16	63	M16	17	29	36	126	100	•
6692	HSK63AH159M16	63	M16	17	29	39	159	133	•
6693	HSK63AH184M16	63	M16	17	29	39	184	158	•
6703	HSK63AH209M16	63	M16	17	29	42	209	183	•
6694	HSK100AH87M12	100	M12	12,5	21	24	87	58	•
6695	HSK100AH137M12	100	M12	12,5	21	47	137	108	•
6697	HSK100AH87M16	100	M16	17	29	32	87	58	•
6698	HSK100AH137M16	100	M16	17	29	42	137	108	•
6705	HSK100AH237M16	100	M16	17	29	55	237	208	•

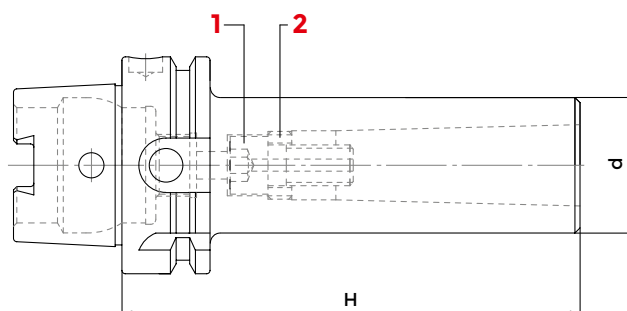
MANDRINI PORTAPUNTE CON ATTACCO CONO MORSE



DIN 69893 A+C - DIN 228-2 FORMA D

COD.	DESCRIZIONE	HSK	MORSE	H	d	G6.3 8000
6256	HSK63AH100CM1P	63	1	100	25	•
6257	HSK63AH115CM2P	63	2	115	32	•
6258	HSK63AH135CM3P	63	3	135	40	•
6259	HSK63AH160CM4P	63	4	160	48	•
6261	HSK100AH120CM2P	100	2	120	32	•
6262	HSK100AH150CM3P	100	3	150	40	•
6263	HSK100AH170CM4P	100	4	170	48	•

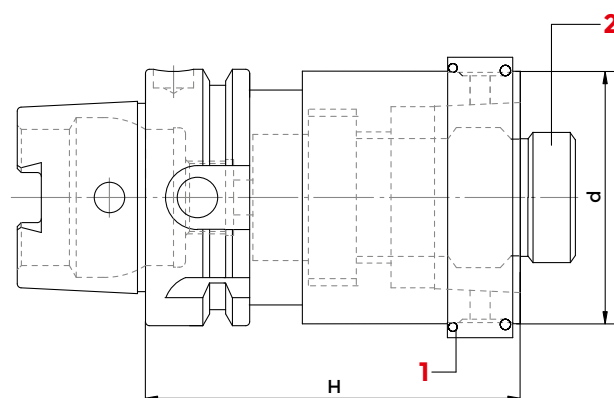
MANDRINI PORTAFRESE CON ATTACCO CONO MORSE



DIN 69893 A+C - DIN 228-2 FORMA C

COD.	DESCRIZIONE	HSK	MORSE	H	d	G6.3 8000	1	2
							VITE	ANELLO
6281	HSK63AH100CM1F	63	1	100	25	•		
6282	HSK63AH115CM2F	63	2	115	32	•	811-401100	7419
6283	HSK63AH135CM3F	63	3	135	40	•	7452	7422
6284	HSK63AH160CM4F	63	4	160	48	•	811-401078	7423
6287	HSK100AH150CM3F	100	3	150	40	•	7454	7424
6288	HSK100AH170CM4F	100	4	170	48	•	811-401098	7423
							811-401092	7424

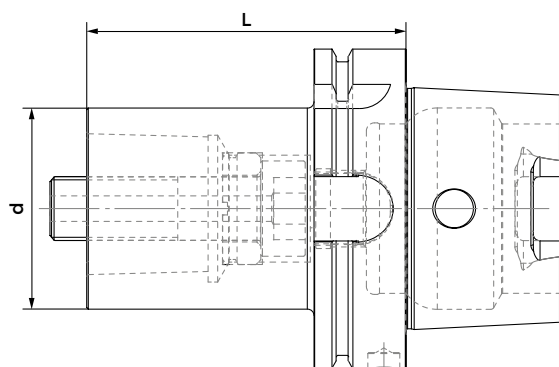
PROLUNGHE/RIDUZIONI HSK A+C/HSK



DIN 69893 A+C

COD.	DESCRIZIONE	HSK	d	H	1 ANELLO (assemblato)	2 UNITÀ DI SERRAGGIO (assemblata)
6197	HSK63H80HSK50	63	50	80	HN50-AN	HN50C
6216	HSK63AH100HSK63	63	63	100	L0701460	HN63C
6199	HSK100AH100HSK63	100	63	100	L0701480	HN100C
6217	HSK100AH140HSK100	100	100	140	L0701480	HN100C

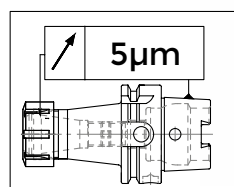
RIDUZIONI HSK63 A+C / CAPTO



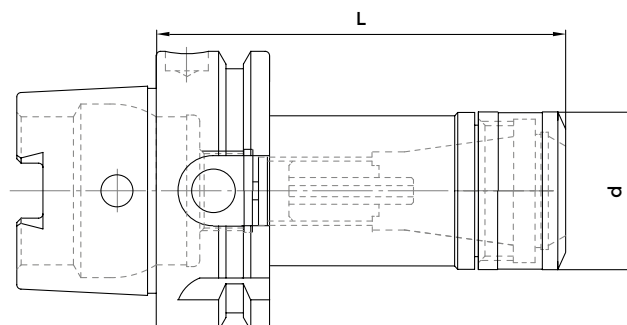
DIN 69893 A+C

COD.	DESCRIZIONE	HSK	d	L
11051	DIN69893 HSK63	63	40	80
11052	DIN69893 HSK63	63	50	90
11053	DIN69893 HSK63	63	63	110
11054	DIN69893 HSK100	100	40	90
11055	DIN69893 HSK100	100	50	100
11056	DIN69893 HSK100	100	63	90
11057	DIN69893 HSK100	100	63	150
11058	DIN69893 HSK100	100	80	120

MANDRINI PORTAPINZA TIPO ER - ALTA PRECISIONE

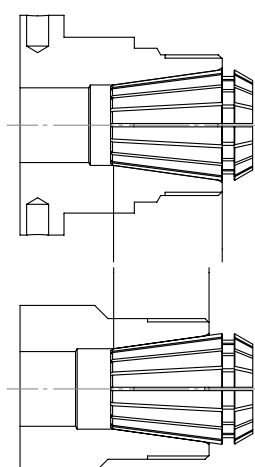


H= 0 > 100 mm - 5 µm
H= 100 > 200 mm - 10 µm



DIN 69893 HSKA - DIN 6499

COD.	DESCRIZIONE	HSK	L	d	ER	G2.5 30000	GHIERA	CHIAVE
214-91747	HSK63AH75ER16-HP	63	75	30	16	•	812-203085	816-203069
214-91748	HSK63AH75ER25-HP	63	75	40	25	•	812-203086	816-203070
214-91749	HSK63AH75ER32-HP	63	75	50	32	•	812-203087	816-203071
214-91738	HSK63AH100ER16-HP	63	100	30	16	•	812-203085	816-203069
214-91739	HSK63AH100ER25-HP	63	100	40	25	•	812-203086	816-203070
214-91740	HSK63AH100ER32-HP	63	100	50	32	•	812-203087	816-203071
214-91742	HSK63AH160ER16-HP	63	160	30	16	•	812-203085	816-203069
214-91743	HSK63AH160ER25-HP	63	160	40	25	•	812-203086	816-203070
214-91744	HSK63AH160ER32-HP	63	160	50	32	•	812-203087	816-203071



**LINEA ALTA
PRECISIONE**

STANDARD



Cassetta corredo:

- 1 portapinza
- 10 pinze

CODICE ORDINAZIONE	COMPOSIZIONE
KIT HSK63 ER16 HP	N°1 HSK63 AH75 ER16 HP + N°10 PINZE ER16 HP
KIT HSK63 ER25 HP	N°1 HSK63 AH75 ER25 HP + N°10 PINZE ER25 HP
KIT HSK63 ER32 HP	N°1 HSK63 AH75 ER32 HP + N°10 PINZE ER32 HP

ACCESSORI



p. 153



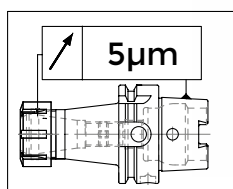
p. 615



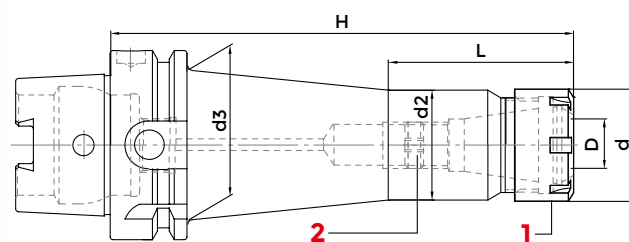
p. 153



MANDRINI PORTAPINZA TIPO ER - LINEA ALTA VELOCITÀ



H= 0 > 100 mm - 5 µm
H= 100 > 200 mm - 10 µm



DIN 69893 A+C - DIN 6499/ISO 15488

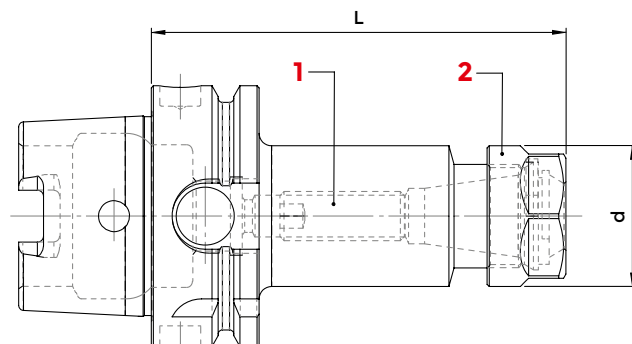
LINEA ALTA VELOCITÀ

COD.	DESCRIZIONE	HSK	H	D	d	ER	L	d2	d3	C2.5 30000	1	2
											GHIERA	GRANO
												
6000	HSK32AH65ER16M	32	65	0,5÷10	22	16M	-	20	-	•	5694	811-303119
6004	HSK32AH70ER25M	32	70	1÷16	35	25M	-	30	-	•	5696	811-303121
6006	HSK40AH60ER16M	40	60	0,5÷10	22	16M	-	20	-	•	5694	811-303119
214-31722	HSK40AH70ER16M	40	70	0,5÷10	22	16M	-	20	-	•	5694	811-303119
6007	HSK40AH120ER16M	40	120	0,5÷10	22	16M	47	20	29	•	5694	811-303119
6002	HSK50AH80ER16M	50	80	0,5÷10	22	16M	-	20	-	•	5694	811-303119
6013	HSK50AH160ER16M	50	160	0,5÷10	22	16M	57	20	28	•	5694	811-303119
6003	HSK63AH70ER11M	63	70	1÷8	16	11M	-	15	-	•	5691	5718
6005	HSK63AH130ER11M	63	130	1÷8	16	11M	-	15	-	•	5691	5718
6008	HSK63AH70ER16M	63	70	0,5÷10	22	16M	-	21	-	•	5694	811-303119
6018	HSK63AH90ER16M	63	90	0,5÷10	22	16M	-	20	-	•	5694	811-303119
6009	HSK63AH130ER16M	63	130	0,5÷10	22	16M	-	22	-	•	5694	811-303119
6019	HSK63AH160ER16M	63	160	0,5÷10	22	16M	57	20	28	•	5694	811-303119
6109	HSK63AH200ER16M	63	200	0,5÷10	22	16 M	-	22	-	•	5694	811-303119
6119	HSK63AH70ER20M	63	70	1÷15	28	20M	-	27	-	•	5695	5720
6301	HSK63AH130ER20M	63	130	1÷15	29	20M	-	27	-	•	5695	5720
6303	HSK63AH200ER20M	63	200	1÷15	30	20M	-	27	-	•	5695	5720
6121	HSK63AH70ER25M	63	70	1÷16	35	25M	-	33	-	•	5696	811-303121
6123	HSK63AH130ER25M	63	130	1÷16	35	25M	-	34	-	•	5696	811-303121
6023	HSK63AH160ER25M	63	160	1÷16	35	25M	68	20	42	•	5696	811-303121
6129	HSK63AH200ER25M	63	200	1÷16	35	25M	-	33	-	•	5696	811-303121
6025	HSK100AH160ER16M	100	160	0,5÷10	22	16M	57	20	30	•	5694	811-303119
6307	HSK100AH100ER20M	100	100	1÷15	28	20M	-	27	-	•	5695	5720
6308	HSK100AH160ER20M	100	160	1÷15	28	20M	-	27	-	•	5695	5720
6310	HSK100AH200ER20M	100	200	1÷15	28	20M	-	27	-	•	5695	5720
6311	HSK100AH100ER25M	100	100	1÷16	35	25M	-	34	-	•	5696	811-303121
6026	HSK100AH160ER25M	100	160	1÷16	35	25M	68	20	46	•	5696	811-303121
6313	HSK100AH200ER25M	100	200	1÷16	35	25M	-	20	-	•	5696	811-303121

ACCESSORI



MANDRINI PORTAPINZA TIPO ER CHIARA ESAGONALE



DIN 69893 A+C

COD.	DESCRIZIONE	HSK	ER	d	L	G6.3 15000	2	1	CHIAVE
							GHIERA	GRANO	
									
6200	HSK 63 A - ER 16 GE / H 70	63	ER 16 1÷12	28	70	•	1214	811-303119	2906
6201	HSK 63 A - ER 16 GE / H 100	63	ER 16 1÷12	28	100	•	1215	811-303119	2906
6202	HSK 63 A - ER 16 GE / H 130	63	ER 16 1÷12	28	130	•	1216	811-303119	2906
6203	HSK 63 A - ER 16 GE / H 160	63	ER 16 1÷12	28	160	•	1217	811-303119	2906
6204	HSK 63 A - ER 16 GE / H 200	63	ER 16 1÷12	28	200	•	1218	811-303119	2906
6206	HSK 63 A - ER 20 GE / H 100	63	ER 20 1÷15	34	100	•	1215	811-303120	2907
6211	HSK 100 A - ER 16 GE / H 160	100	ER 16 1÷12	28	160	•	1214	811-303119	2906

ACCESSORI



p. 633



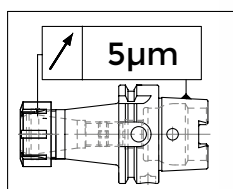
p. 615



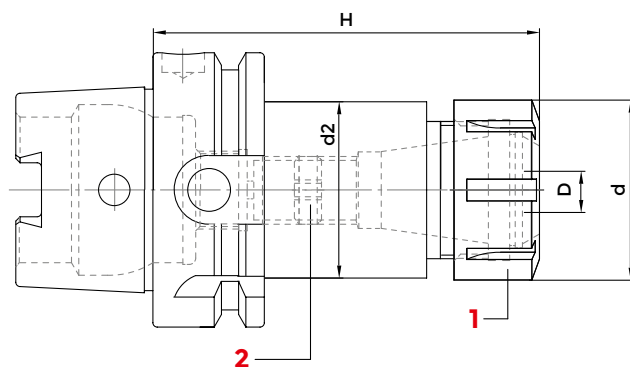
p. 636



MANDRINI PORTAPINZA TIPO ER



H= 0 > 100 mm - 5 µm
 H= 100 > 200 mm - 10 µm

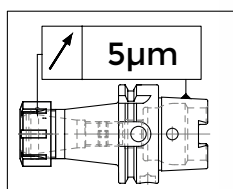


DIN 69893 A+C - DIN 6499/ISO 15488

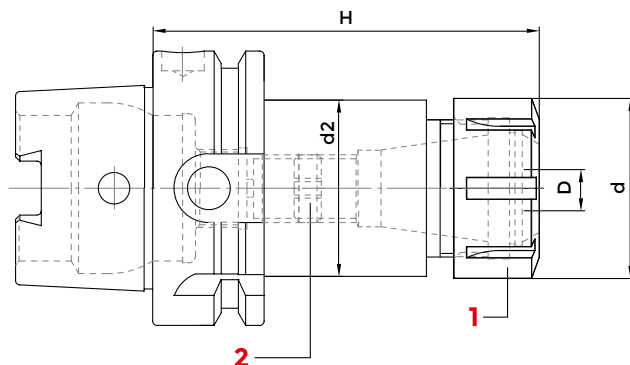
COD.	DESCRIZIONE	HSK	H	D	d	ER	d2	G6.3 20000	1	2
									GHIERA	GRANO
										
6030	HSK40AH65ER25	40	65	1÷16	42	25	32	•	4995	811-303121
6031	HSK40AH80ER25	40	80	1÷16	42	25	32	•	4995	811-303121
6032	HSK40AH65ER32	40	65	2÷20	50	32	40	•	4996	0191
6033	HSK40AH100ER32	40	100	2÷20	50	32	40	•	4996	0191
6038	HSK50AH70ER25	50	70	1÷16	42	25	41	•	4995	811-303121
6039	HSK50AH95ER25	50	95	1÷16	42	25	32	•	4995	811-303121
6040	HSK50AH70ER32	50	70	2÷20	50	32	35	•	4996	0191
6041	HSK50AH100ER32	50	100	2÷20	50	32	40	•	4996	0191
6247	HSK50AH75ER40	50	75	3÷30	63	40	42	•	4997	811-303122
6044	HSK63AH75ER16	63	75	0,5÷10	32	16	22	•	4993	811-303119
6045	HSK63AH100ER16	63	100	0,5÷10	32	16	31,5	•	4993	811-303119
6046	HSK63AH130ER16	63	130	0,5÷10	32	16	28	•	4993	811-303119
6047	HSK63AH160ER16	63	160	0,5÷10	32	16	31,5	•	4993	811-303119
6747	HSK63AH200ER16	63	200	0,5÷10	32	16	28	•	4993	811-303119
6048	HSK63AH75ER20	63	75	1÷13	35	20	25	•	4994	811-303120
6049	HSK63AH100ER20	63	100	1÷13	35	20	34,5	•	4994	811-303120
6050	HSK63AH130ER20	63	130	1÷13	35	20	34	•	4994	811-303120
6051	HSK63AH160ER20	63	160	1÷13	35	20	34,5	•	4994	811-303120
6751	HSK63AH200ER20	63	200	1÷13	35	20	34	•	4994	811-303120
6052	HSK63AH75ER25	63	75	1÷16	42	25	32	•	4995	811-303121
6053	HSK63AH100ER25	63	100	1÷16	42	25	41,5	•	4995	811-303121
6054	HSK63AH130ER25	63	130	1÷16	42	25	41	•	4995	811-303121
6055	HSK63AH160ER25	63	160	1÷16	42	25	41,5	•	4995	811-303121
6755	HSK63AH200ER25	63	200	1÷16	42	25	41	•	4995	811-303121
6056	HSK63AH75ER32	63	75	2÷20	50	32	40	•	4996	0191
6057	HSK63AH100ER32	63	100	2÷20	50	32	49,5	•	4996	0191
6058	HSK63AH130ER32	63	130	2÷20	50	32	49	•	4996	0191
6059	HSK63AH160ER32	63	160	2÷20	50	32	49,5	•	4996	0191
6785	HSK63AH200ER32	63	200	2÷20	50	32	49	•	4996	0191

segue >>

MANDRINI PORTAPINZA TIPO ER



H= 0 > 100 mm - 5 µm
 H= 100 > 200 mm - 10 µm



DIN 69893 A+C - DIN 6499/ISO 15488

COD.	DESCRIZIONE	HSK	H	D	d	ER	d2	G6.3 20000	1	2
									GHIERA	GRANO
										
6060	HSK63AH80ER40	63	80	3÷30	63	40	50	•	4997	811-303122
6106	HSK63AH100ER40	63	100	3÷30	63	40	50	•	4997	811-303122
6061	HSK63AH120ER40	63	120	3÷30	63	40	50	•	4997	811-303122
6062	HSK63AH160ER40	63	160	3÷30	63	40	50	•	4997	811-303122
6790	HSK63AH200ER40	63	200	3÷30	63	40	50	•	4997	811-303122
6064	HSK63AH105ER50	63	105	6÷36	78	50	53	•	4998	
6464	HSK100AH100ER16	100	100	0,5÷10	32	16	28	•	4993	811-303119
6465	HSK100AH160ER16	100	160	0,5÷10	32	16	28	•	4993	811-303119
6467	HSK100AH100ER20	100	100	1÷13	35	20	34	•	4994	811-303120
6468	HSK100AH160ER20	100	160	1÷13	35	20	34	•	4994	811-303120
6065	HSK100AH160ER25	100	160	1÷16	42	25	41,5	•	4995	811-303121
6469	HSK100AH200ER20	100	200	1÷13	35	25	34	•	4994	811-303120
6063	HSK100AH100ER25	100	100	1÷16	42	25	41,5	•	4995	811-303121
6066	HSK100AH200ER25	100	200	1÷16	42	25	41	•	4995	811-303121
6067	HSK100AH100ER32	100	100	2÷20	50	32	49,5	•	4996	0191
6107	HSK100AH120ER32	100	120	2÷20	50	32	49	•	4996	0191
6069	HSK100AH160ER32	100	160	2÷20	50	32	49,5	•	4996	0191
6070	HSK100AH200ER32	100	200	2÷20	50	32	49	•	4996	0191
6108	HSK100AH100ER40	100	100	3÷30	63	40	50	•	4997	811-303122
6071	HSK100AH120ER40	100	120	3÷30	63	40	62,5	•	4997	811-303122
6072	HSK100AH160ER40	100	160	3÷30	63	40	62,5	•	4997	811-303122
6076	HSK100AH200ER40	100	200	3÷30	63	40	50	•	4997	811-303122
6068	HSK100AH120ER50	100	120	6-36	78	50	64,5	•	4998	-
264-31747	HSK125AH100ER25	125	100	1÷16	42	25	41,5	•	4995	811-303121
264-31748	HSK125AH100ER32	125	100	2÷20	50	32	49,5	•	4996	0191
264-31749	HSK125AH120ER40	125	120	3÷30	63	40	62,5	•	4997	811-303122

ACCESSORI

p. 633



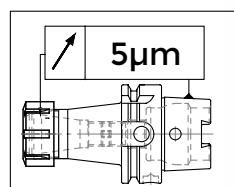
p. 615



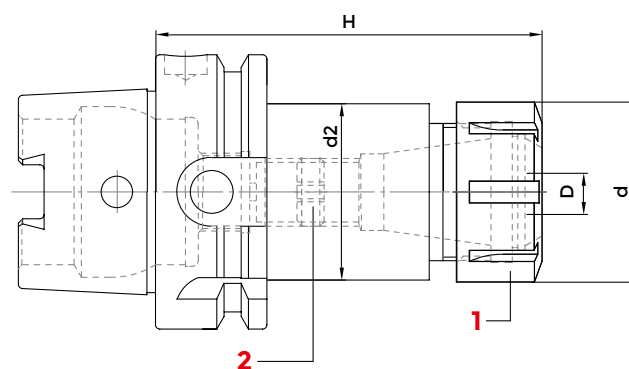
p. 636



MANDRINI PORTAPINZA TIPO ER - LINEA ALTA VELOCITÀ



H= 0 > 100 mm - 5 µm
 H= 100 > 200 mm - 10 µm



DIN 69893 A+C - DIN 6499/ISO 15488

LINEA ALTA VELOCITÀ

COD.	DESCRIZIONE	HSK	H	D	d	ER	d2	G2.5 30000	1	2
									GHIERA	VITE
										
214-91731	HSK63AH75ER16	63	75	0,5÷10	32	16	22	•	1202	811-303119
214-91734	HSK63AH75ER25	63	75	1÷16	42	25	32	•	1207	811-303121
214-91737	HSK63AH75ER32	63	75	2÷20	50	32	40	•	1208	0191
214-91735	HSK63AH80ER40	63	80	3÷30	63	40	50	•	1211	811-303122
214-91732	HSK63AH100ER16	63	100	0,5÷10	32	16	31,5	•	1202	811-303119
214-91733	HSK63AH75ER20	63	75	-	34,5	20	-	•	1203	811-303120
214-91702	HSK63AH100ER25	63	100	1÷16	42	25	41,5	•	1207	811-303121
214-91703	HSK63AH100ER32	63	100	2÷20	50	32	49,5	•	1208	0191
214-91704	HSK63AH120ER40	63	120	3÷30	63	40	50	•	1211	811-303122
214-91710	HSK63AH160ER32	63	160	2÷20	50	32	49,5	•	1208	0191

ACCESSORI



p. 633



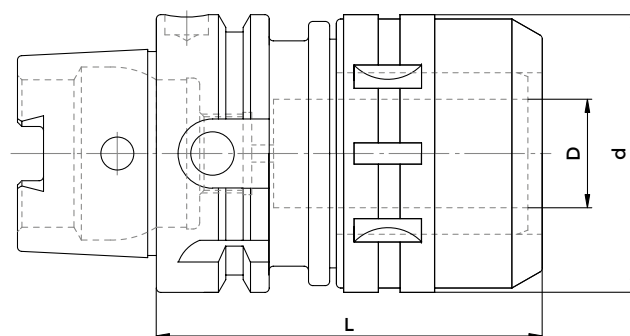
p. 615



p. 636



MANDRINI A FORTE SERRAGGIO

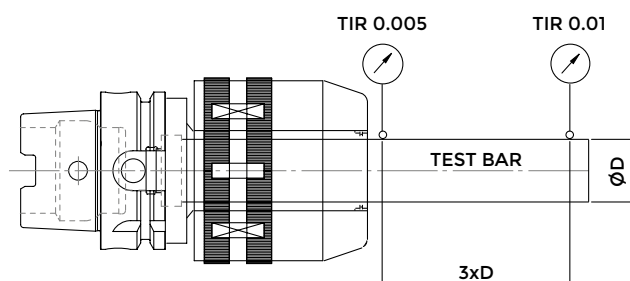


DIN 69893 A+C

COD.	DESCRIZIONE	HSK	D	d	L	C6.3 12000
6243	HSK63AH105C20	63	20	54	105	•
6709	HSK63AH110C32	63	32	63	110	•
6244	HSK63AH130C32	63	32	72	130	•
6245	HSK100AH110C20	100	20	54	110	•
6246	HSK100AH123C32	100	32	72	123	•

Forniti con chiave inclusa

MANDRINO DI FRESATURA Ø	NORMA DIN 69893 A	OSCILLAZIONE (3D)	COPPIA DI SERRAGGIO
C20	DIN 69893 A	0~0,01	980M.m (100 Kgf.m)
C32	DIN 69893 A	0~0,01	3430M.m (350 Kgf.m)



CODICE ORDINAZIONE	COMPOSIZIONE
KIT HSK63A C20	N° HSK63AH105C20 + n°5 pinze K20: Ø6,8,10,12,16 + chiave
KIT HSK63A C32	N° HSK63AH120C32 + n°7 pinze K32: Ø6,8,10,12,16,20,25 + chiave



Cassetta corredo:

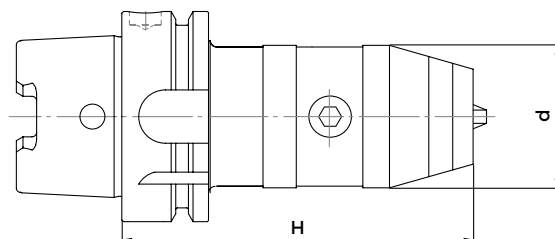
- 1 mandrino forte serraggio
- 1 serie pinze
- 1 chiave

ACCESSORI



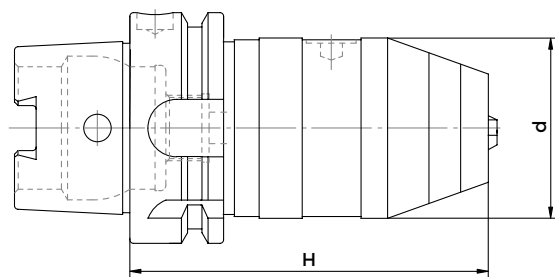
p. 688

MANDRINI PORTAPUNTE INTEGRALI PER ROTAZIONE DESTRA E SINISTRA



DIN 69893 A+C

COD.	DESCRIZIONE	HSK	H	d	RANGE DI SERRACCIO
252-11751	HSK63AH130R0,5-13X	63	130	50	0,5-13
252-11752	HSK63AH140R2,5-16X	63	140	57	2,5-16
252-11753	HSK100AH111R0,5-13X	100	111	50	0,5-13
252-11754	HSK100AH116R2,5-16X	100	116	57	2,5-16

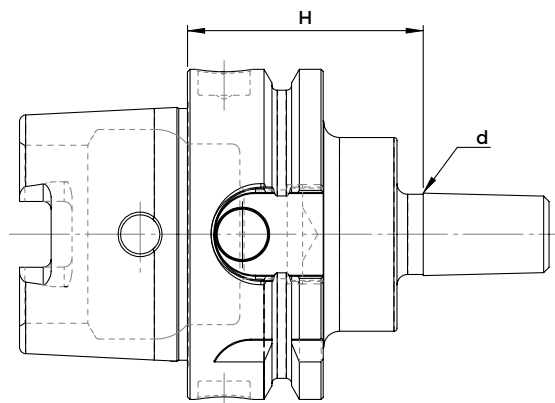


DIN 69893 A+C

COD.	DESCRIZIONE	HSK	H	d	RANGE DI SERRACCIO
8831	HSK63AH105R1-13X	63 *	105	50	1-13
8832	HSK63AH110R3-16X	63 *	110	57	3-16

*con passaggio refrigerante interno

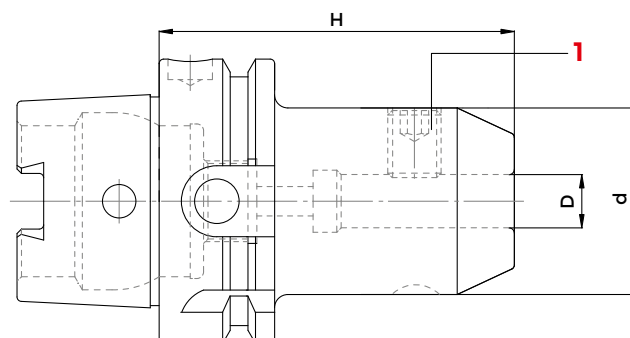
ATTACCHI PER MANDRINI AUTOSERRANTI



DIN 69893 A+C

COD.	DESCRIZIONE	HSK	d	H
6014	HSK 63 A- B 12	63	12,065	45
6015	HSK 63 A- B 16	63	15,733	45
6016	HSK 63 A- B 18	63	17,78	45

MANDRINI PORTAFRESE TIPO WELDON - LINEA ALTA VELOCITÀ

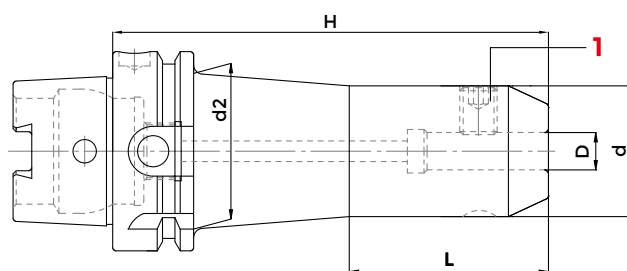


DIN 69893 E - DIN 1835/B

LINEA ALTA VELOCITÀ

COD.	DESCRIZIONE	H	D	d	G2.5 25000	1 GRANO
						
213-91701	HSK63AH65WE06	65	6	25	•	4970
213-91702	HSK63AH65WE08	65	8	28	•	4971
213-91703	HSK63AH65WE10	65	10	35	•	4972
213-91704	HSK63AH80WE12	80	12	42	•	4973
213-91705	HSK63AH80WE14	80	14	44	•	4973
213-91706	HSK63AH80WE16	80	16	48	•	0074
213-91707	HSK63AH80WE18	80	18	50	•	0074
213-91708	HSK63AH80WE20	80	20	52	•	4975
213-91709	HSK63AH110WE25	110	25	65	•	4976
213-91710	HSK63AH110WE32	110	32	72	•	4977

MANDRINI PORTAFRESE TIPO WELDON, PROLUNGATI - LINEA ALTA VELOCITÀ

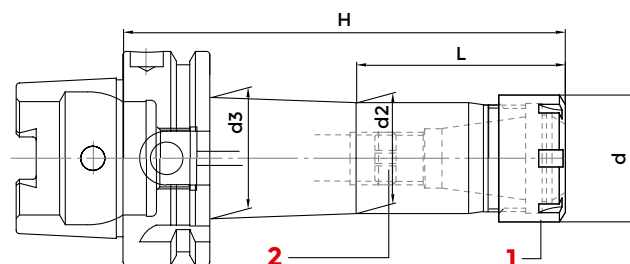


DIN 69893 A+C

LINEA ALTA VELOCITÀ

COD.	DESCRIZIONE	H	D	d	d2	L	G2.5 25000	1 GRANO
								
213-91722	HSK63AH100WE06	100	6	18	26	50	•	0020
213-91723	HSK63AH100WE08	100	8	22	30	50	•	0372
213-91724	HSK63AH100WE10	100	10	30	-	-	•	0060
213-91725	HSK63AH100WE12	100	12	34	-	-	•	0200
213-91727	HSK63AH100WE16	100	16	42	-	-	•	0261
213-91729	HSK63AH100WE20	100	20	45	-	-	•	0070

MANDRINI PORTAPINZA TIPO ER MINI EXTRA SOTTILI - LINEA ALTA VELOCITÀ



DIN 69893 A+C - DIN 6499/ISO 15488

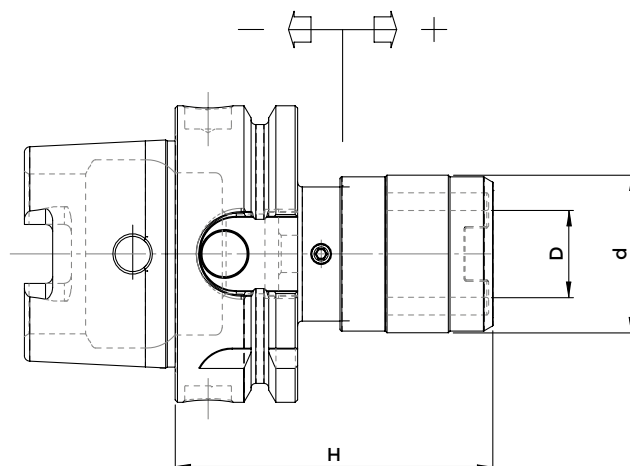
LINEA ALTA VELOCITÀ

COD.	DESCRIZIONE	HSK	ER	d	H	L	d2	d3	G2.5 30000	1	2
										GHIERA	GRANO
											
214-91723	HSK40AH70ER11M	40	11M	16	70	20	14	16	•	5691	0235
214-91724	HSK40AH100ER11M	40	11M	16	100	40	14	20	•	5691	0235
6073	HSK63AH100ER11M	63	11M	16	100	40	14	20	•	5691	0235
6018	HSK63AH100ER16M	63	16M	22	100	42	20	25	•	5694	811-303119
6019	HSK63AH160ER16M	63	16M	22	160	90	20	26	•	5694	811-303119
6020	HSK63AH100ER20M	63	20M	28	100	48	26	30	•	5695	811-303120
6022	HSK63AH100ER25M	63	25M	35	100	-	33	-	•	5696	811-303121
6074	HSK63AH160ER11M	63	11M	16	160	50	14	23	•	5691	0235
6021	HSK63AH160ER20M	63	20M	28	160	98	26	31	•	5695	811-303120
6023	HSK63AH160ER25M	63	25M	35	160	95	33	35	•	5696	811-303121
6024	HSK100AH100ER16M	100	16M	22	100	47	22	26	•	5694	811-303119

ACCESSORI



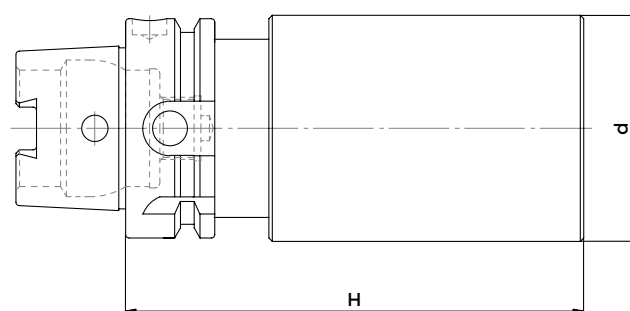
MASCHIATORI A DOPPIA COMPENSAZIONE



DIN 69893 A+C

COD.	DESCRIZIONE	HSK	TAGLIA	DIMENSIONI MASCHIO	COMPENSAZIONE	D	d	H
6454	HSK63AH72GR1	63	1	M3-M12	- 7,5 + 7,5	19	48	72
6455	HSK63AH110GR2	63	2	M6-M20	- 10 + 10	31	60	110
6457	HSK100AH100GR2	100	1	M3÷M12	- 7,5 + 7,5	19	48	80
6458	HSK100AH100GR2	100	2	M6÷M20	- 10 + 10	31	60	100
6459	HSK100AH144GR3	100	3	M14÷M33	- 17,5 + 17,5	48	79	144

MANDRINI SEMILAVORATI A STELO TENERO



DIN 69893 A+C

COD.	DESCRIZIONE	HSK	H	d
6440	HSK32AH150D35SM	32	150	35
6441	HSK40AH150D40SM	40	150	40
6442	HSK40AH200D52SM	40	200	52
6443	HSK50AH200D52SM	50	200	52
6444	HSK50AH200D63SM	50	200	63
217-11783	HSK63AH160D63SM	63	160	63
6445	HSK63AH250D63SM	63	250	63
217-11784	HSK63AH160D80SM	63	160	80
6446	HSK63AH250D80SM	63	250	80
6447	HSK100AH200D63SM	100	200	63
6448	HSK100AH250D80SM	100	250	80
6449	HSK100AH300D90SM	100	300	90