

HSK - DIN63893 FORMA A

HSK - DIN63893 FORMA A



CALETTAMENTO A CALDO STANDARD

SHRINK FIT HOLDERS STANDARD



CALETTAMENTO A CALDO SLIM TYPE

SHRINK FIT HOLDERS SLIM TYPE



PORTAPINZE PER SKS

COLLET CHUCK FOR SKS



PORTA TESTINE FILETTATE (TIPO CPY)

FOR SCREWED MILLING CUTTERS



FORTE SERRAGGIO

POWER MILLING CHUCKS



IDRAULICO

HYDRAULIC EXPANSIONS CHUCK



PORTAPINZA ER DIN6499

COLLET CHUCK FOR ER DIN6499



PORTAPINZA EOC DIN6388

COLLET CHUCK FOR EOC DIN6388



PER FRESE WELDON

END MILL HOLDERS



PORTAFRESE FISSI

SHELL END MILL HOLDERS



PORTAFRESE COMBINATI

COMBI SHELL END MILL HOLDERS



PORTA PUNTE CON CHIAVE ESAGONALE

HEX KEY LOCK DRILL CHUCKS



STELO TENERO LAVORABILE

BLANK ARBORS



BARRA DI CONTROLLO

TEST ARBORS

CARATTERISTICHE / SPECIFICATION / CARACTÉRISTIQUES/ TECHNISCHE DATEN

CARATTERISTICHE TECNICHE

- Costruiti in acciaio certificato in barre.
- Eseguiti trattamenti termici da fornitori certificati ISO 9001.
- Rettificati di precisione esternamente, internamente e nelle filettature delle ghiera chiudipinza.
- Controllati con strumenti di misura certificati.
- La tolleranza di precisione dei coni HSK-A è AT2.
- L'errore di concentricità massimo tra il cono e la sede utensile è 0.003 mm.

CARACTÉRISTIQUES

- Fabriqués en bar d'acier certifié.
- Réalisation du traitement thermique par des fournisseurs certifiés ISO 9001.
- Rectification de précision extérieurement, intérieurement et dans les filetages des écrous serre-pince.
- Contrôlés par des instruments de mesure certifiés.
- La tolérance de précision des cônes HSK-A est AT2.
- L'erreur de concentricité maximum entre le cône et le siège de l'outil est de 0.003 mm.

TECHNICAL FEATURES

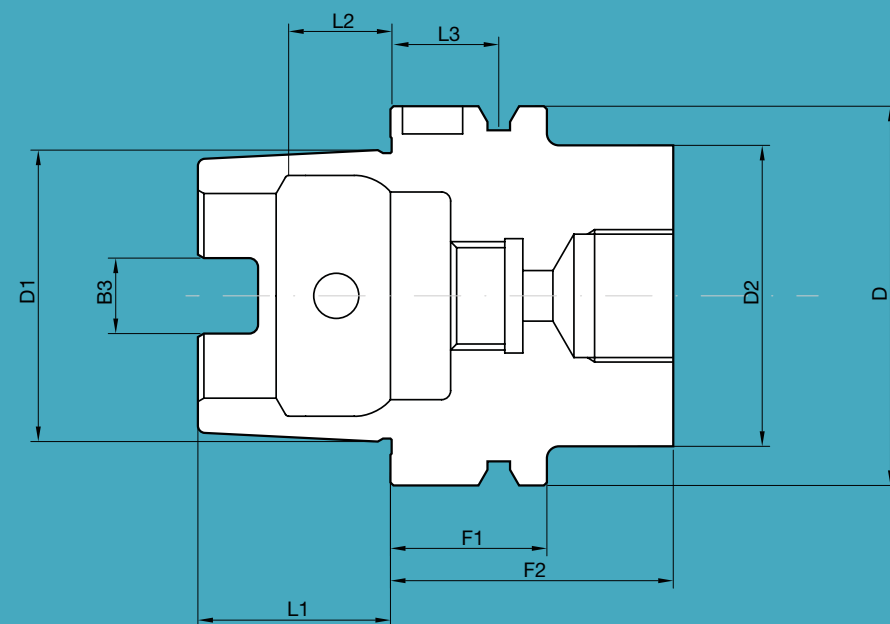
- Manufactured with certificate steel.
- Heat treatments are performed by certified suppliers ISO 9001.
- Precision ground on shank, inside tapers and collet nut threads.
- Tested with high precision inspection and gaging equipment.
- Taper accuracy of HSK-A shanks lower than AT2.
- The maximum error of concentricity between the cone and the seat of tool is 0.003 mm.

MERKMALE

- Gebaut aus zertifiziertem Stabstahl
- Warmbehandlungen von Lieferanten mit Zeugnis ISO 9001
- Genauigkeitgeschliffen aussen, innen und in den Gewinden der Spannmutter für den Zangenverschluss
- Geprüft mit zertifizierten Messinstrumente
- Die Präzisionstoleranz der Konen HSK-A ist AT2
- Die max konzentrische Abweichung zwischen Konus und Werkzeugsitz ist 0.003 mm

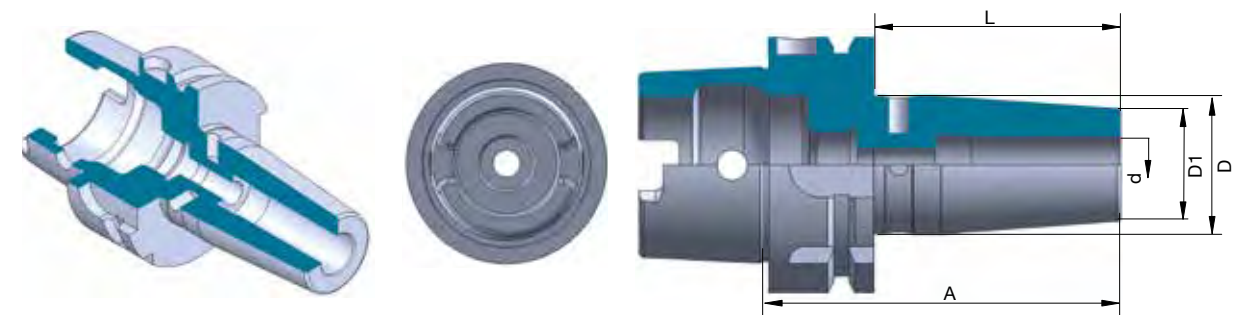
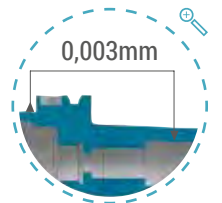
QUOTE / QUOTE / QUOTES / ABMESSUNGEN

HSK	D	D1	D2	B3	L1	L2	L3	F1	F2	COOLANT TUBE
32	32	24	26	7	16	8,92	16	20	35	M10X1
40	40	30	34	8	20	11,42	16	20	35	M12X1
50	50	38	42	10,54	25	14,13	18	26	42	M16X1
63	63	48	53	12,54	32	18,13	18	26	42	M18X1
80	80	60	68	16,04	40	22,85	18	26	42	M20X1,5
100	100	75	85	20,02	50	28,56	20	29	45	M24X1,5



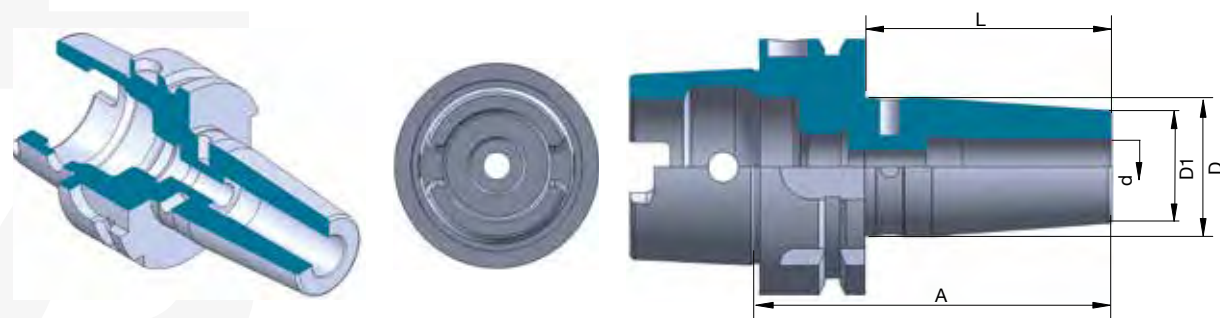
CALETTAMENTO A CALDO STANDARD

SHRINK FIT HOLDERS STANDARD - FORM A



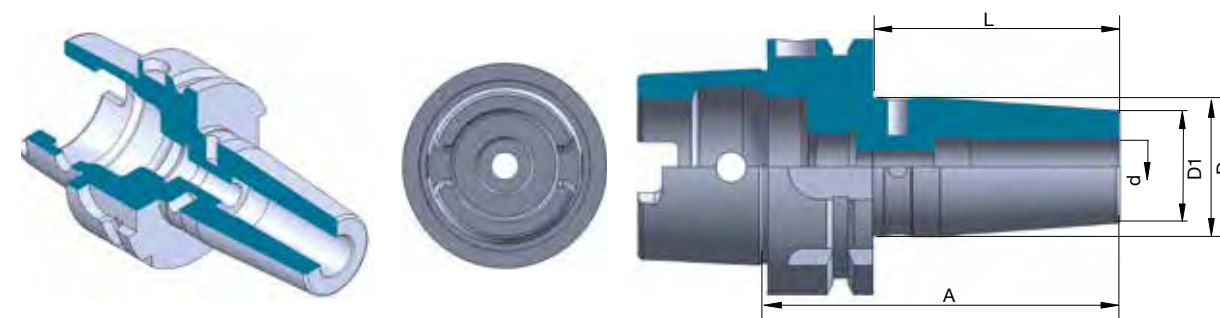
CALETTAMENTO STANDARD - SHRINK FIT HOLDER - HSK32A

Cod.	TYPE	d	A	AT2		G2.5/25000		
				D1	D	D1	D	L
HSK.A.32.60.CL3	HSK32A H60 CL3	3	60	10	16	10	16	40
HSK.A.32.60.CL4	HSK32A H60 CL4	4	60	10	21	10	21	40
HSK.A.32.60.CL5	HSK32A H60 CL5	5	60	10	21	10	21	40
HSK.A.32.70.CL6	HSK32A H70 CL6	6	70	20	25	20	25	50
HSK.A.32.70.CL8	HSK32A H70 CL8	8	70	20	25	20	25	50
HSK.A.32.70.CL10	HSK32A H70 CL10	10	70	24	29	24	29	50
HSK.A.32.80.CL12	HSK32A H80 CL12	12	80	24	29	24	29	60
HSK.A.32.90.CL14	HSK32A H90 CL14	14	90	27	34	27	34	70
HSK.A.32.90.CL16	HSK32A H90 CL16	16	90	27	34	27	34	70
HSK.A.32.100.CL20	HSK32A H100 CL20	20	100	33	40	33	40	80



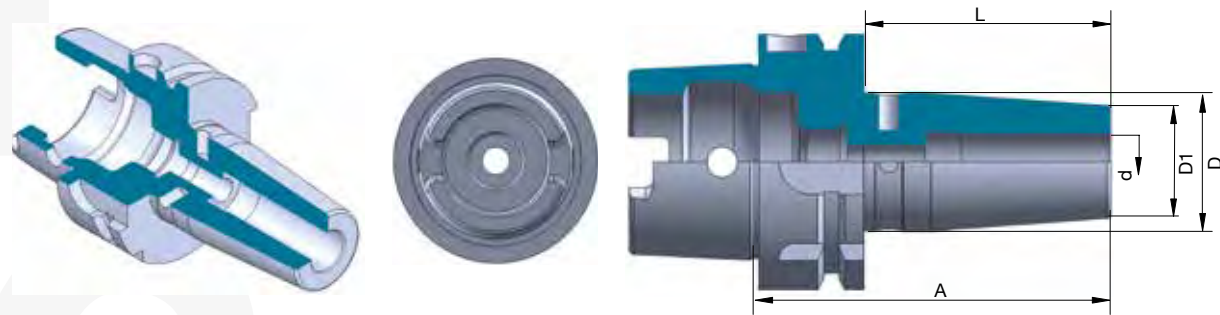
CALETTAMENTO STANDARD - SHRINK FIT HOLDER - HSK40A

Cod.	TYPE	d	A	D1	AT2 G2.5/25000	
					D	L
HSK.A.40.60.CL3	HSK40A H60 CL3	3	60	10	16	40
HSK.A.40.120.CL3	HSK40A H120 CL3	3	120	10	20	100
HSK.A.40.160.CL3	HSK40A H160 CL3	3	160	10	20	140
HSK.A.40.60.CL4	HSK40A H60 CL4	4	60	10	16	40
HSK.A.40.120.CL4	HSK40A H120 CL4	4	120	15	22	100
HSK.A.40.160.CL4	HSK40A H160 CL4	4	160	15	22	140
HSK.A.40.60.CL5	HSK40A H60 CL5	5	60	10	16	40
HSK.A.40.120.CL5	HSK40A H120 CL5	5	120	15	22	100
HSK.A.40.160.CL5	HSK40A H160 CL5	5	160	15	22	140
HSK.A.40.80.CL6	HSK40A H80 CL6	6	80	20	27	60
HSK.A.40.120.CL6	HSK40A H120 CL6	6	120	20	27	100
HSK.A.40.160.CL6	HSK40A H160 CL6	6	160	20	27	140
HSK.A.40.80.CL8	HSK40A H80 CL8	8	80	20	27	60
HSK.A.40.120.CL8	HSK40A H120 CL8	8	120	20	27	100
HSK.A.40.160.CL8	HSK40A H160 CL8	8	160	20	27	140
HSK.A.40.80.CL10	HSK40A H80 CL10	10	80	24	31	60
HSK.A.40.120.CL10	HSK40A H120 CL10	10	120	24	31	100
HSK.A.40.160.CL10	HSK40A H160 CL10	10	160	24	31	140
HSK.A.40.90.CL12	HSK40A H90 CL12	12	90	24	31	70
HSK.A.40.120.CL12	HSK40A H120 CL12	12	120	24	31	100
HSK.A.40.160.CL12	HSK40A H160 CL12	12	160	24	31	140
HSK.A.40.90.CL14	HSK40A H90 CL14	14	90	27	34	70
HSK.A.40.120.CL14	HSK40A H120 CL14	14	120	27	34	100
HSK.A.40.160.CL14	HSK40A H160 CL14	14	160	27	34	140
HSK.A.40.90.CL16	HSK40A H90 CL16	16	90	27	34	70
HSK.A.40.120.CL16	HSK40A H120 CL16	16	120	27	34	100
HSK.A.40.160.CL16	HSK40A H160 CL16	16	160	27	34	140



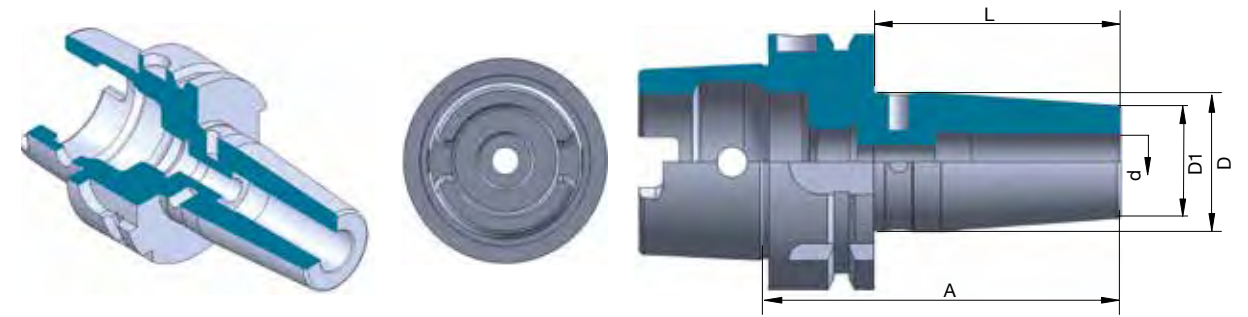
CALETTAMENTO STANDARD - SHRINK FIT HOLDER - HSK50A

Cod.	TYPE	d	A	D1	AT2 G2.5/25000	
					D	L
HSK.A.50.80.CL3	HSK50A H80 CL3	3	80	10	15	54
HSK.A.50.120.CL3	HSK50A H120 CL3	3	120	10	20	94
HSK.A.50.160.CL3	HSK50A H160 CL3	3	160	10	20	134
HSK.A.50.80.CL4	HSK50A H80 CL4	4	80	15	22	54
HSK.A.50.120.CL4	HSK50A H120 CL4	4	120	15	22	94
HSK.A.50.160.CL4	HSK50A H160 CL4	4	160	15	22	134
HSK.A.50.80.CL5	HSK50A H80 CL5	5	80	15	22	54
HSK.A.50.120.CL5	HSK50A H120 CL5	5	120	15	22	94
HSK.A.50.160.CL5	HSK50A H160 CL5	5	160	15	22	134
HSK.A.50.80.CL6	HSK50A H80 CL6	6	80	20	27	54
HSK.A.50.120.CL6	HSK50A H120 CL6	6	120	20	27	94
HSK.A.50.160.CL6	HSK50A H160 CL6	6	160	20	27	134
HSK.A.50.80.CL8	HSK50A H80 CL8	8	80	20	27	54
HSK.A.50.120.CL8	HSK50A H120 CL8	8	120	20	27	94
HSK.A.50.160.CL8	HSK50A H160 CL8	8	160	20	27	134
HSK.A.50.85.CL10	HSK50A H85 CL10	10	85	24	31	59
HSK.A.50.120.CL10	HSK50A H120 CL10	10	120	24	31	94
HSK.A.50.160.CL10	HSK50A H160 CL10	10	160	24	31	134
HSK.A.50.90.CL12	HSK50A H90 CL12	12	90	24	31	64
HSK.A.50.120.CL12	HSK50A H120 CL12	12	120	24	31	94
HSK.A.50.160.CL12	HSK50A H160 CL12	12	160	24	31	134
HSK.A.50.90.CL14	HSK50A H90 CL14	14	90	27	34	64
HSK.A.50.120.CL14	HSK50A H120 CL14	14	120	27	34	94
HSK.A.50.160.CL14	HSK50A H160 CL14	14	160	27	34	134
HSK.A.50.95.CL16	HSK50A H95 CL16	16	95	27	34	69
HSK.A.50.120.CL16	HSK50A H120 CL16	16	120	27	34	94
HSK.A.50.160.CL16	HSK50A H160 CL16	16	160	27	34	134
HSK.A.50.95.CL18	HSK50A H95 CL18	18	95	33	40	69
HSK.A.50.120.CL18	HSK50A H120 CL18	18	120	33	40	94
HSK.A.50.160.CL18	HSK50A H160 CL18	18	160	33	40	134
HSK.A.50.100.CL20	HSK50A H100 CL20	20	100	33	40	74
HSK.A.50.120.CL20	HSK50A H120 CL20	20	120	33	40	94
HSK.A.50.160.CL20	HSK50A H160 CL20	20	160	33	40	134



CALETTAMENTO STANDARD - SHRINK FIT HOLDER - HSK63A

Cod.	TYPE	d	A	D1	D	L	G2.5/25000	
							AT2	
HSK.A.63.80.CL3	HSK63A H80 CL3	3	80	10	15	54		
HSK.A.63.120.CL3	HSK63A H120 CL3	3	120	10	20	94		
HSK.A.63.160.CL3	HSK63A H160 CL3	3	160	10	20	134		
HSK.A.63.80.CL4	HSK63A H80 CL4	4	80	15	22	54		
HSK.A.63.120.CL4	HSK63A H120 CL4	4	120	15	22	94		
HSK.A.63.160.CL4	HSK63A H160 CL4	4	160	15	22	134		
HSK.A.63.80.CL5	HSK63A H80 CL5	5	80	15	22	54		
HSK.A.63.120.CL5	HSK63A H120 CL5	5	120	15	22	94		
HSK.A.63.160.CL5	HSK63A H160 CL5	5	160	15	22	134		
HSK.A.63.90.CL6	HSK63A H90 CL6	6	90	21	27	64		
HSK.A.63.130.CL6	HSK63A H130 CL6	6	130	21	27	104		
HSK.A.63.160.CL6	HSK63A H160 CL6	6	160	21	27	134		
HSK.A.63.90.CL8	HSK63A H90 CL8	8	90	21	27	64		
HSK.A.63.130.CL8	HSK63A H130 CL8	8	130	21	27	104		
HSK.A.63.160.CL8	HSK63A H160 CL8	8	160	21	27	134		
HSK.A.63.90.CL10	HSK63A H90 CL10	10	90	24	32	64		
HSK.A.63.130.CL10	HSK63A H130 CL10	10	130	24	32	104		
HSK.A.63.160.CL10	HSK63A H160 CL10	10	160	24	32	134		
HSK.A.63.90.CL12	HSK63A H90 CL12	12	90	24	32	64		
HSK.A.63.130.CL12	HSK63A H130 CL12	12	130	24	32	104		
HSK.A.63.160.CL12	HSK63A H160 CL12	12	160	24	32	134		
HSK.A.63.90.CL14	HSK63A H90 CL14	14	90	27	34	64		
HSK.A.63.130.CL14	HSK63A H130 CL14	14	130	27	34	104		
HSK.A.63.160.CL14	HSK63A H160 CL14	14	160	27	34	134		
HSK.A.63.90.CL16	HSK63A H90 CL16	16	90	27	34	64		
HSK.A.63.130.CL16	HSK63A H130 CL16	16	130	27	34	104		
HSK.A.63.160.CL16	HSK63A H160 CL16	16	160	27	34	134		
HSK.A.63.95.CL18	HSK63A H95 CL18	18	95	33	42	69		
HSK.A.63.130.CL18	HSK63A H130 CL18	18	130	33	42	104		
HSK.A.63.160.CL18	HSK63A H160 CL18	18	160	33	42	134		
HSK.A.63.100.CL20	HSK63A H100 CL20	20	100	32	42	74		
HSK.A.63.130.CL20	HSK63A H130 CL20	20	130	32	42	104		
HSK.A.63.160.CL20	HSK63A H160 CL20	20	160	32	42	134		
HSK.A.63.115.CL25	HSK63A H115 CL25	25	115	44	53	89		
HSK.A.63.130.CL25	HSK63A H130 CL25	25	130	44	53	104		
HSK.A.63.160.CL25	HSK63A H160 CL25	25	160	44	53	134		
HSK.A.63.120.CL32	HSK63A H120 CL32	32	120	44	53	94		
HSK.A.63.160.CL32	HSK63A H160 CL32	32	160	44	53	134		

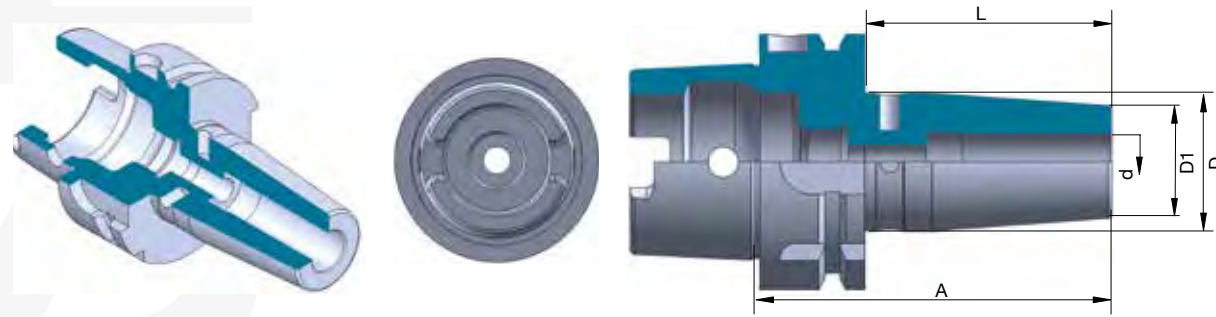


CALETTAMENTO STANDARD - SHRINK FIT HOLDER - HSK80A

Cod.	TYPE	d	A	D1	D	L	G2.5/25000	
							AT2	
HSK.A.80.85.CL6	HSK80A H85 CL6	6	85	20	27	59		
HSK.A.80.120.CL6	HSK80A H120 CL6	6	120	20	27	94		
HSK.A.80.160.CL6	HSK80A H160 CL6	6	160	20	27	134		
HSK.A.80.85.CL8	HSK80A H85 CL8	8	85	20	27	59		
HSK.A.80.120.CL8	HSK80A H120 CL8	8	120	20	27	94		
HSK.A.80.160.CL8	HSK80A H160 CL8	8	160	20	27	134		
HSK.A.80.90.CL10	HSK80A H90 CL10	10	90	24	31	64		
HSK.A.80.120.CL10	HSK80A H120 CL10	10	120	24	31	94		
HSK.A.80.160.CL10	HSK80A H160 CL10	10	160	24	31	134		
HSK.A.80.95.CL12	HSK80A H95 CL12	12	95	24	31	69		
HSK.A.80.120.CL12	HSK80A H120 CL12	12	120	24	31	94		
HSK.A.80.160.CL12	HSK80A H160 CL12	12	160	24	31	134		
HSK.A.80.95.CL14	HSK80A H95 CL14	14	95	27	34	69		
HSK.A.80.120.CL14	HSK80A H120 CL14	14	120	27	34	94		
HSK.A.80.160.CL14	HSK80A H160 CL14	14	160	27	34	134		
HSK.A.80.100.CL16	HSK80A H100 CL16	16	100	27	34	74		
HSK.A.80.120.CL16	HSK80A H120 CL16	16	120	27	34	94		
HSK.A.80.160.CL16	HSK80A H160 CL16	16	160	27	34	134		
HSK.A.80.100.CL18	HSK80A H100 CL18	18	100	33	40	74		
HSK.A.80.120.CL18	HSK80A H120 CL18	18	120	33	40	94		
HSK.A.80.160.CL18	HSK80A H160 CL18	18	160	33	40	134		
HSK.A.80.105.CL20	HSK80A H105 CL20	20	105	33	40	79		
HSK.A.80.120.CL20	HSK80A H120 CL20	20	120	33	40	94		
HSK.A.80.160.CL20	HSK80A H160 CL20	20	160	33	40	134		
HSK.A.80.115.CL25	HSK80A H115 CL25	25	115	44	53	89		
HSK.A.80.120.CL25	HSK80A H120 CL25	25	120	44	53	94		
HSK.A.80.160.CL25	HSK80A H160 CL25	25	160	44	53	134		
HSK.A.80.120.CL32	HSK80A H120 CL32	32	120	44	53	94		
HSK.A.80.160.CL32	HSK80A H160 CL32	32	160	44	53	134		

CALETTAMENTO A CALDO SLIM TYPE

SHRINK FIT HOLDERS SLIM TYPE - FORM A



CALETTAMENTO STANDARD - SHRINK FIT HOLDER - HSK100A

Cod.	TYPE	d	A	D1	D	L	AT2	
							G2.5/25000	
HSK.A.100.85.CL6	HSK100A H85 CL6	6	85	20	27	56		
HSK.A.100.120.CL6	HSK100A H120 CL6	6	120	20	27	91		
HSK.A.100.160.CL6	HSK100A H160 CL6	6	160	20	27	131		
HSK.A.100.85.CL8	HSK100A H85 CL8	8	85	20	27	56		
HSK.A.100.120.CL8	HSK100A H120 CL8	8	120	20	27	91		
HSK.A.100.160.CL8	HSK100A H160 CL8	8	160	20	27	131		
HSK.A.100.90.CL10	HSK100A H90 CL10	10	90	24	31	61		
HSK.A.100.120.CL10	HSK100A H120 CL10	10	120	24	31	91		
HSK.A.100.160.CL10	HSK100A H160 CL10	10	160	24	31	131		
HSK.A.100.95.CL12	HSK100A H95 CL12	12	95	24	31	66		
HSK.A.100.120.CL12	HSK100A H120 CL12	12	120	24	31	91		
HSK.A.100.160.CL12	HSK100A H160 CL12	12	160	24	31	131		
HSK.A.100.95.CL14	HSK100A H95 CL14	14	95	27	34	66		
HSK.A.100.120.CL14	HSK100A H120 CL14	14	120	27	34	91		
HSK.A.100.160.CL14	HSK100A H160 CL14	14	160	27	34	131		
HSK.A.100.100.CL16	HSK100A H100 CL16	16	100	27	34	71		
HSK.A.100.120.CL16	HSK100A H120 CL16	16	120	27	34	91		
HSK.A.100.160.CL16	HSK100A H160 CL16	16	160	27	34	131		
HSK.A.100.100.CL18	HSK100A H100 CL18	18	100	33	40	71		
HSK.A.100.120.CL18	HSK100A H120 CL18	18	120	33	40	91		
HSK.A.100.160.CL18	HSK100A H160 CL18	18	160	33	40	131		
HSK.A.100.105.CL20	HSK100A H105 CL20	20	105	33	40	76		
HSK.A.100.120.CL20	HSK100A H120 CL20	20	120	33	40	91		
HSK.A.100.160.CL20	HSK100A H160 CL20	20	160	33	40	131		
HSK.A.100.115.CL25	HSK100A H115 CL25	25	115	44	53	86		
HSK.A.100.120.CL25	HSK100A H120 CL25	25	120	44	53	91		
HSK.A.100.160.CL25	HSK100A H160 CL25	25	160	44	53	131		
HSK.A.100.120.CL32	HSK100A H120 CL32	32	120	44	53	91		
HSK.A.100.160.CL32	HSK100A H160 CL32	32	160	44	53	131		

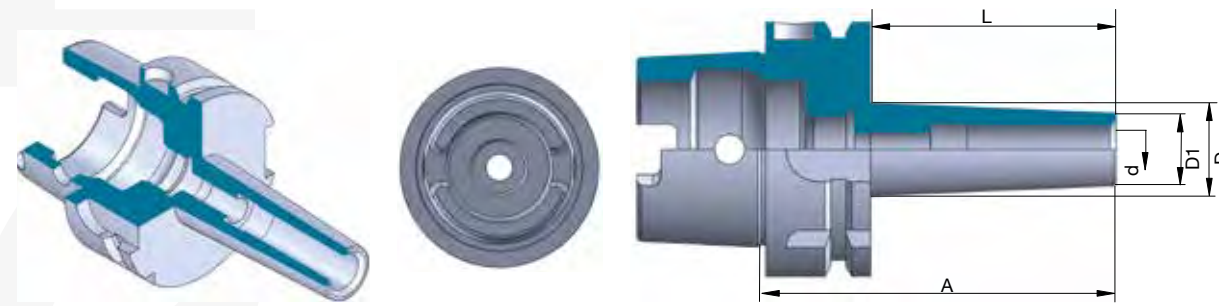


CALETTAMENTO TIPO SLIM - SHRINK FIT HOLDER SLIM TYPE - HSK63A

Cod.	TYPE	d	A	D1	D	L	AT2	
							G2.5/25000	
HSK.A.63.80.CL3.SL	SLIM TYPE HSK63A H80 CL3	3	80	9	13	54		
HSK.A.63.120.CL3.SL	SLIM TYPE HSK63A H120 CL3	3	120	9	16	94		
HSK.A.63.80.CL4.SL	SLIM TYPE HSK63A H80 CL4	4	80	10	15	54		
HSK.A.63.120.CL4.SL	SLIM TYPE HSK63A H120 CL4	4	120	10	20	94		
HSK.A.63.80.CL5.SL	SLIM TYPE HSK63A H80 CL5	5	80	11	16	54		
HSK.A.63.120.CL5.SL	SLIM TYPE HSK63A H120 CL5	5	120	11	16	94		
HSK.A.63.90.CL6.SL	SLIM TYPE HSK63A H90 CL6	6	90	12	17	64		
HSK.A.63.130.CL6.SL	SLIM TYPE HSK63A H130 CL6	6	130	12	19	104		
HSK.A.63.160.CL6.SL	SLIM TYPE HSK63A H160 CL6	6	160	12	19	134		

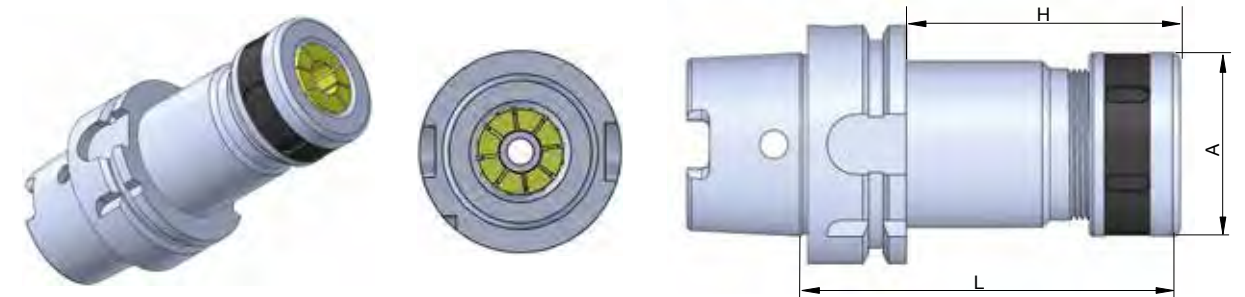
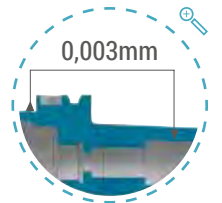
PORTAPINZE PER SKS

COLLET CHUCK FOR SKS - FORM A



CALETTAMENTO TIPO SLIM - SHRINK FIT HOLDER SLIM TYPE - HSK63A

Cod.	TYPE	d	A	AT2			G2.5/25000		
				D1	D	L	D1	D	L
HSK.A.63.90.CL8.SL	SLIM TYPE HSK63A H90 CL8	8	90	14	19	64			
HSK.A.63.130.CL8.SL	SLIM TYPE HSK63A H130 CL8	8	130	14	21	104			
HSK.A.63.160.CL8.SL	SLIM TYPE HSK63A H160 CL8	8	160	14	21	134			
HSK.A.63.90.CL10.SL	SLIM TYPE HSK63A H90 CL10	10	90	16	21	64			
HSK.A.63.130.CL10.SL	SLIM TYPE HSK63A H130 CL10	10	130	16	23	104			
HSK.A.63.160.CL10.SL	SLIM TYPE HSK63A H160 CL10	10	160	16	23	134			
HSK.A.63.90.CL12.SL	SLIM TYPE HSK63A H90 CL12	12	90	18	23	64			
HSK.A.63.130.CL12.SL	SLIM TYPE HSK63A H130 CL12	12	130	18	25	104			
HSK.A.63.160.CL12.SL	SLIM TYPE HSK63A H160 CL12	12	160	18	25	134			
HSK.A.63.90.CL14.SL	SLIM TYPE HSK63A H90 CL14	14	90	18	23	64			
HSK.A.63.130.CL14.SL	SLIM TYPE HSK63A H130 CL14	14	130	18	25	104			
HSK.A.63.160.CL14.SL	SLIM TYPE HSK63A H160 CL14	14	160	18	25	134			
HSK.A.63.90.CL16.SL	SLIM TYPE HSK63A H90 CL16	16	90	24	29	64			
HSK.A.63.130.CL16.SL	SLIM TYPE HSK63A H130 CL16	16	130	24	31	104			
HSK.A.63.160.CL16.SL	SLIM TYPE HSK63A H160 CL16	16	160	24	31	134			
HSK.A.63.95.CL18.SL	SLIM TYPE HSK63A H95 CL18	18	95	24	29	69			
HSK.A.63.130.CL18.SL	SLIM TYPE HSK63A H130 CL18	18	130	24	31	104			
HSK.A.63.160.CL18.SL	SLIM TYPE HSK63A H160 CL18	18	160	24	31	134			
HSK.A.63.100.CL20.SL	SLIM TYPE HSK63A H100 CL20	20	100	32	39	74			
HSK.A.63.130.CL20.SL	SLIM TYPE HSK63A H130 CL20	20	130	32	39	104			
HSK.A.63.160.CL20.SL	SLIM TYPE HSK63A H160 CL20	20	160	32	39	134			



PORTAPINZA PER SKS - COLLET CHUCK FOR SKS - HSK63A

Cod.	TYPE	L	AT2		G2.5/25000	
			H	A	H	A
HSK.A.63.90.SKS10	HSK63A H90 SKS10	90	64	30		
HSK.A.63.120.SKS10	HSK63A H120 SKS10	120	94	30		
HSK.A.63.90.SKS20	HSK63A H90 SKS20	90	64	48,5		
HSK.A.63.135.SKS20	HSK63A H135 SKS20	135	109	48,5		

PORTA TESTINE FILETTATE (TIPO CPY)

TOOLHOLDERS FOR SCREWED MILLING CUTTERS - FORM A



PORTA TESTINE FILETTATE - FOR SCREWED MILLING CHUCK - HSK50A

Cod.	TYPE	H	M	d1	d2	d3	L	AT2	
								G2.5/25000	
HSK.A.50.59.M6CPY	HSK50A H59 M6 CPY	59	M6	6,5	9,7	13	33		
HSK.A.50.84.M6CPY	HSK50A H84 M6 CPY	84	M6	6,5	9,7	20	58		
HSK.A.50.109.M6CPY	HSK50A H109 M6 CPY	109	M6	6,5	9,7	23	83		
HSK.A.50.59.M8CPY	HSK50A H59 M8 CPY	59	M8	8,5	13	15	33		
HSK.A.50.84.M8CPY	HSK50A H84 M8 CPY	84	M8	8,5	13	23	58		
HSK.A.50.109.M8CPY	HSK50A H109 M8 CPY	109	M8	8,5	13	23	83		
HSK.A.50.134.M8CPY	HSK50A H134 M8 CPY	134	M8	8,5	13	25	108		
HSK.A.50.59.M10CPY	HSK50A H59 M10 CPY	59	M10	10,5	18	20	33		
HSK.A.50.84.M10CPY	HSK50A H84 M10 CPY	84	M10	10,5	18	25	58		
HSK.A.50.109.M10CPY	HSK50A H109 M10 CPY	109	M10	10,5	18	28	83		
HSK.A.50.134.M10CPY	HSK50A H134 M10 CPY	134	M10	10,5	18	30	108		
HSK.A.50.59.M12CPY	HSK50A H59 M12 CPY	59	M12	12,5	21	24	33		
HSK.A.50.84.M12CPY	HSK50A H84 M12 CPY	84	M12	12,5	21	24	58		
HSK.A.50.109.M12CPY	HSK50A H109 M12 CPY	109	M12	12,5	21	31	83		
HSK.A.50.134.M12CPY	HSK50A H134 M12 CPY	134	M12	12,5	21	31	108		



PORTA TESTINE FILETTATE - FOR SCREWED MILLING CHUCK - HSK63A

Cod.	TYPE	H	M	d1	d2	d3	L	AT2	
								G2.5/25000	
HSK.A.63.59.M8CPY	HSK63A H59 M8 CPY	59	M8	8,5	13	15	33		
HSK.A.63.84.M8CPY	HSK63A H84 M8 CPY	84	M8	8,5	13	23	58		
HSK.A.63.109.M8CPY	HSK63A H109 M8 CPY	109	M8	8,5	13	23	83		
HSK.A.63.134.M8CPY	HSK63A H134 M8 CPY	134	M8	8,5	13	25	108		
HSK.A.63.59.M10CPY	HSK63A H59 M10 CPY	59	M10	10,5	18	19,5	33		
HSK.A.63.84.M10CPY	HSK63A H84 M10 CPY	84	M10	10,5	18	25	58		
HSK.A.63.109.M10CPY	HSK63A H109 M10 CPY	109	M10	10,5	18	28	83		
HSK.A.63.134.M10CPY	HSK63A H134 M10 CPY	134	M10	10,5	18	28	108		
HSK.A.63.159.M10CPY	HSK63A H159 M10 CPY	159	M10	10,5	18	34	133		
HSK.A.63.176.M10CPY	HSK63A H176 M10 CPY	176	M10	10,5	18	36,5	150		
HSK.A.63.59.M12CPY	HSK63A H59 M12 CPY	59	M12	12,5	21	24	33		
HSK.A.63.84.M12CPY	HSK63A H84 M12 CPY	84	M12	12,5	21	24	58		
HSK.A.63.109.M12CPY	HSK63A H109 M12 CPY	109	M12	12,5	21	31	83		
HSK.A.63.134.M12CPY	HSK63A H134 M12 CPY	134	M12	12,5	21	31	108		
HSK.A.63.159.M12CPY	HSK63A H159 M12 CPY	159	M12	12,5	21	31	133		
HSK.A.63.176.M12CPY	HSK63A H176 M12 CPY	176	M12	12,5	21	40	150		
HSK.A.63.59.M16CPY	HSK63A H59 M16 CPY	59	M16	17	29	34	33		
HSK.A.63.84.M16CPY	HSK63A H84 M16 CPY	84	M16	17	29	34	58		
HSK.A.63.109.M16CPY	HSK63A H109 M16 CPY	109	M16	17	29	34	83		
HSK.A.63.134.M16CPY	HSK63A H134 M16 CPY	134	M16	17	29	39	108		
HSK.A.63.159.M16CPY	HSK63A H159 M16 CPY	159	M16	17	29	39	133		
HSK.A.63.176.M16CPY	HSK63A H176 M16 CPY	176	M16	17	29	42,5	150		



PORTA TESTINE FILETTATE - FOR SCREWED MILLING CHUCK - HSK80A

Cod.184	TYPE	H	M	AT2		G2.5/25000	
				d1	d2	d3	L
HSK.A.80.84.M6CPY	HSK80A H84 M6 CPY	84	M6	6,5	9,7	20	58
HSK.A.80.109.M6CPY	HSK80A H109 M6 CPY	109	M6	6,5	9,7	23	83
HSK.A.80.84.M8CPY	HSK80A H84 M8 CPY	84	M8	8,5	13	23	58
HSK.A.80.109.M8CPY	HSK80A H109 M8 CPY	109	M8	8,5	13	23	83
HSK.A.80.134.M8CPY	HSK80A H134 M8 CPY	134	M8	8,5	13	25	108
HSK.A.80.84.M10CPY	HSK80A H84 M10 CPY	84	M10	10,5	18	25	58
HSK.A.80.109.M10CPY	HSK80A H109 M10 CPY	109	M10	10,5	18	28	83
HSK.A.80.134.M10CPY	HSK80A H134 M10 CPY	134	M10	10,5	18	30	108
HSK.A.80.84.M12CPY	HSK80A H84 M12 CPY	84	M12	12,5	21	24	58
HSK.A.80.109.M12CPY	HSK80A H109 M12 CPY	109	M12	12,5	21	31	83
HSK.A.80.134.M12CPY	HSK80A H134 M12 CPY	134	M12	12,5	21	31	108
HSK.A.80.84.M16CPY	HSK80A H84 M16 CPY	84	M16	17	29	34	58
HSK.A.80.109.M16CPY	HSK80A H109 M16 CPY	109	M16	17	29	34	83
HSK.A.80.134.M16CPY	HSK80A H134 M16 CPY	134	M16	17	29	39	108
HSK.A.80.159.M16CPY	HSK80A H159 M16 CPY	159	M16	17	29	55	133
HSK.A.80.184.M16CPY	HSK80A H184 M16 CPY	184	M16	17	29	55	158



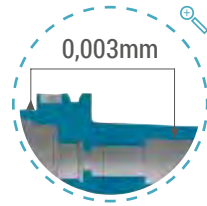
PORTA TESTINE FILETTATE - FOR SCREWED MILLING CHUCK - HSK100A

Cod.	TYPE	H	M	AT2		G2.5/25000	
				d1	d2	d3	L
HSK.A.100.79.M8CPY	HSK100A H79 M8 CPY	79	M8	8,5	13	23	50
HSK.A.100.79.M10CPY	HSK100A H79 M10 CPY	79	M10	10,5	18	23	50
HSK.A.100.129.M10CPY	HSK100A H129 M10 CPY	129	M10	10,5	18	32	100
HSK.A.100.179.M10CPY	HSK100A H179 M10 CPY	179	M10	10,5	18	36,5	150
HSK.A.100.79.M12CPY	HSK100A H79 M12 CPY	79	M12	12,5	21	24	50
HSK.A.100.87.M12CPY	HSK100A H87 M12 CPY	87	M12	12,5	21	24	58
HSK.A.100.129.M12CPY	HSK100A H129 M12 CPY	129	M12	12,5	21	33	100
HSK.A.100.137.M12CPY	HSK100A H137 M12 CPY	137	M12	12,5	21	47	108
HSK.A.100.179.M12CPY	HSK100A H179 M12 CPY	179	M12	12,5	21	40	150
HSK.A.100.187.M12CPY	HSK100A H187 M12 CPY	187	M12	12,5	21	55	158
HSK.A.100.79.M16CPY	HSK100A H79 M16 CPY	79	M16	17	29	34	50
HSK.A.100.87.M16CPY	HSK100A H87 M16 CPY	87	M16	17	29	31,5	58
HSK.A.100.129.M16CPY	HSK100A H129 M16 CPY	129	M16	17	29	36	100
HSK.A.100.137.M16CPY	HSK100A H137 M16 CPY	137	M16	17	29	47	108
HSK.A.100.179.M16CPY	HSK100A H179 M16 CPY	179	M16	17	29	42,5	150
HSK.A.100.187.M16CPY	HSK100A H187 M16 CPY	187	M16	17	29	55	158
HSK.A.100.208.M16CPY	HSK100A H208 M16 CPY	208	M16	17	29	55	179

SU RICHIESTA: HSK.A.32.59.M6CPY - HSK.A.32.84.M6CPY - HSK.A.32.109.M6CPY - HSK.A.40.59.M6CPY - HSK.A.40.84.M6CPY - HSK.A.40.109.M6CPY
 ON REQUEST: HSK.A.32.59.M6CPY - HSK.A.32.84.M6CPY - HSK.A.32.109.M6CPY - HSK.A.40.59.M6CPY - HSK.A.40.84.M6CPY - HSK.A.40.109.M6CPY

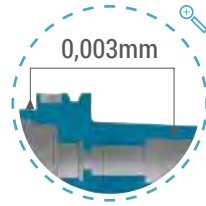
FORTE SERRAGGIO

POWER MILLING CHUCKS - FORM A



IDRAULICO

HYDRAULIC EXPANSION CHUCK - FORM A



HSK - DIN63893 FORMA A



FORTE SERRAGGIO - POWER MILLING CHUCKS - HSK63A

Cod.	TYPE	D	H	AT2	
				G6.3/15000	
				PINZE	
HSK.A.63.85.FP20	HSK63A H85 D20	20	85	4SR20 / 3 ÷ 16	
HSK.A.63.110.FP32	HSK63A H110 D32	32	110	4SR32 / 6 ÷ 25	



IDRAULICO - HYDRAULIC EXPANSION CHUCK - HSK32A

Cod.	TYPE	L	H	AT2	
				G6.3/25000	
				D	
HSK.A.32.90.HY12	HSK32A H90 D12	90	70	D2	12
HSK.A.32.100.HY20	HSK32A H100 D20	100	80	D2	20



IDRAULICO - HYDRAULIC EXPANSION CHUCK - HSK40A

Cod.	TYPE	L	H	AT2		G6.3/25000	
				D2	D		
HSK.A.40.90.HY12	HSK40A H90 D12	90	70	32	12		
HSK.A.40.90.HY20	HSK40A H90 D20	90	70	42	20		



IDRAULICO - HYDRAULIC EXPANSION CHUCK - HSK80A

Cod.	TYPE	L	H	AT2		G6.3/25000	
				D2	D		
HSK.A.80.95.HY12	HSK80A H95 D12	95	69	32	12		
HSK.A.80.105.HY20	HSK80A H105 D20	105	79	42	20		
HSK.A.80.115.HY25	HSK80 H115 D25	115	89	50	25		
HSK.A.80.120.HY32	HSK80A H120 D32	120	94	60	32		



IDRAULICO - HYDRAULIC EXPANSION CHUCK - HSK50A

Cod.	TYPE	L	H	AT2		G6.3/25000	
				D2	D		
HSK.A.50.90.HY12	HSK50A H90 D12	90	64	32	12		
HSK.A.50.100.HY20	HSK50A H100 D20	100	74	42	20		
HSK.A.50.120.HY25	HSK50A H120 D25	120	94	50	25		



IDRAULICO - HYDRAULIC EXPANSION CHUCK - HSK100A

Cod.	TYPE	L	H	AT2		G6.3/25000	
				D2	D		
HSK.A.100.95.HY12	HSK100A H95 D12	95	66	32	12		
HSK.A.100.105.HY20	HSK100A H105 D20	105	76	42	20		
HSK.A.100.115.HY25	HSK100A H115 D25	115	86	50	25		
HSK.A.100.120.HY32	HSK100A H120 D32	120	91	60	32		

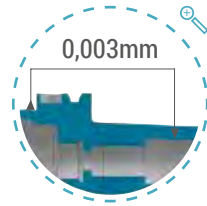


IDRAULICO - HYDRAULIC EXPANSION CHUCK - HSK63A

Cod.	TYPE	L	H	AT2		G6.3/25000	
				D2	D		
HSK.A.63.90.HY12	HSK63A H90 D12	90	64	32	12		
HSK.A.63.100.HY20	HSK63A H100 D20	100	74	42	20		
HSK.A.63.120.HY25	HSK63A H120 D25	120	94	50	25		
HSK.A.63.125.HY32	HSK63A H125 D32	125	99	60	32		

PORTAPINZA ER DIN6499

COLLET CHUCK FOR ER DIN6499 - FORM A



PORTAPINZE ER MINI - COLLET CHUCKS ER MINI - HSK40A

Cod.	TYPE	CAPACITÀ RANGE	AT2		G6.3/18000	
			A	D	L	H
HSK.A.40.80.ER11M	HSK40A H80 ERX11M	1 ÷ 7 mm	16	16	60	80
HSK.A.40.80.ER16M	HSK40A H80 ERX16M	1 ÷ 10 mm	22	22	60	80
HSK.A.40.80.ER25M	HSK40A H80 ERX25M	1 ÷ 16 mm	35	35	60	80



PORTAPINZE ER MINI - COLLET CHUCKS ER MINI - HSK50A

Cod.	TYPE	CAPACITÀ RANGE	AT2		G6.3/18000	
			A	D	L	H
HSK.A.50.100.ER11M	HSK50A H100 ERX11M	1 ÷ 7 mm	16	16	74	100
HSK.A.50.100.ER16M	HSK50A H100 ERX16M	1 ÷ 10 mm	22	22	74	100



PORTAPINZE ER MINI - COLLET CHUCKS ER MINI - HSK32A

Cod.	TYPE	CAPACITÀ RANGE	AT2		G6.3/18000	
			A	D	L	H
HSK.A.32.80.ER11M	HSK32A H80 ERX11M	1 ÷ 7 mm	16	16	60	80
HSK.A.32.80.ER16M	HSK32A H80 ERX16M	1 ÷ 10 mm	22	22	60	80



PORTAPINZE ER MINI - COLLET CHUCKS ER MINI - HSK63A

Cod.	TYPE	CAPACITÀ RANGE	AT2		G6.3/18000	
			A	D	L	H
HSK.A.63.100.ER11M	HSK63A H100 ERX11M	1 ÷ 7 mm	16	16	74	100
HSK.A.63.160.ER11M	HSK63A H160 ERX11M	1 ÷ 7 mm	16	16	134	160
HSK.A.63.100.ER16M	HSK63A H100 ERX16M	1 ÷ 10 mm	22	22	74	100
HSK.A.63.160.ER16M	HSK63A H160 ERX16M	1 ÷ 10 mm	22	22	134	160
HSK.A.63.110.ER20M	HSK63A H110 ERX20M	1 ÷ 13 mm	28	28	84	110
HSK.A.63.100.ER25M	HSK63A H100 ERX25M	1 ÷ 16 mm	35	35	74	100
HSK.A.63.160.ER25M	HSK63A H160 ERX25M	1 ÷ 16 mm	35	35	134	160



PORTAPINZE ER MINI - COLLET CHUCKS ER MINI - HSK100A

Cod.	TYPE	CAPACITÀ RANGE	AT2		G6.3/18000	
			A	D	L	H
HSK.A.100.160.ER16M	HSK100A H160 ERX16M	1 ÷ 10 mm	22	22	131	160



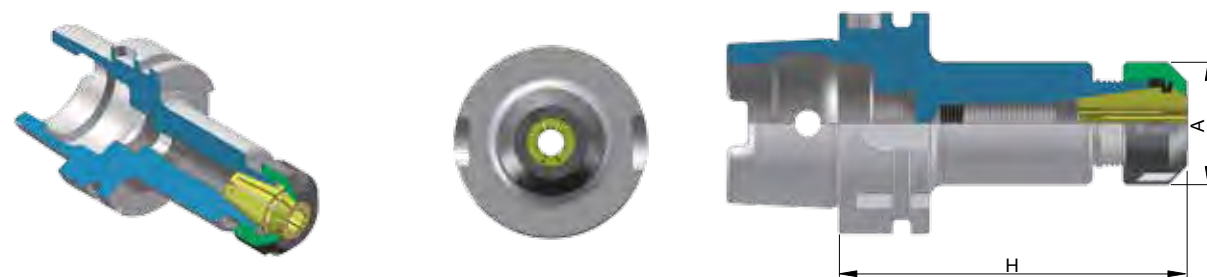
PORTAPINZE ER - COLLET CHUCKS ER - HSK32A

Cod.	TYPE	CAPACITÀ RANGE	AT2		G6.3/18000	
			A	H	L	H
HSK.A.32.80.ER16	HSK32A H80 ERX16	1 ÷ 10 mm	32	80		
HSK.A.32.80.ER25	HSK32A H80 ERX25	1 ÷ 16 mm	42	80		



PORTAPINZE ER - COLLET CHUCKS ER - HSK40A

Cod.	TYPE	CAPACITÀ RANGE	AT2		G6.3/18000	
			A	H	L	H
HSK.A.40.80.ER16	HSK40A H80 ERX16	1 ÷ 10 mm	32	80		
HSK.A.40.80.ER25	HSK40A H80 ERX25	1 ÷ 16 mm	42	80		
HSK.A.40.100.ER32	HSK40A H100 ERX32	2 ÷ 20 mm	50	100		



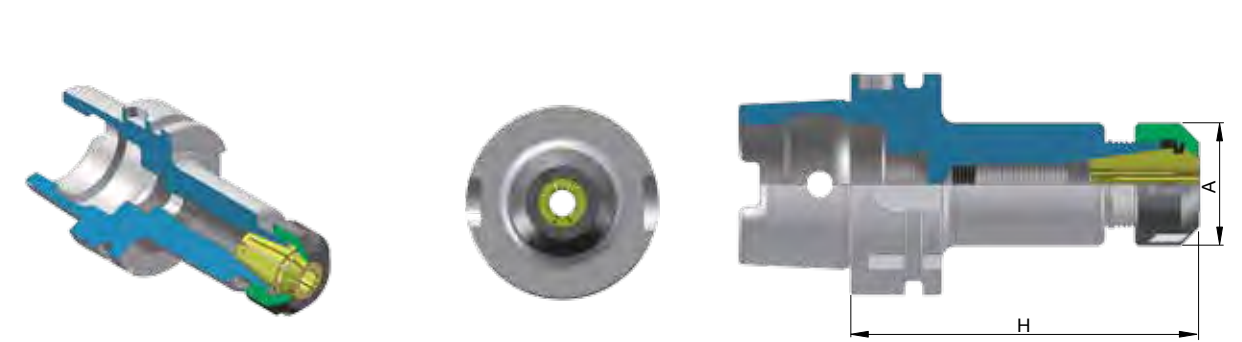
PORTAPINZE ER - COLLET CHUCKS ER - HSK50A

Cod.	TYPE	CAPACITÀ RANGE	AT2		G6.3/18000	
			A	H	L	H
HSK.A.50.100.ER16	HSK50A H100 ERX16	1 ÷ 10 mm	32	100		
HSK.A.50.100.ER25	HSK50A H100 ERX25	1 ÷ 16 mm	42	100		
HSK.A.50.100.ER32	HSK50A H100 ERX32	2 ÷ 20 mm	50	100		



PORTAPINZE ER - COLLET CHUCKS ER - HSK63A

Cod.	TYPE	CAPACITÀ RANGE	G6.3/18000	
			A	H
HSK.A.63.100.ER16	HSK63A H100 ERX16	1 ÷ 10 mm	32	100
HSK.A.63.160.ER16	HSK63A H160 ERX16	1 ÷ 10 mm	32	160
HSK.A.63.200.ER16	HSK63A H200 ERX16	1 ÷ 10 mm	32	200
HSK.A.63.100.ER20	HSK63A H100 ERX20	1 ÷ 13 mm	35	100
HSK.A.63.100.ER25	HSK63A H100 ERX25	1 ÷ 16 mm	42	100
HSK.A.63.160.ER25	HSK63A H160 ERX25	1 ÷ 16 mm	42	160
HSK.A.63.200.ER25	HSK63A H200 ERX25	1 ÷ 16 mm	42	200
HSK.A.63.70.ER32	HSK63A H70 ERX32	2 ÷ 20 mm	50	70
HSK.A.63.80.ER32	HSK63A H80 ERX32	2 ÷ 20 mm	50	80
HSK.A.63.100.ER32	HSK63A H100 ERX32	2 ÷ 20 mm	50	100
HSK.A.63.120.ER32	HSK63A H120 ERX32	2 ÷ 20 mm	50	120
HSK.A.63.130.ER32	HSK63A H130 ERX32	2 ÷ 20 mm	50	130
HSK.A.63.160.ER32	HSK63A H160 ERX32	2 ÷ 20 mm	50	160
HSK.A.63.200.ER32	HSK63A H200 ERX32	2 ÷ 20 mm	50	200
HSK.A.63.65.ER40	HSK63A H65 ERX40	3 ÷ 30 mm	63	65
HSK.A.63.120.ER40	HSK63A H120 ERX40	3 ÷ 30 mm	63	120
HSK.A.63.160.ER40	HSK63A H160 ERX40	3 ÷ 30 mm	63	160



PORTAPINZE ER - COLLET CHUCKS ER - HSK100A

Cod.	TYPE	CAPACITÀ RANGE	G6.3/18000	
			A	H
HSK.A.100.100.ER16	HSK100A H100 ERX16	1 ÷ 10	32	100
HSK.A.100.160.ER16	HSK100A H160 ERX16	1 ÷ 10	32	160
HSK.A.100.100.ER20	HSK100A H100 ERX20	1 ÷ 13	35	100
HSK.A.100.100.ER25	HSK100A H100 ERX25	1 ÷ 16	42	100
HSK.A.100.160.ER25	HSK100A H160 ERX25	1 ÷ 16	42	160
HSK.A.100.200.ER25	HSK100A H200 ERX25	1 ÷ 16	42	200
HSK.A.100.80.ER32	HSK100A H80 ERX32	2 ÷ 20	50	80
HSK.A.100.100.ER32	HSK100A H100 ERX32	2 ÷ 20	50	100
HSK.A.100.160.ER32	HSK100A H160 ERX32	2 ÷ 20	50	160
HSK.A.100.200.ER32	HSK100A H200 ERX32	2 ÷ 20	50	200
HSK.A.100.100.ER40	HSK100A H100 ERX40	3 ÷ 30	63	100
HSK.A.100.160.ER40	HSK100A H160 ERX40	3 ÷ 30	63	160
HSK.A.100.200.ER40	HSK100A H200 ERX40	3 ÷ 30	63	200

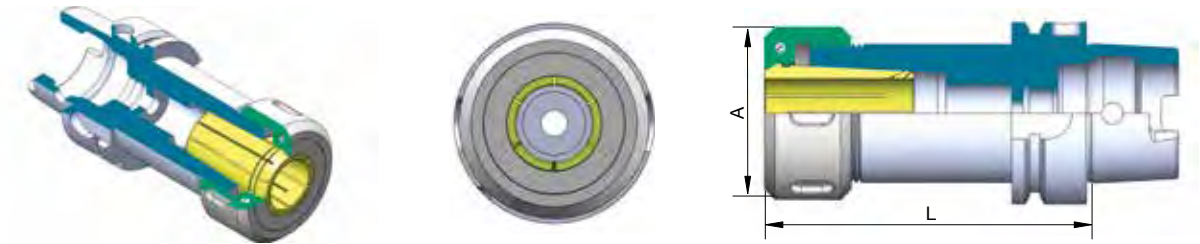
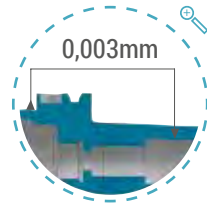


PORTAPINZE ER - COLLET CHUCKS ER - HSK80A

Cod.	TYPE	CAPACITÀ RANGE	G6.3/18000	
			A	H
HSK.A.80.100.ER32	HSK80A H100 ERX32	2 ÷ 20 mm	50	100
HSK.A.80.120.ER40	HSK80A H120 ERX40	3 ÷ 30 mm	63	120

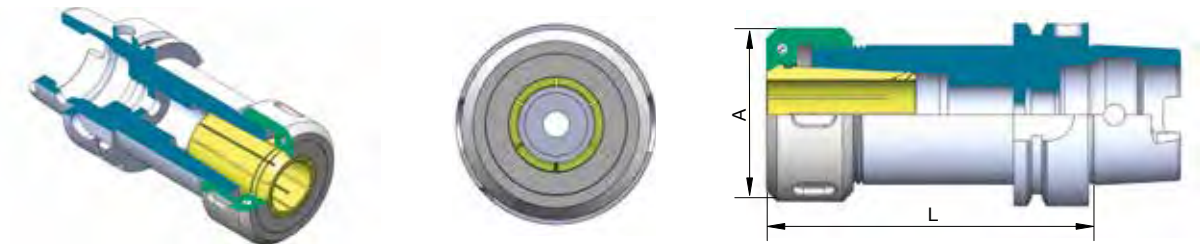
PORTAPINZA EOC DIN6388

COLLET CHUCK FOR EOC DIN6388 - FORM A



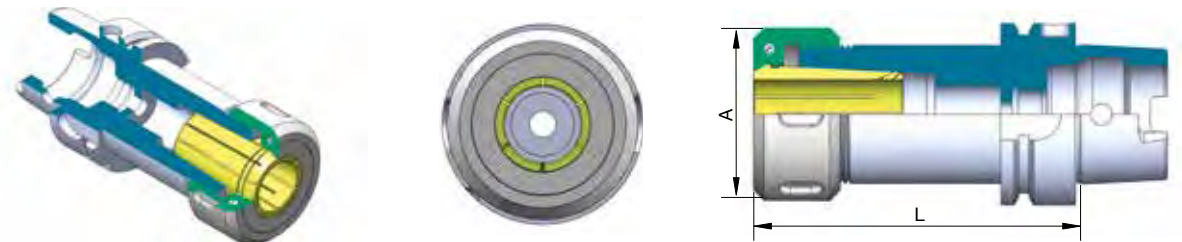
PORTAPINZA PER EOC - COLLET CHUCK FOR EOC - HSK63A

Cod.	TYPE	CAPACITÀ RANGE	G6.3/15000	
			AT2	A
HSK.A.63.100.EOC16	HSK63A H100 EOC16	2 ÷ 16	43	100
HSK.A.63.100.EOC25	HSK63A H100 EOC25	2 ÷ 25	60	100
HSK.A.63.120.EOC32	HSK63A H120 EOC32	3 ÷ 32	72	100



PORTAPINZA PER EOC - COLLET CHUCK FOR EOC - HSK100A

Cod.	TYPE	CAPACITÀ RANGE	G6.3/15000	
			AT2	A
HSK.A.100.110.EOC16	HSK100A H110 EOC16	2 ÷ 16	43	110
HSK.A.100.120.EOC25	HSK100A H120 EOC25	2 ÷ 25	60	120
HSK.A.100.130.EOC32	HSK100A H130 EOC32	3 ÷ 32	72	130

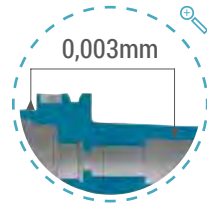


PORTAPINZA PER EOC - COLLET CHUCK FOR EOC - HSK50A

Cod.	TYPE	CAPACITÀ RANGE	G6.3/15000	
			AT2	A
HSK.A.50.100.EOC16	HSK50A H100 EOC16	2 ÷ 16	43	100
HSK.A.50.100.EOC25	HSK50A H100 EOC25	2 ÷ 25	60	100

PER FRESE WELDON

END MILL HOLDERS - FORM A



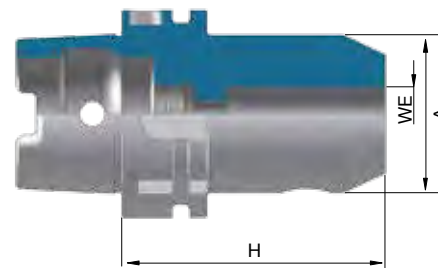
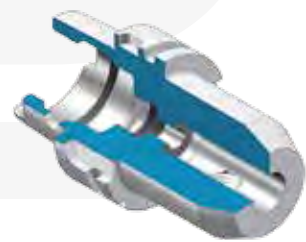
PER FRESE WELDON - END MILL HOLDERS - HSK40A

Cod.	TYPE	H	G6.3/15000	
			AT2	WE
HSK.A.40.60.WE6	HSK40A H60 WE6	60	25	6
HSK.A.40.60.WE8	HSK40A H60 WE8	60	28	8
HSK.A.40.60.WE10	HSK40A H60 WE10	60	35	10
HSK.A.40.70.WE12	HSK40A H70 WE12	70	42	12
HSK.A.40.75.WE16	HSK40A H75 WE16	75	48	16



PER FRESE WELDON - END MILL HOLDERS - HSK50A

Cod.	TYPE	H	G6.3/15000	
			AT2	WE
HSK.A.50.65.WE6	HSK50A H65 WE6	65	25	6
HSK.A.50.65.WE8	HSK50A H65 WE8	65	28	8
HSK.A.50.65.WE10	HSK50A H65 WE10	65	35	10
HSK.A.50.80.WE12	HSK50A H80 WE12	80	42	12
HSK.A.50.80.WE14	HSK50A H80 WE14	80	44	14
HSK.A.50.80.WE16	HSK50A H80 WE16	80	48	16
HSK.A.50.80.WE18	HSK50A H80 WE18	80	50	18
HSK.A.50.80.WE20	HSK50A H80 WE20	80	52	20



PER FRESE WELDON - END MILL HOLDERS - HSK32A

Cod.	TYPE	H	G6.3/15000	
			AT2	WE
HSK.A.32.60.WE6	HSK32A H60 WE6	60	25	6
HSK.A.32.60.WE8	HSK32A H60 WE8	60	28	8
HSK.A.32.65.WE10	HSK32A H65 WE10	65	35	10
HSK.A.32.65.WE12	HSK32A H65 WE12	65	42	12



PER FRESE WELDON - END MILL HOLDERS - HSK63A

Cod.	TYPE	H	AT2 G6.3/15000		
			A	WE	
HSK.A.63.65.WE6	HSK63A H65 WE6	65	25	6	
HSK.A.63.100.WE6	HSK63A H100 WE6	100	25	6	
HSK.A.63.160.WE6	HSK63A H160 WE6	160	25	6	
HSK.A.63.65.WE8	HSK63A H65 WE8	65	28	8	
HSK.A.63.100.WE8	HSK63A H100 WE8	100	28	8	
HSK.A.63.160.WE8	HSK63A H160 WE8	160	28	8	
HSK.A.63.65.WE10	HSK63A H65 WE10	65	35	10	
HSK.A.63.100.WE10	HSK63A H100 WE10	100	35	10	
HSK.A.63.160.WE10	HSK63A H160 WE10	160	35	10	
HSK.A.63.80.WE12	HSK63A H80 WE12	80	42	12	
HSK.A.63.100.WE12	HSK63A H100 WE12	100	42	12	
HSK.A.63.160.WE12	HSK63A H160 WE12	160	42	12	
HSK.A.63.80.WE14	HSK63A H80 WE14	80	44	14	
HSK.A.63.100.WE14	HSK63A H100 WE14	100	44	14	
HSK.A.63.160.WE14	HSK63A H160 WE14	160	44	14	
HSK.A.63.80.WE16	HSK63A H80 WE16	80	48	16	
HSK.A.63.100.WE16	HSK63A H100 WE16	100	48	16	
HSK.A.63.160.WE16	HSK63A H160 WE16	160	48	16	
HSK.A.63.80.WE18	HSK63A H80 WE18	80	48	18	
HSK.A.63.100.WE18	HSK63A H100 WE18	100	48	18	
HSK.A.63.160.WE18	HSK63A H160 WE18	160	48	18	
HSK.A.63.80.WE20	HSK63A H80 WE20	80	52	20	
HSK.A.63.100.WE20	HSK63A H100 WE20	100	52	20	
HSK.A.63.160.WE20	HSK63A H160 WE20	160	52	20	
HSK.A.63.110.WE25	HSK63A H110 WE25	110	65	25	
HSK.A.63.160.WE25	HSK63A H160 WE25	160	65	25	
HSK.A.63.110.WE32	HSK63A H110 WE32	110	72	32	
HSK.A.63.160.WE32	HSK63A H160 WE32	160	72	32	



PER FRESE WELDON - END MILL HOLDERS - HSK80A

Cod.	TYPE	H	AT2 G6.3/15000		
			A	WE	
HSK.A.80.80.WE6	HSK80A H80 WE6	80	25	6	
HSK.A.80.80.WE8	HSK80A H80 WE8	80	28	8	
HSK.A.80.80.WE10	HSK80A H80 WE10	80	35	10	
HSK.A.80.80.WE12	HSK80A H80 WE12	80	42	12	
HSK.A.80.80.WE14	HSK80A H80 WE14	80	44	14	
HSK.A.80.100.WE16	HSK80A H100 WE16	100	48	16	
HSK.A.80.100.WE18	HSK80A H100 WE18	100	50	18	
HSK.A.80.100.WE20	HSK80A H100 WE20	100	52	20	
HSK.A.80.100.WE25	HSK80A H100 WE25	100	65	25	
HSK.A.80.110.WE32	HSK80A H110 WE32	110	72	32	

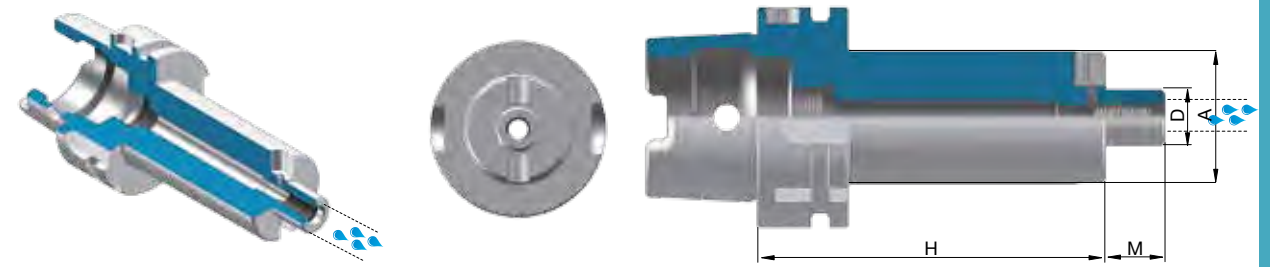
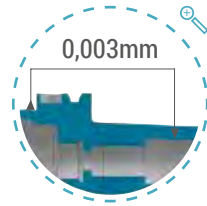


PER FRESE WELDON - END MILL HOLDERS - HSK100A

Cod.	TYPE	H	AT2 G6.3/15000		
			A	WE	
HSK.A.100.80.WE6	HSK100A H80 WE6	80	25	6	
HSK.A.100.80.WE8	HSK100A H80 WE8	80	28	8	
HSK.A.100.80.WE10	HSK100A H80 WE10	80	35	10	
HSK.A.100.100.WE12	HSK100A H100 WE12	100	42	12	
HSK.A.100.100.WE14	HSK100A H100 WE14	100	44	14	
HSK.A.100.100.WE16	HSK100A H100 WE16	100	48	16	
HSK.A.100.100.WE18	HSK100A H100 WE18	100	50	18	
HSK.A.100.100.WE20	HSK100A H100 WE20	100	52	20	
HSK.A.100.100.WE25	HSK100A H100 WE25	100	65	25	
HSK.A.100.100.WE32	HSK100A H100 WE32	100	72	32	
HSK.A.100.105.WE40	HSK100A H105 WE40	100	80	40	

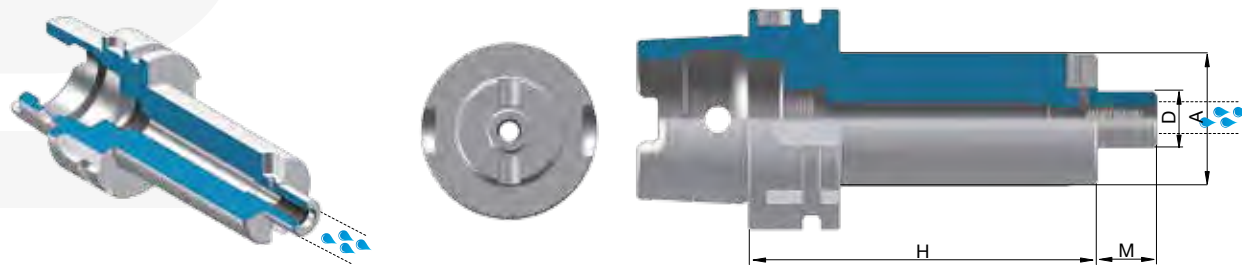
PORTAFRESE FISSI

SHELL END MILL HOLDERS - FORM A



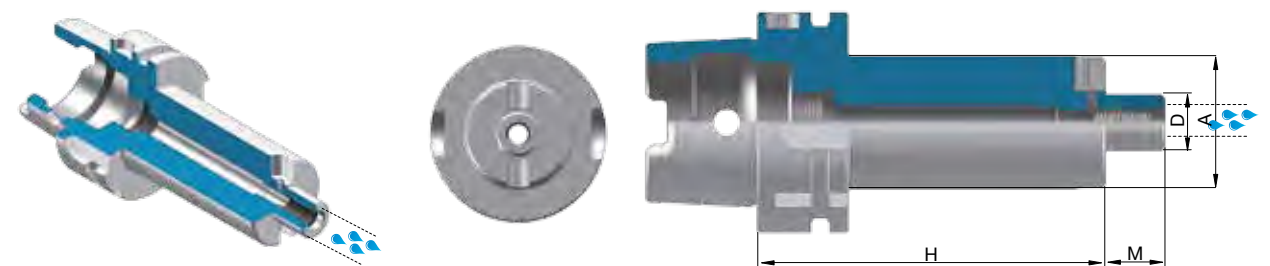
PORTAFRESE FISSI - SHELL END MILL HOLDERS - HSK63A

Cod.	TYPE	AT2 G6.3/18000			
		H	D	M	A
HSK.A.63.50.D16S	HSK63A H50 D16S	50	16	17	38
HSK.A.63.100.D16S	HSK63A H100 D16S	100	16	17	38
HSK.A.63.160.D16S	HSK63A H160 D16S	160	16	17	38
HSK.A.63.50.D22S	HSK63A H50 D22S	50	22	19	48
HSK.A.63.100.D22S	HSK63A H100 D22S	100	22	19	48
HSK.A.63.160.D22S	HSK63A H160 D22S	160	22	19	48
HSK.A.63.60.D27S	HSK63A H60 D27S	60	27	21	58
HSK.A.63.100.D27S	HSK63A H100 D27S	100	27	21	58
HSK.A.63.160.D27S	HSK63A H160 D27S	160	27	21	58
HSK.A.63.60.D32S	HSK63A H60 D32S	60	32	24	78
HSK.A.63.100.D32S	HSK63A H100 D32S	100	32	24	78
HSK.A.63.60.D40S	HSK63A H60 D40S	60	40	27	88



PORTAFRESE FISSI - SHELL END MILL HOLDERS - HSK50A

Cod.	TYPE	AT2 G6.3/18000			
		H	D	M	A
HSK.A.50.50.D16S	HSK50A H50 D16S	50	16	17	38
HSK.A.50.60.D22S	HSK50A H60 D22S	60	22	19	48
HSK.A.50.60.D27S	HSK50A H60 D27S	60	27	21	58
HSK.A.50.60.D32S	HSK50A H60 D32S	60	32	24	78



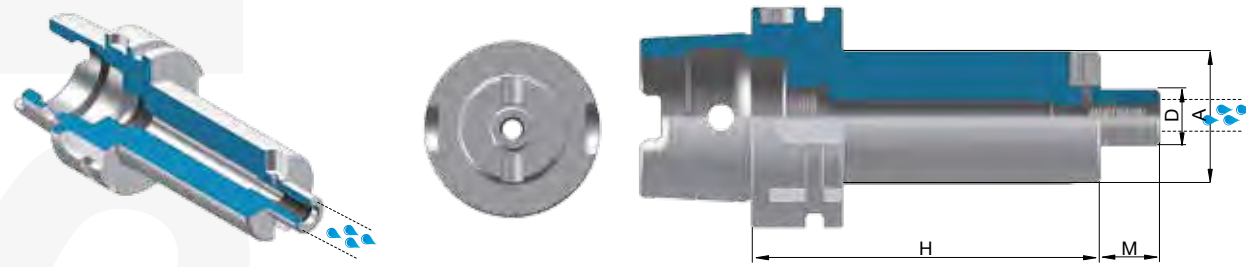
PORTAFRESE FISSI - SHELL END MILL HOLDERS - HSK80A

Cod.	TYPE	AT2 G6.3/18000			
		H	D	M	A
HSK.A.80.50.D22S	HSK80A H50 D22S	50	22	19	48
HSK.A.80.50.D27S	HSK80A H50 D27S	50	27	21	58
HSK.A.80.60.D32S	HSK80A H60 D32S	60	32	24	78
HSK.A.80.60.D40S	HSK80A H60 D40S	60	40	27	88

PORTAFRESE COMBINATI

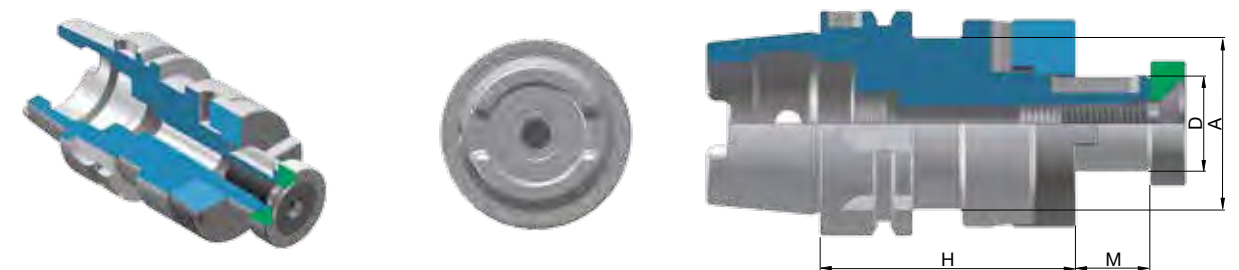
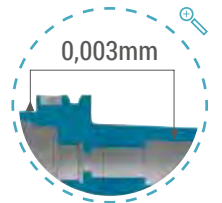
COMBI SHELL END MILL HOLDERS - FORM A

HSK - DIN63893 FORMA A



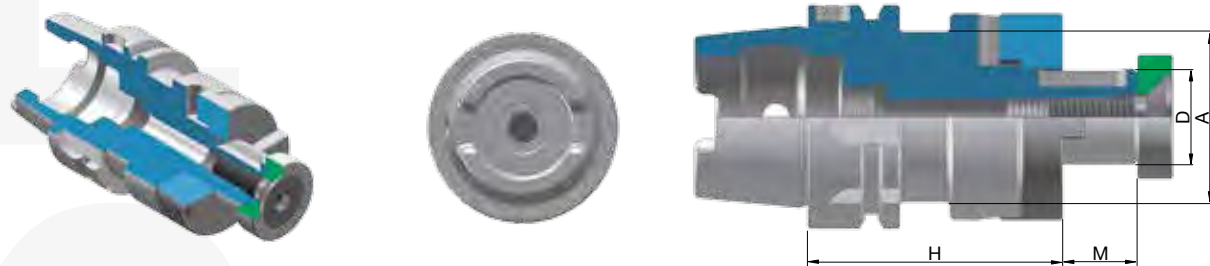
PORTAFRESE FISSI - SHELL END MILL HOLDERS - HSK100A

Cod.	TYPE	H	D	AT2		G6.3/18000	
				M	A		
HSK.A.100.50.D16S	HSK100A H50 D16S	50	16	17	38		
HSK.A.100.100.D16S	HSK100A H100 D16S	100	16	17	38		
HSK.A.100.160.D16S	HSK100A H160 D16S	160	16	17	38		
HSK.A.100.55.D22S	HSK100A H50 D22S	50	22	19	48		
HSK.A.100.100.D22S	HSK100A H100 D22S	100	22	19	48		
HSK.A.100.160.D22S	HSK100A H160 D22S	160	22	19	48		
HSK.A.100.50.D27S	HSK100A H50 D27S	50	27	21	58		
HSK.A.100.100.D27S	HSK100A H100 D27S	100	27	21	58		
HSK.A.100.160.D27S	HSK100A H160 D27S	160	27	21	58		
HSK.A.100.50.D32S	HSK100A H50 D32S	50	32	24	66		
HSK.A.100.100.D32S	HSK100A H100 D32S	100	32	24	66		
HSK.A.100.160.D32S	HSK100A H160 D32S	160	32	24	66		
HSK.A.100.60.D40S	HSK100A H60 D40S	60	40	27	80		
HSK.A.100.100.D40S	HSK100A H100 D40S	100	40	27	80		
HSK.A.100.160.D40S	HSK100A H160 D40S	160	40	27	80		



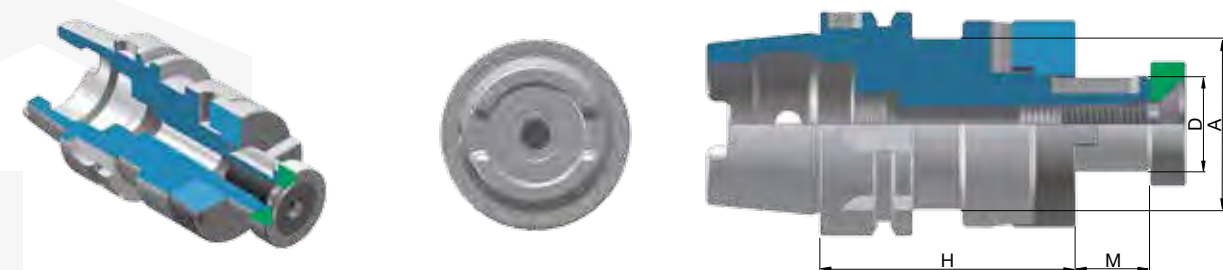
PORTAFRESE COMBINATO - COMBI SHELL END MILL HOLDERS - HSK32A

Cod.	TYPE	H	D	AT2		G6.3/18000	
				M	A		
HSK.A.32.55.D16C	HSK32A H55 D16C	55	16	17	32		
HSK.A.32.55.D22C	HSK32A H55 D22C	55	22	19	40		
HSK.A.32.65.D27C	HSK32A H65 D27C	65	27	21	48		



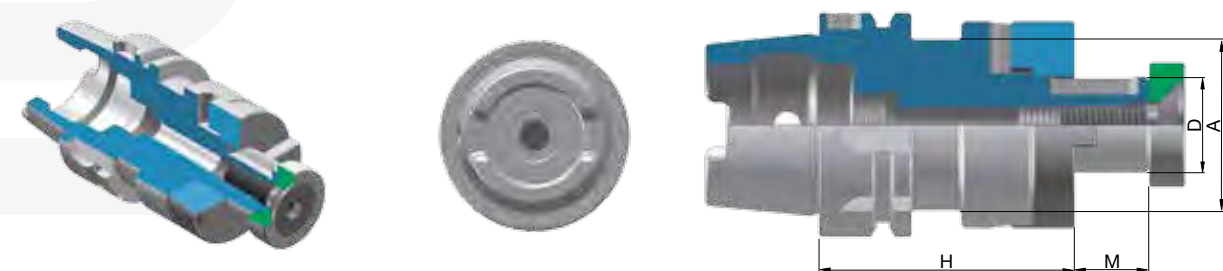
PORTAFRESE COMBINATO - COMBI SHELL END MILL HOLDERS - HSK40A

Cod.	TYPE	AT2 G6.3/18000			
		H	D	M	A
HSK.A.40.50.D16C	HSK40A H50 D16C	50	16	17	32
HSK.A.40.50.D22C	HSK40A H50 D22C	50	22	19	40
HSK.A.40.65.D27C	HSK40A H65 D27C	65	27	21	48



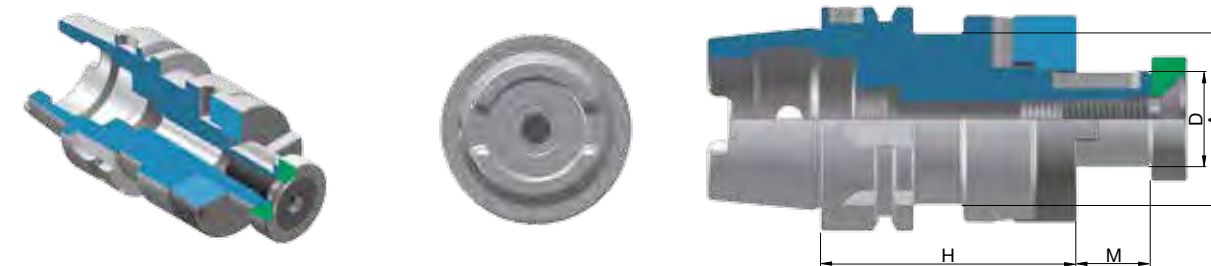
PORTAFRESE COMBINATO - COMBI SHELL END MILL HOLDERS - HSK50A

Cod.	TYPE	AT2 G6.3/18000			
		H	D	M	A
HSK.A.50.50.D16C	HSK50A H50 D16C	50	16	17	32
HSK.A.50.50.D22C	HSK50A H50 D22C	50	22	19	40
HSK.A.50.65.D27C	HSK50A H65 D27C	65	27	21	48
HSK.A.50.65.D32C	HSK50A H65 D32C	65	32	24	58



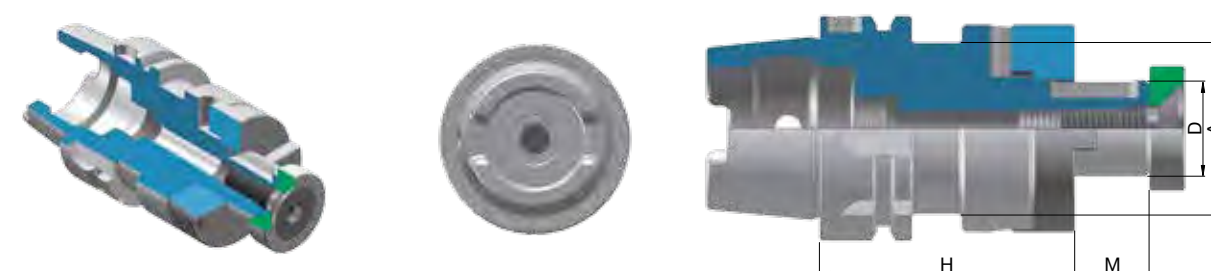
PORTAFRESE COMBINATO - COMBI SHELL END MILL HOLDERS - HSK80A

Cod.	TYPE	AT2 G6.3/18000			
		H	D	M	A
HSK.A.80.60.D16C	HSK80A H60 D16C	60	16	17	32
HSK.A.80.60.D22C	HSK80A H60 D22C	60	22	19	40
HSK.A.80.60.D27C	HSK80A H60 D27C	60	27	21	48
HSK.A.80.60.D32C	HSK80A H60 D32C	60	32	24	58
HSK.A.80.70.D40C	HSK80A H70 D40C	70	40	27	70



PORTAFRESE COMBINATO - COMBI SHELL END MILL HOLDERS - HSK63A

Cod.	TYPE	AT2 G6.3/18000			
		H	D	M	A
HSK.A.63.60.D16C	HSK63A H60 D16C	60	16	17	32
HSK.A.63.100.D16C	HSK63A H100 D16C	100	16	17	32
HSK.A.63.160.D16C	HSK63A H160 D16C	160	16	17	32
HSK.A.63.60.D22C	HSK63A H60 D22C	60	22	19	40
HSK.A.63.100.D22C	HSK63A H100 D22C	100	22	19	40
HSK.A.63.160.D22C	HSK63A H160 D22C	160	22	19	40
HSK.A.63.60.D27C	HSK63A H60 D27C	60	27	21	48
HSK.A.63.100.D27C	HSK63A H100 D27C	100	27	21	48
HSK.A.63.160.D27C	HSK63A H160 D27C	160	27	21	48
HSK.A.63.60.D32C	HSK63A H60 D32C	60	32	24	58
HSK.A.63.100.D32C	HSK63A H100 D32C	100	32	24	58
HSK.A.63.160.D32C	HSK63A H160 D32C	160	32	24	58
HSK.A.63.70.D40C	HSK63A H70 D40C	70	40	27	70
HSK.A.63.100.D40C	HSK63A H100 D40C	100	40	27	70
HSK.A.63.100.D40C	HSK63A H160 D40C	160	40	27	70

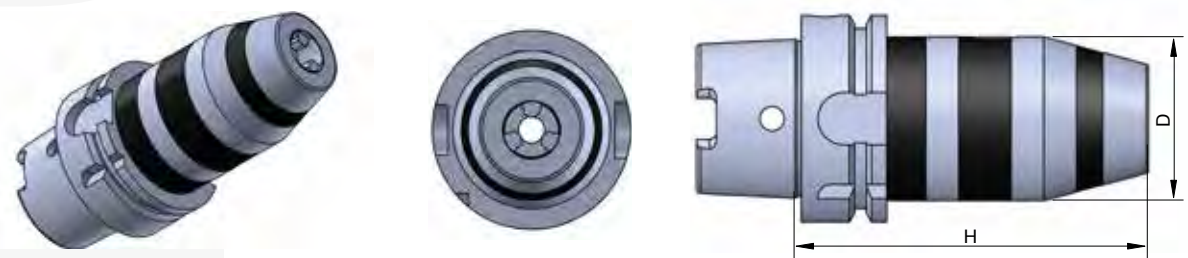
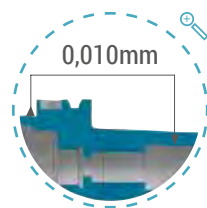


PORTAFRESE COMBINATO - COMBI SHELL END MILL HOLDERS - HSK100A

Cod.	TYPE	AT2 G6.3/18000			
		H	D	M	A
HSK.A.100.60.D16C	HSK100A H60 D16C	60	16	17	32
HSK.A.100.60.D22C	HSK100A H60 D22C	60	22	19	40
HSK.A.100.60.D27C	HSK100A H60 D27C	60	27	21	48
HSK.A.100.60.D32C	HSK100A H60 D32C	60	32	24	58
HSK.A.100.70.D40C	HSK100A H70 D40C	70	40	27	70

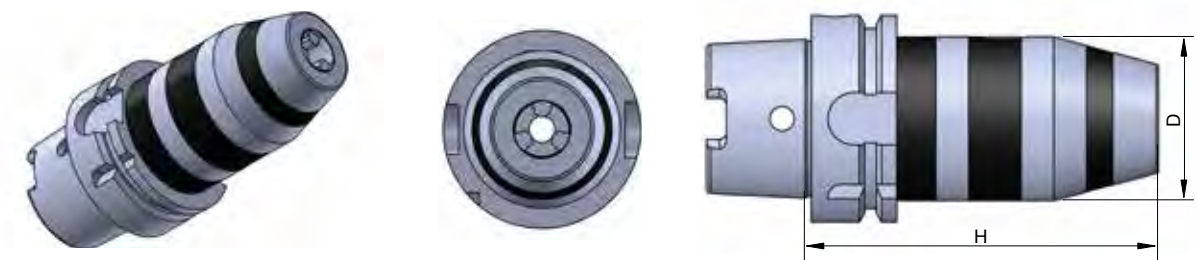
PORTA PUNTE CON CHIAVE ESAGONALE

HEX KEY LOCK DRILL CHUCKS WITH COOLANT THROUGH - FORM A



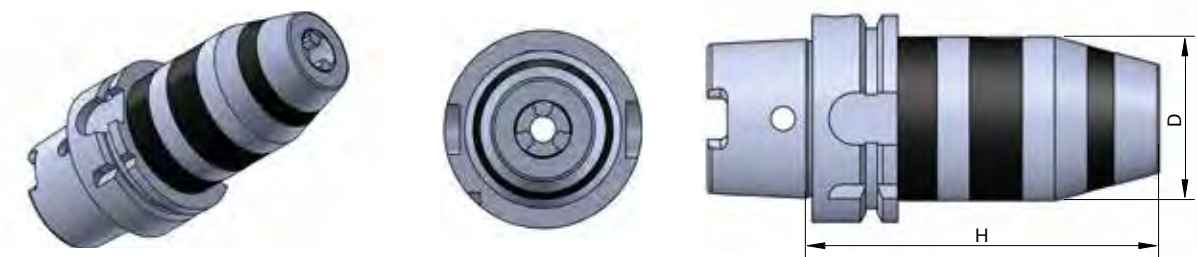
PORTAPUNTE CON CHIAVE ESAGONALE - DRILL CHUCKS WITH HEX KEY - HSK50A

Cod.	TYPE	H	D	AT2	G6.3/12000
				CAPACITA' RANGE	
HSK.A.50.116.HD13	HSK50A H116 HD13	116	50	1 ÷ 13	
HSK.A.50.121.HD16	HSK50A H121 HD16	121	57	3 ÷ 16	



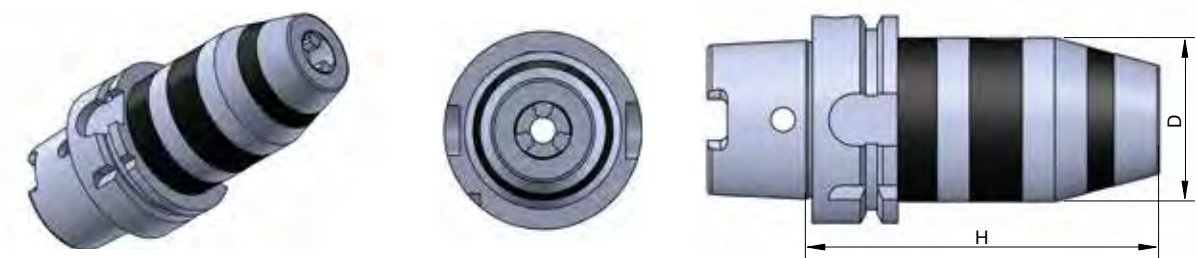
PORTAPUNTE CON CHIAVE ESAGONALE - DRILL CHUCKS WITH HEX KEY - HSK63A

Cod.	TYPE	H	D	AT2	G6.3/12000
				CAPACITA' RANGE	
HSK.A.63.101.HD13	HSK63A H101 HD13	101	50	1 ÷ 13	
HSK.A.63.106.HD16	HSK63A H106 HD16	106	57	3 ÷ 16	



PORTAPUNTE CON CHIAVE ESAGONALE - DRILL CHUCKS WITH HEX KEY - HSK80A

Cod.	TYPE	H	D	AT2	G6.3/12000
				CAPACITA' RANGE	
HSK.A.80.109.HD13	HSK100A H110 HD13	109	50	1 ÷ 13	
HSK.A.80.114.HD16	HSK100A H115 HD16	114	57	3 ÷ 16	



PORTAPUNTE CON CHIAVE ESAGONALE - DRILL CHUCKS WITH HEX KEY - HSK100A

Cod.	TYPE	H	D	AT2	G6.3/12000
				CAPACITA' RANGE	
HSK.A.100.110.HD13	HSK100A H110 HD13	110	50	1 ÷ 13	
HSK.A.100.115.HD16	HSK100A H115 HD16	115	57	3 ÷ 16	

STELO TENERO LAVORABILE

BLANK ARBORS - FORM A

HSK - DIN63893 FORMA A

RICAMBI PORTAPUNTE - SPARE PARTS FOR DRILL CHUCK HEX KEY

Cod.	TYPE
RIC.HD13	RICAMBI PER/SPARE PARTS FOR HD13
RIC.HD16	RICAMBI PER/SPARE PARTS FOR HD16

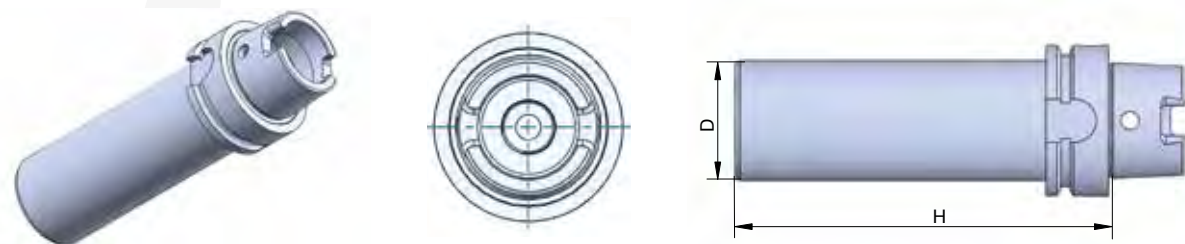


STELO TENERO LAVORABILE - BLANK ARBORS

Cod.	TYPE	D	MATERIAL	
			AT2	42HRC
HSK.A.32.150.D25BL	HSK32A H150 D25	25		150
HSK.A.40.150.D40BL	HSK40A H150 D40	40		150
HSK.A.50.150.D50BL	HSK50A H150 D50	50		150
HSK.A.63.160.D63BL	HSK63A H160 D63	63		160
HSK.A.63.250.D63BL	HSK63A H250 D63	63		250
HSK.A.80.250.D80BL	HSK80A H250 D80	80		250
HSK.A.100.250.D97BL	HSK100A H250 D97	97		250

BARRA DI CONTROLLO

TEST ARBORS



BARRA DI CONTROLLO - TEST ARBORS

Cod.	TYPE	H	D
HSK.A.32.150.D25	HSK32A H150 D25	150	25
HSK.A.40.150.D25	HSK40A H150 D25	150	25
HSK.A.50.200.D32	HSK50A H200 D32	200	32
HSK.A.63.300.D40	HSK63A H300 D40	300	40
HSK.A.80.300.D40	HSK80A H300 D40	300	40
HSK.A.100.300.D50	HSK100A H300 D50	300	50

AT2

HSK - DIN63893 FORMA C

HSK - DIN 63893 FORM C



PORTAPINZA ER DIN6499
COLLET CHUCK FOR ER DIN6499



PER FRESE WELDON
END MILL HOLDERS



STELO TENERO LAVORABILE
BLANK ARBORS

CARATTERISTICHE / SPECIFICATION / CARACTÉRISTIQUES/ TECHNISCHE DATEN

CARATTERISTICHE TECNICHE

- Costruiti in acciaio certificato in barre.
- Eseguiti trattamenti termici da fornitori certificati ISO 9001.
- Rettificati di precisione esternamente, internamente e nelle filettature delle ghiera chiudipinza.
- Controllati con strumenti di misura certificati.
- La tolleranza di precisione dei coni HSK-C è AT2.
- L'errore di concentricità massimo tra il cono e la sede utensile è 0.003 mm.

TECHNICAL FEATURES

- Manufactured with certificate steel.
- Heat treatments are performed by certified suppliers ISO 9001.
- Precision ground on shank, inside tapers and collet nut threads.
- Tested with high precision inspection and gaging equipment.
- Taper accuracy of HSK-C shanks lower than AT2.
- The maximum error of concentricity between the cone and the seat of tool is 0.003 mm.

CARACTÉRISTIQUES

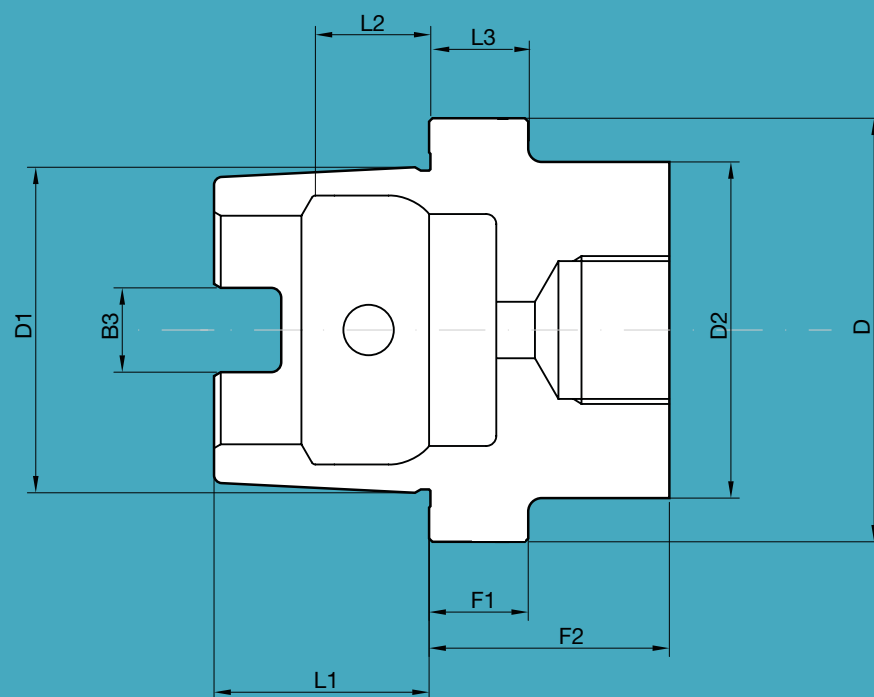
- Fabriqués en bar d'acier certifié.
- Réalisation du traitement thermique par des fournisseurs certifiés ISO 9001.
- Rectification de précision extérieurement, intérieurement et dans les filetages des écrous serre-pince.
- Contrôlés par des instruments de mesure certifiés.
- La tolérance de précision des cônes HSK-C est AT2.
- L'erreur de concentricité maximum entre le cône et le siège de l'outil est de 0.003 mm.

MERKMALE

- Gebaut aus zertifiziertem Stabstahl
- Warmbehandlungen von Lieferanten mit Zeugnis ISO 9001
- Genauigkeitgeschliffen aussen, innen und in den Gewinden der Spannmutter für den Zangenverschluss
- Geprüft mit zertifizierten Messinstrumente
- Die Präzisionstoleranz der Kone HSK-C ist AT2
- Die max konzentrische Abweichung zwischen Konus und Werkzeugsitz ist 0.003 mm

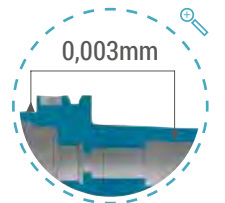
QUOTE / QUOTE / QUOTES / ABMESSUNGEN

HSK	D	D1	D2	B3	L1	L2	L3	F1	F2	COOLANT TUBE
32	32	24	26	7	16	8,92	16	20	35	M10X1
40	40	30	34	8	20	11,42	16	20	35	M12X1
50	50	38	42	10,54	25	14,13	18	26	42	M16X1
63	63	48	53	12,54	32	18,13	18	26	42	M18X1
80	80	60	68	16,04	40	22,85	18	26	42	M20X1,5
100	100	75	88	20,02	50	28,56	20	29	45	M24X1,5

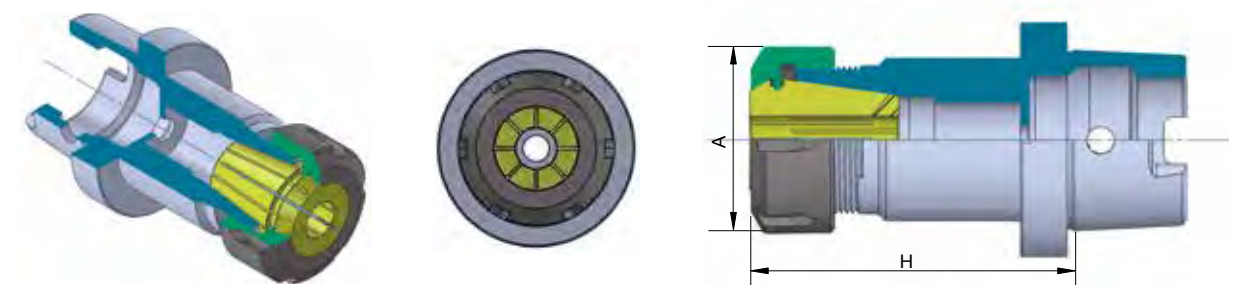


PORTAPINZA ER DIN6499

COLLET CHUCK ER DIN6499 - FORM C



HSK - DIN63893 FORMA C

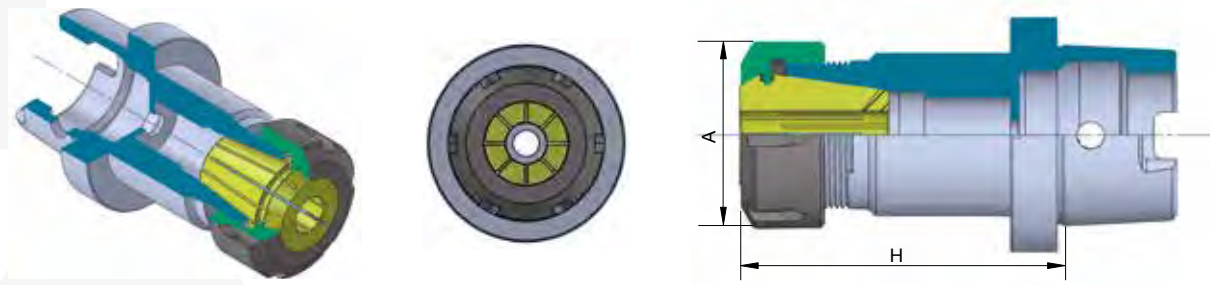


PORTAPINZA ER DIN6499 - COLLET CHUCK ER DIN6499 - HSK32C

Cod.	TYPE	CAPACITA' RANGE	AT2	G6.3/18000
			A	H
HSK.C.32.60.ER16	HSK32C H60 ERX16	1 ÷ 10	32	60

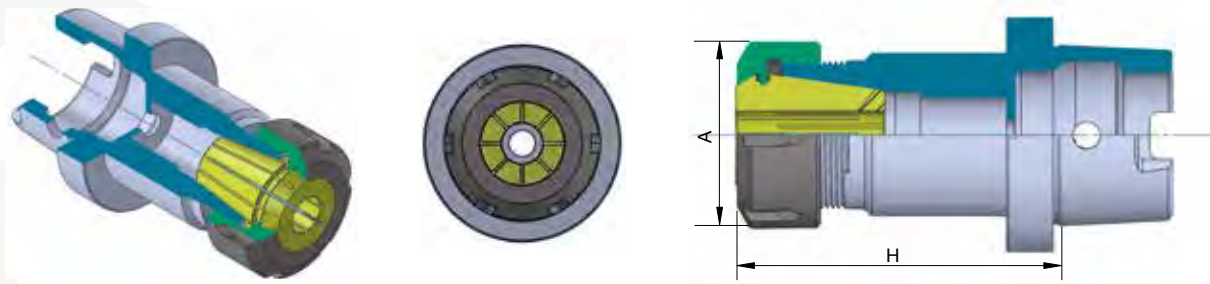
PER FRESE WELDON WHISTLE NOTCH END MILL HOLDERS WHISTLE NOTCH - FORM C

HSK - DIN63893 FORMA C



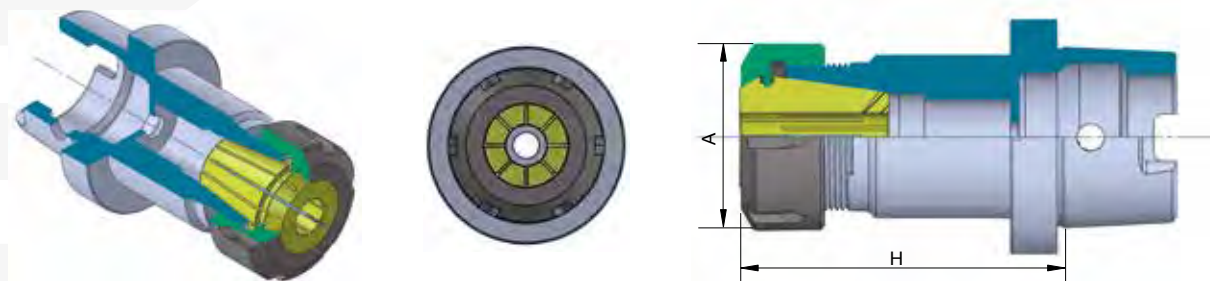
PORTAPINZA ER - COLLET CHUCK ER - HSK40C

Cod.	TYPE	CAPACITA' RANGE	AT2 G6.3/18000	
			A	H
HSK.C.40.60.ER16	HSK40C H60 ERX16	1 ÷ 10	32	60
HSK.C.40.70.ER25	HSK40C H70 ERX25	2 ÷ 16	42	70
HSK.C.40.75.ER32	HSK40C H75 ERX32	2 ÷ 20	50	75



PORTAPINZA ER - COLLET CHUCK ER - HSK50C

Cod.	TYPE	CAPACITA' RANGE	AT2 G6.3/18000	
			A	H
HSK.C.50.60.ER16	HSK50C H60 ERX16	1 ÷ 10	32	60
HSK.C.50.70.ER25	HSK50C H70 ERX25	2 ÷ 16	42	70
HSK.C.50.75.ER32	HSK50C H75 ERX32	2 ÷ 20	50	75
HSK.C.50.80.ER40	HSK50C H80 ERX40	3 ÷ 26	63	80



PORTAPINZA ER - COLLET CHUCK ER - HSK63C

Cod.	TYPE	CAPACITA' RANGE	AT2 G6.3/18000	
			A	H
HSK.C.63.70.ER25	HSK63C H70 ERX25	2 ÷ 16	42	70
HSK.C.63.75.ER32	HSK63C H75 ERX32	2 ÷ 20	50	75
HSK.C.63.80.ER40	HSK63C H80 ERX40	3 ÷ 26	63	80



PER FRESE WELDON WHISTLE NOTCH - END MILL HOLDER WHISTLE NOTCH - HSK32C

Cod.	TYPE	WE	AT2 G6.3/18000	
			H	A
HSK.C.32.60.WE6	HSK32C H60 WE6	6	60	25
HSK.C.32.60.WE8	HSK32C H60 WE8	8	60	28
HSK.C.32.65.WE10	HSK32C H65 WE10	10	65	35



PER FRESE WELDON WHISTLE NOTCH - END MILL HOLDER WHISTLE NOTCH - HSK40C

AT2 G6.3/18000

Cod.	TYPE	d	A	D
HSK.C.40.60.WE6	HSK40C H60 WE6	6	60	25
HSK.C.40.60.WE8	HSK40C H60 WE8	8	60	28
HSK.C.40.65.WE10	HSK40C H65 WE10	10	65	35
HSK.C.40.70.WE12	HSK40C H70 WE12	12	70	42
HSK.C.40.70.WE14	HSK40C H70 WE14	14	70	44
HSK.C.40.75.WE16	HSK40C H75 WE16	16	75	48



PER FRESE WELDON WHISTLE NOTCH - END MILL HOLDER WHISTLE NOTCH - HSK63C

AT2 G6.3/18000

Cod.	TYPE	WE	H	A
HSK.C.63.60.WE6	HSK63C H60 WE6	6	60	25
HSK.C.63.60.WE8	HSK63C H60 WE8	8	60	28
HSK.C.63.65.WE10	HSK63C H65 WE10	10	65	35
HSK.C.63.75.WE12	HSK63C H75 WE12	12	75	42
HSK.C.63.75.WE14	HSK63C H75 WE14	14	75	44
HSK.C.63.80.WE16	HSK63C H80 WE16	16	80	48
HSK.C.63.80.WE18	HSK63C H80 WE18	18	80	50
HSK.C.63.80.WE20	HSK63C H80 WE20	20	80	52
HSK.C.63.95.WE25	HSK63C H95 WE25	25	95	63
HSK.C.63.100.WE32	HSK63C H100 WE32	32	100	72



PER FRESE WELDON WHISTLE NOTCH - END MILL HOLDER WHISTLE NOTCH - HSK50C

AT2 G6.3/18000

Cod.	TYPE	d	A	D
HSK.C.50.60.WE6	HSK50C H60 WE6	6	60	25
HSK.C.50.60.WE8	HSK50C H60 WE8	8	60	28
HSK.C.50.65.WE10	HSK50C H65 WE10	10	65	35
HSK.C.50.75.WE12	HSK50C H75 WE12	12	75	42
HSK.C.50.75.WE14	HSK50C H75 WE14	14	75	44
HSK.C.50.80.WE16	HSK50C H80 WE16	16	80	48
HSK.C.50.80.WE18	HSK50C H80 WE18	18	80	50
HSK.C.50.80.WE20	HSK50C H80 WE20	20	80	52

STELO TENERO LAVORABILE

BLANK ARBORS - FORM C



STELO TENERO LAVORABILE - BLANK ARBORS

Cod.	TYPE	A	MATERIAL	
			AT2	42HRC
HSK.C.32.160.D40BL	HSK32C H160 BLANKS D40	160		40
HSK.C.40.160.D50BL	HSK40C H160 BLANKS D50	160		50
HSK.C.50.200.D63BL	HSK50C H200 BLANKS D63	200		63
HSK.C.63.200.D80BL	HSK63C H200 BLANKS D80	200		80



HSK - DIN63893 FORMA E

HSK - DIN63893 FORMA E



**CALETTAMENTO A CALDO
STANDARD**
SHRINK FIT HOLDERS STANDARD



PORTAPINZA ER DIN6499
COLLET CHUCK FOR ER DIN6499



PORTAPINZA EOC DIN6388
COLLET CHUCK FOR EOC DIN6388



PER FRESE WELDON
END MILL HOLDERS



PORTAFRESE FISSI
SHELL END MILL HOLDERS



ALBERATI
CUTTER ARBORS - FORMA E

CARATTERISTICHE / SPECIFICATION / CARACTÉRISTIQUES/ TECHNISCHE DATEN

CARATTERISTICHE TECNICHE

- Costruiti in acciaio certificato in barre.
- Eseguiti trattamenti termici da fornitori certificati ISO 9001.
- Rettificati di precisione esternamente, internamente e nelle filettature delle ghiera chiudipinza.
- Controllati con strumenti di misura certificati.
- La tolleranza di precisione dei coni HSK-E è AT2.
- L'errore di concentricità massimo tra il cono e la sede utensile è 0.003 mm.

TECHNICAL FEATURES

- Manufactured with certificate steel.
- Heat treatments are performed by certified suppliers ISO 9001.
- Precision ground on shank, inside tapers and collet nut threads.
- Tested with high precision inspection and ganging equipment.
- Taper accuracy of HSK-E shanks lower than AT2.
- The maximum error of concentricity between the cone and the seat of tool is 0.003 mm.

CARACTÉRISTIQUES

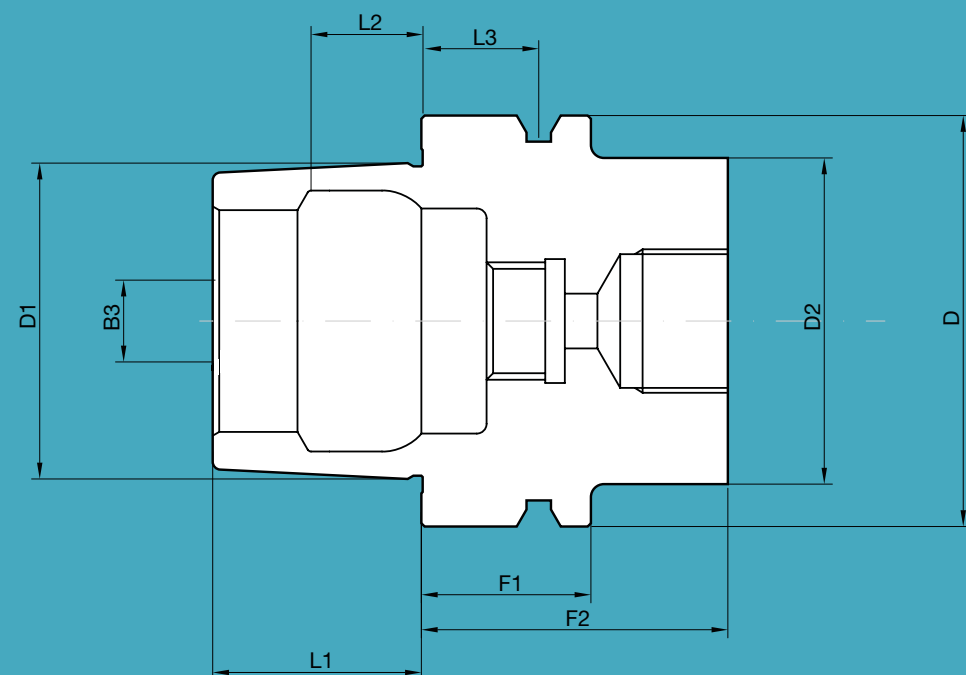
- Fabriqués en bar d'acier certifié.
- Réalisation du traitement thermique par des fournisseurs certifiés ISO 9001.
- Rectification de précision extérieurement, intérieurement et dans les filetages des écrous serre-pince.
- Contrôlés par des instruments de mesure certifiés.
- La tolérance de précision des cônes HSK-E est AT2.
- L'erreur de concentricité maximum entre le cône et le siège de l'outil est de 0.003 mm.

MERKMALE

- Gebaut aus zertifiziertem Stabstahl
- Warmbehandlungen von Lieferanten mit Zeugnis ISO 9001
- Genauigkeitgeschliffen aussen, innen und in den Gewinden der Spannmutter für den Zangenverschluss
- Geprüft mit zertifizierten Messinstrumente
- Die Präzisionstoleranz der Kone HSK-E ist AT2
- Die max konzentrische Abweichung zwischen Konus und Werkzeugsitz ist 0.003 mm

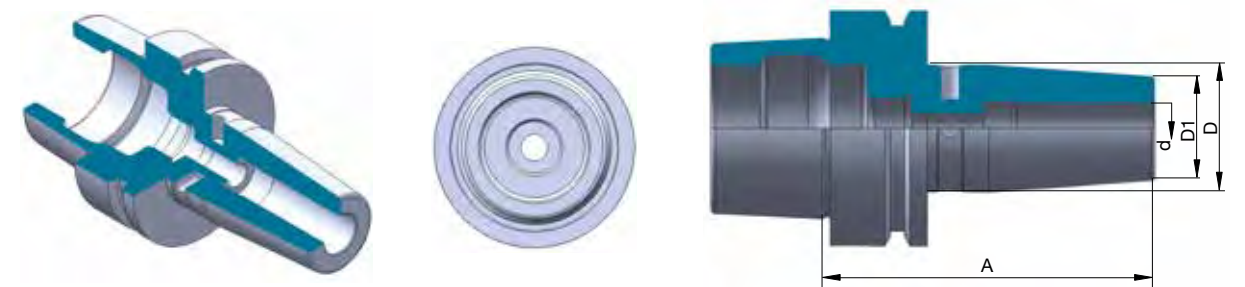
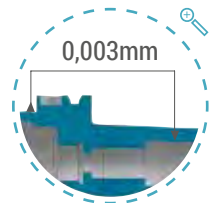
QUOTE / QUOTE / QUOTES / ABMESSUNGEN

HSK	D	D1	D2	L1	L2	L3	F1	F2	COOLANT TUBE
25	32	19	20	13	10,5	-	10	20	M5X10
32	32	24	26	16	8,92	16	20	35	M10X1
40	40	30	34	20	11,42	16	20	35	M12X1
50	50	38	42	25	14,13	18	26	42	M16X1
63	63	48	53	32	18,13	18	26	42	M18X1
80	80	60	68	40	22,85	18	26	42	M20X1,5
100	100	75	85	50	28,56	20	29	45	M24X1,5



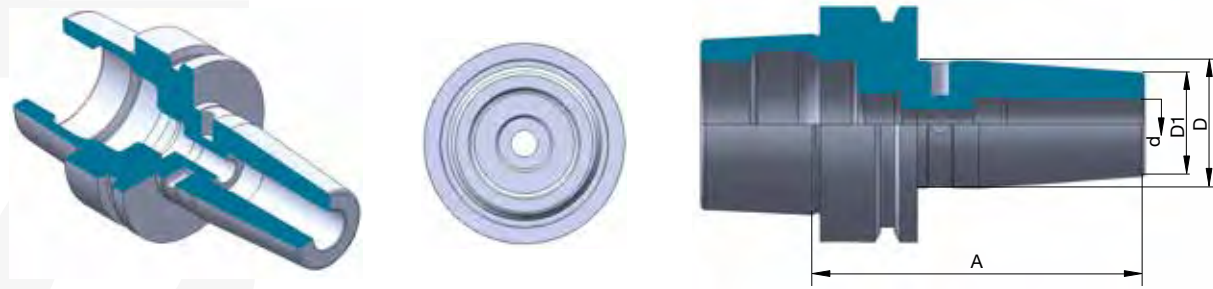
CALETTAMENTO A CALDO STANDARD

SHRINK FIT HOLDERS STANDARD - FORM E



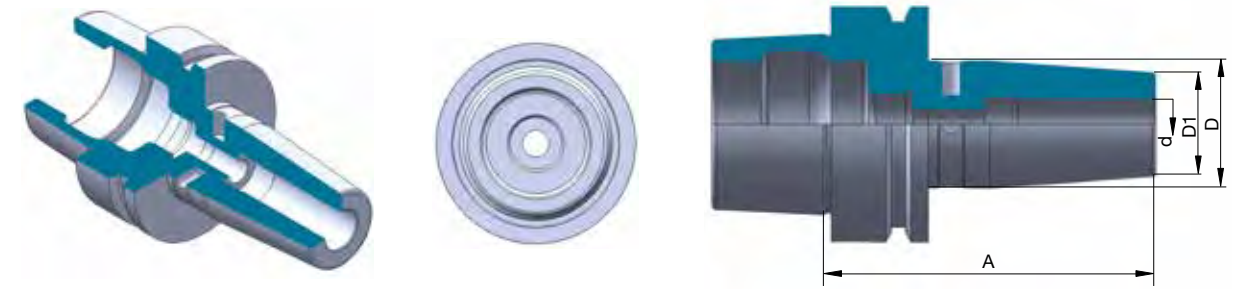
CALETTAMENTO STANDARD - SHRINK FIT HOLDERS - HSK32E

Cod.	TYPE	d	A	AT2	G2.5/25000
				D1	D
HSK.E.32.60.CL3	HSK32E H60 CL3	3	60	10	16
HSK.E.32.60.CL4	HSK32E H60 CL4	4	60	10	16
HSK.E.32.60.CL5	HSK32E H60 CL5	5	60	10	16
HSK.E.32.70.CL6	HSK32E H70 CL6	6	70	20	25
HSK.E.32.70.CL8	HSK32E H70 CL8	8	70	20	25
HSK.E.32.70.CL10	HSK32E H70 CL10	10	70	24	29
HSK.E.32.80.CL12	HSK32E H80 CL12	12	80	24	29
HSK.E.32.90.CL14	HSK32E H90 CL14	14	90	27	34
HSK.E.32.90.CL16	HSK32E H90 CL16	16	90	27	34
HSK.E.32.100.CL20	HSK32E H100 CL20	20	100	33	40



CALETTAMENTO STANDARD - SHRINK FIT HOLDERS - HSK40E

Cod.	TYPE	d	A	AT2		G2.5/25000	
				D1	D		
HSK.E.40.60.CL3	HSK40E H60 CL3	3	60	10	16		
HSK.E.40.120.CL3	HSK40E H120 CL3	3	120	10	20		
HSK.E.40.160.CL3	HSK40E H160 CL3	3	160	10	20		
HSK.E.40.60.CL4	HSK40E H60 CL4	4	60	10	16		
HSK.E.40.120.CL4	HSK40E H120 CL4	4	120	15	22		
HSK.E.40.160.CL4	HSK40E H160 CL4	4	160	15	22		
HSK.E.40.60.CL5	HSK40E H60 CL5	5	60	10	16		
HSK.E.40.120.CL5	HSK40E H120 CL5	5	120	15	22		
HSK.E.40.160.CL5	HSK40E H160 CL5	5	160	15	22		
HSK.E.40.80.CL6	HSK40E H80 CL6	6	80	20	27		
HSK.E.40.120.CL6	HSK40E H120 CL6	6	120	20	27		
HSK.E.40.160.CL6	HSK40E H160 CL6	6	160	20	27		
HSK.E.40.80.CL8	HSK40E H80 CL8	8	80	20	27		
HSK.E.40.120.CL8	HSK40E H120 CL8	8	120	20	27		
HSK.E.40.160.CL8	HSK40E H160 CL8	8	160	20	27		
HSK.E.40.80.CL10	HSK40E H80 CL10	10	80	24	31		
HSK.E.40.120.CL10	HSK40E H120 CL10	10	120	24	31		
HSK.E.40.160.CL10	HSK40E H160 CL10	10	160	24	31		
HSK.E.40.90.CL12	HSK40E H90 CL12	12	90	24	31		
HSK.E.40.120.CL12	HSK40E H120 CL12	12	120	24	31		
HSK.E.40.160.CL12	HSK40E H160 CL12	12	160	24	31		
HSK.E.40.90.CL14	HSK40E H90 CL14	14	90	27	34		
HSK.E.40.120.CL14	HSK40E H120 CL14	14	120	27	34		
HSK.E.40.160.CL14	HSK40E H160 CL14	14	160	27	34		
HSK.E.40.90.CL16	HSK40E H90 CL16	16	90	27	34		
HSK.E.40.120.CL16	HSK40E H120 CL16	16	120	27	34		
HSK.E.40.160.CL16	HSK40E H160 CL16	16	160	27	34		

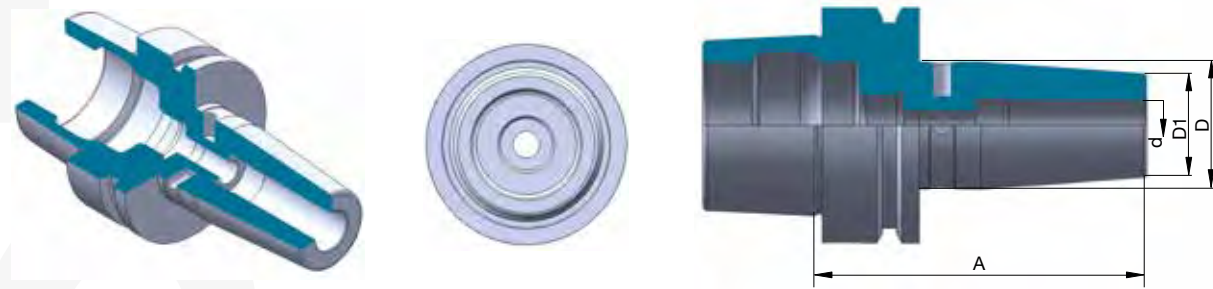


CALETTAMENTO STANDARD - SHRINK FIT HOLDERS - HSK50E

Cod.	TYPE	d	A	AT2		G2.5/25000	
				D1	D		
HSK.E.50.80.CL3	HSK50E H80 CL3	3	80	10	15		
HSK.E.50.120.CL3	HSK50E H120 CL3	3	120	10	20		
HSK.E.50.160.CL3	HSK50E H160 CL3	3	160	10	20		
HSK.E.50.80.CL4	HSK50E H80 CL4	4	80	15	22		
HSK.E.50.120.CL4	HSK50E H120 CL4	4	120	15	22		
HSK.E.50.160.CL4	HSK50E H160 CL4	4	160	15	22		
HSK.E.50.80.CL5	HSK50E H80 CL5	5	80	15	22		
HSK.E.50.120.CL5	HSK50E H120 CL5	5	120	15	22		
HSK.E.50.160.CL5	HSK50E H160 CL5	5	160	15	22		
HSK.E.50.80.CL6	HSK50E H80 CL6	6	80	20	27		
HSK.E.50.120.CL6	HSK50E H120 CL6	6	120	20	27		
HSK.E.50.160.CL6	HSK50E H160 CL6	6	160	20	27		
HSK.E.50.80.CL8	HSK50E H80 CL8	8	80	20	27		
HSK.E.50.120.CL8	HSK50E H120 CL8	8	120	20	27		
HSK.E.50.160.CL8	HSK50E H160 CL8	8	160	20	27		
HSK.E.50.85.CL10	HSK50E H85 CL10	10	85	24	31		
HSK.E.50.120.CL10	HSK50E H120 CL10	10	120	24	31		
HSK.E.50.160.CL10	HSK50E H160 CL10	10	160	24	31		
HSK.E.50.90.CL12	HSK50E H90 CL12	12	90	24	31		
HSK.E.50.120.CL12	HSK50E H120 CL12	12	120	24	31		
HSK.E.50.160.CL12	HSK50E H160 CL12	12	160	24	31		
HSK.E.50.90.CL14	HSK50E H90 CL14	14	90	27	34		
HSK.E.50.120.CL14	HSK50E H120 CL14	14	120	27	34		
HSK.E.50.160.CL14	HSK50E H160 CL14	14	160	27	34		
HSK.E.50.95.CL16	HSK50E H95 CL16	16	95	27	34		
HSK.E.50.120.CL16	HSK50E H120 CL16	16	120	27	34		
HSK.E.50.160.CL16	HSK50E H160 CL16	16	160	27	34		
HSK.E.50.95.CL18	HSK50E H95 CL18	18	95	33	40		
HSK.E.50.120.CL18	HSK50E H120 CL18	18	120	33	40		
HSK.E.50.160.CL18	HSK50E H160 CL18	18	160	33	40		
HSK.E.50.100.CL20	HSK50- H100 CL20	20	100	33	40		
HSK.E.50.120.CL20	HSK50- H120 CL20	20	120	33	40		
HSK.E.50.160.CL20	HSK50E H160 CL20	20	160	33	40		

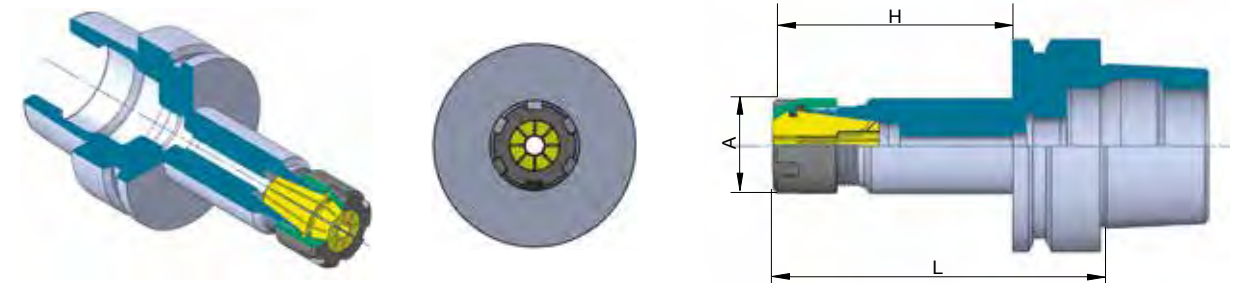
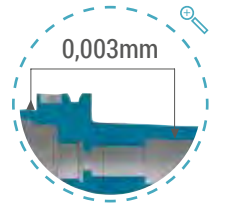
PORTAPINZA ER DIN6499

COLLET CHUCK ER DIN 6499 - FORM E



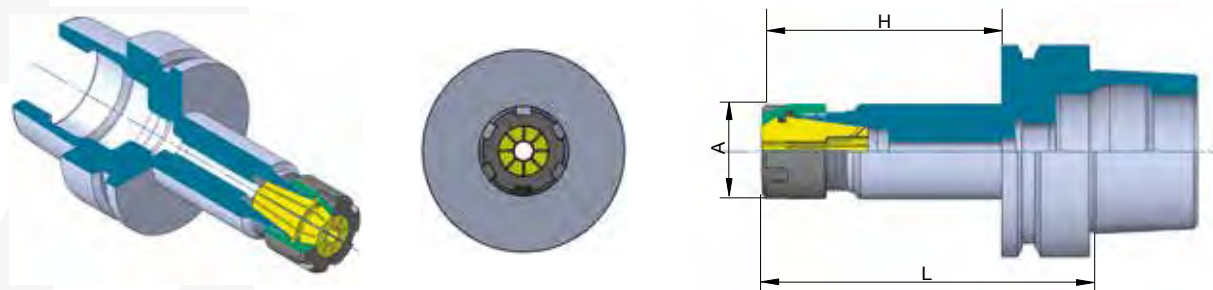
CALETTAMENTO STANDARD - SHRINK FIT HOLDERS - HSK63E

Cod.	TYPE	d	A	AT2		G2.5/25000	
				D1	D		
HSK.E.63.80.CL3	HSK63E H80 CL3	3	80	10	15		
HSK.E.63.120.CL3	HSK63E H120 CL3	3	120	10	20		
HSK.E.63.160.CL3	HSK63E H160 CL3	3	160	10	20		
HSK.E.63.80.CL4	HSK63E H80 CL4	4	80	15	22		
HSK.E.63.120.CL4	HSK63E H120 CL4	4	120	15	22		
HSK.E.63.160.CL4	HSK63E H160 CL4	4	160	15	22		
HSK.E.63.80.CL5	HSK63E H80 CL5	5	80	15	22		
HSK.E.63.120.CL5	HSK63E H120 CL5	5	120	15	22		
HSK.E.63.160.CL5	HSK63E H160 CL5	5	160	15	22		
HSK.E.63.80.CL6	HSK63E H80 CL6	6	80	20	27		
HSK.E.63.120.CL6	HSK63E H120 CL6	6	120	20	27		
HSK.E.63.160.CL6	HSK63E H160 CL6	6	160	20	27		
HSK.E.63.80.CL8	HSK63E H80 CL8	8	80	20	27		
HSK.E.63.120.CL8	HSK63E H120 CL8	8	120	20	27		
HSK.E.63.160.CL8	HSK63E H160 CL8	8	160	20	27		
HSK.E.63.85.CL10	HSK63E H85 CL10	10	85	24	31		
HSK.E.63.120.CL10	HSK63E H120 CL10	10	120	24	31		
HSK.E.63.160.CL10	HSK63E H160 CL10	10	160	24	31		
HSK.E.63.90.CL12	HSK63E H90 CL12	12	90	24	31		
HSK.E.63.120.CL12	HSK63E H120 CL12	12	120	24	31		
HSK.E.63.160.CL12	HSK63E H160 CL12	12	160	24	31		
HSK.E.63.90.CL14	HSK63E H90 CL14	14	90	27	34		
HSK.E.63.120.CL14	HSK63E H120 CL14	14	120	27	34		
HSK.E.63.160.CL14	HSK63E H160 CL14	14	160	27	34		
HSK.E.63.95.CL16	HSK63E H95 CL16	16	95	27	34		
HSK.E.63.120.CL16	HSK63E H120 CL16	16	120	27	34		
HSK.E.63.160.CL16	HSK63E H160 CL16	16	160	27	34		
HSK.E.63.95.CL18	HSK63E H95 CL18	18	95	33	40		
HSK.E.63.120.CL18	HSK63E H120 CL18	18	120	33	40		
HSK.E.63.160.CL18	HSK63E H160 CL18	18	160	33	40		
HSK.E.63.100.CL20	HSK63E H100 CL20	20	100	33	40		
HSK.E.63.120.CL20	HSK63E H120 CL20	20	120	33	40		
HSK.E.63.160.CL20	HSK63E H160 CL20	20	160	33	40		
HSK.E.63.115.CL25	HSK63E H115 CL25	25	115	44	53		
HSK.E.63.120.CL25	HSK63E H120 CL25	25	120	44	53		
HSK.E.63.160.CL25	HSK63E H160 CL25	25	160	44	53		
HSK.E.63.120.CL32	HSK63E H120 CL32	32	120	44	53		
HSK.E.63.160.CL32	HSK63E H160 CL32	32	160	44	53		



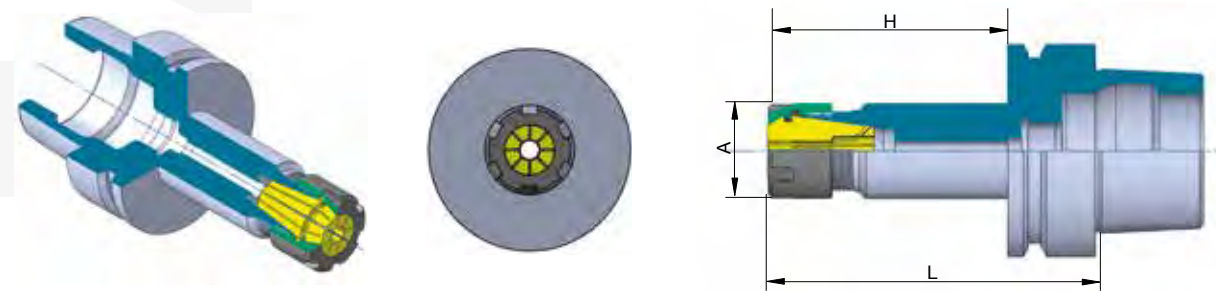
PORTAPINZA ER MINI - COLLET CHUCK ER MINI - HSK25E

Cod.	TYPE	CAPACITA' RANGE	AT2			G6.3/24000		
			A	L	H			
HSK.E.25.55.ER11M	HSK25E H55 ERX11M	1 ÷ 7	16	45	55			
HSK.E.25.55.ER16M	HSK25E H55 ERX16M	1 ÷ 10	22	45	55			



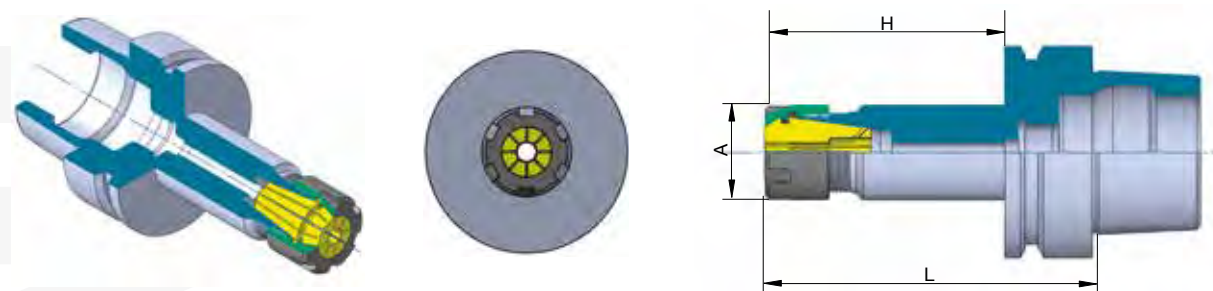
PORTAPINZA ER MINI - COLLET CHUCK ER MINI - HSK32E

Cod.	TYPE	CAPACITA' RANGE	AT2 G6.3/24000		
			A	L	H
HSK.E.32.80.ER11M	HSK32E H80 ERX11M	1 ÷ 7	16	60	80
HSK.E.32.80.ER16M	HSK32E H80 ERX16M	1 ÷ 10	22	60	80



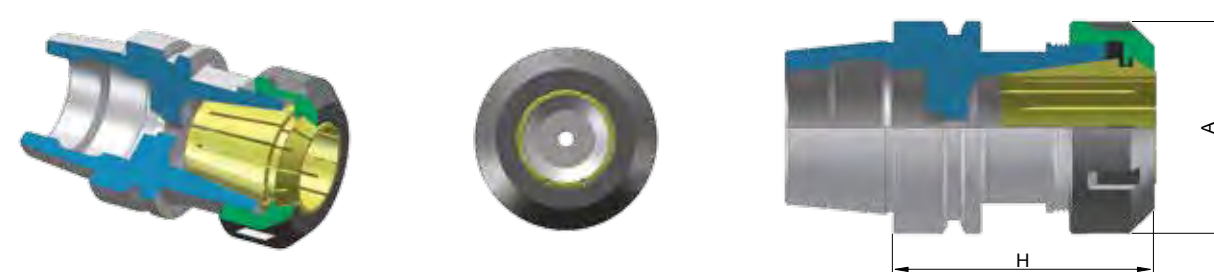
PORTAPINZA ER MINI - COLLET CHUCK ER MINI - HSK40E

Cod.	TYPE	CAPACITA' RANGE	AT2 G6.3/24000		
			A	L	H
HSK.E.40.80.ER11M	HSK40E H80 ERX11M	1 ÷ 7	16	60	80
HSK.E.40.80.ER16M	HSK40E H80 ERX16M	1 ÷ 10	22	60	80



PORTAPINZA ER MINI - COLLET CHUCK ER MINI - HSK50E

Cod.	TYPE	CAPACITA' RANGE	AT2 G6.3/24000		
			A	L	H
HSK.E.50.100.ER11M	HSK50E H100 ERX11M	1 ÷ 7	16	74	100



PORTAPINZA ER - COLLET CHUCK ER - HSK32E

Cod.	TYPE	CAPACITA' RANGE	AT2 G6.3/24000	
			A	H
HSK.E.32.60.ER16	HSK32E H60 ERX16	1 ÷ 10	32	60
HSK.E.32.80.ER25	HSK32E H80 ERX25	2 ÷ 16	42	80



PORTAPINZA ER - COLLET CHUCK ER - HSK40E

Cod.	TYPE	CAPACITA' RANGE	AT2 G6.3/24000	
			A	H
HSK.E.40.60.ER16	HSK40E H60 ERX16	1 ÷ 10	32	60
HSK.E.40.70.ER25	HSK40E H70 ERX25	2 ÷ 16	42	70

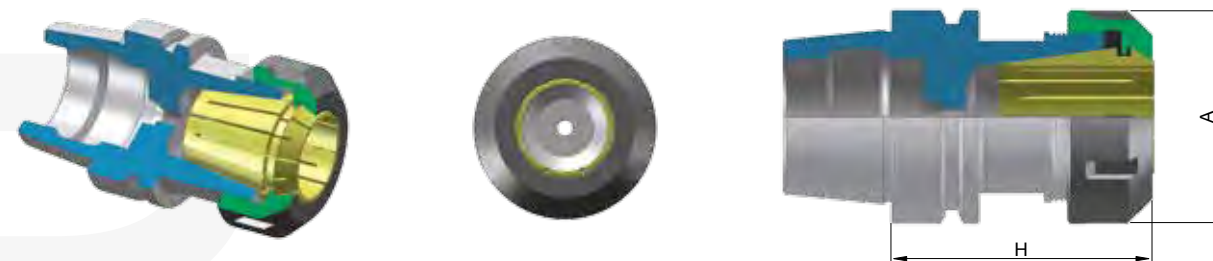
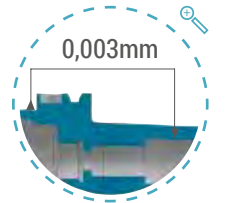
PORTAPINZA EOC DIN 6388

COLLET CHUCK FOR EOC DIN6388 - FORM E



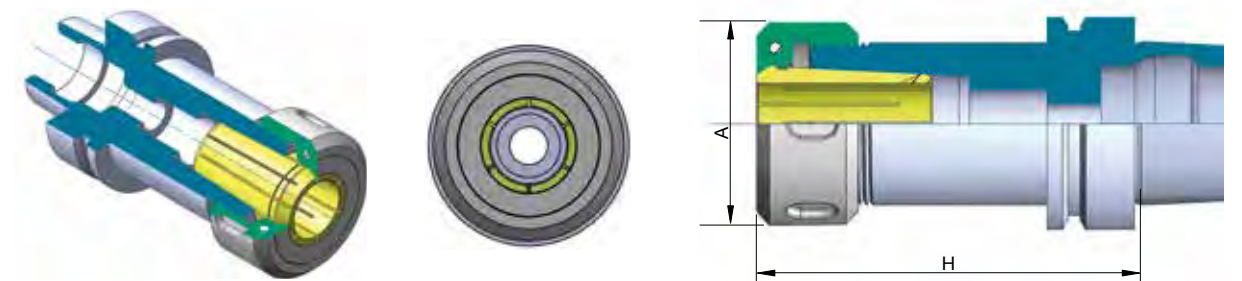
PORTAPINZA ER - COLLET CHUCK ER - HSK50E

Cod.	TYPE	CAPACITA' RANGE	AT2 G6.3/24000	
			A	H
HSK.E.50.100.ER16	HSK50E H100 ERX16	1 ÷ 10	32	100
HSK.E.50.70.ER25	HSK50E H50 ERX25	2 ÷ 16	42	70
HSK.E.50.73.ER32.DX	HSK50E H73 ERX32 DX	3 ÷ 20	50	73
HSK.E.50.73.ER32.SX	HSK50E H73 ERX32 SX	3 ÷ 20	50	73
HSK.E.50.75.ER40.DX	HSK50E H75 ERX40 DX	4 ÷ 30	63	75
HSK.E.50.75.ER40.SX	HSK50E H75 ERX40 SX	4 ÷ 30	63	75



PORTAPINZA ER - COLLET CHUCK ER - HSK63E

Cod.	TYPE	CAPACITA' RANGE	AT2 G6.3/24000	
			A	H
HSK.E.63.73.ER32.DX	HSK63E H73 ERX32 DX	3 ÷ 20	50	73
HSK.E.63.73.ER32.SX	HSK63E H73 ERX32 SX	3 ÷ 20	50	73
HSK.E.63.78.ER40.DX	HSK63E H78 ERX40 DX	4 ÷ 30	63	78
HSK.E.63.78.ER40.SX	HSK63E H78 ERX40 SX	4 ÷ 30	63	78

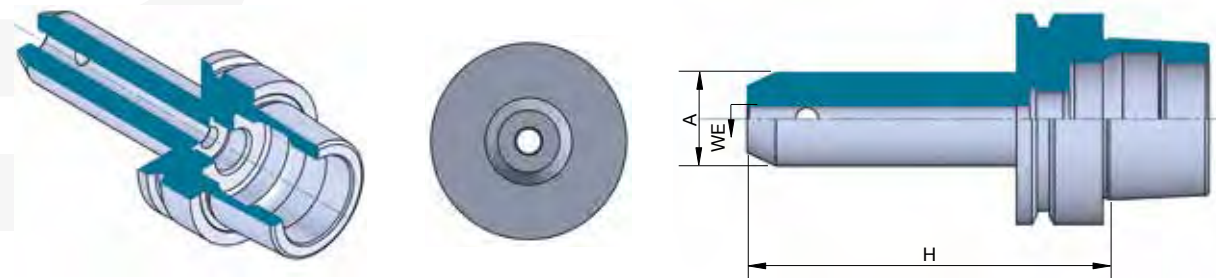
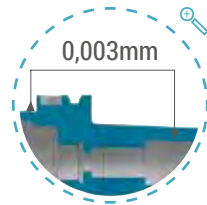


PORTAPINZA PER EOC - COLLET CHUCK FOR EOC - HSK63E

Cod.	TYPE	CAPACITA' RANGE	AT2 G6.3/24000	
			H	A
HSK.E.63.80.EOC25.DX	HSK63E H80 EOC25 DX	2 ÷ 25	80	60
HSK.E.63.80.EOC25.SX	HSK63E H80 EOC25 SX	2 ÷ 25	80	60

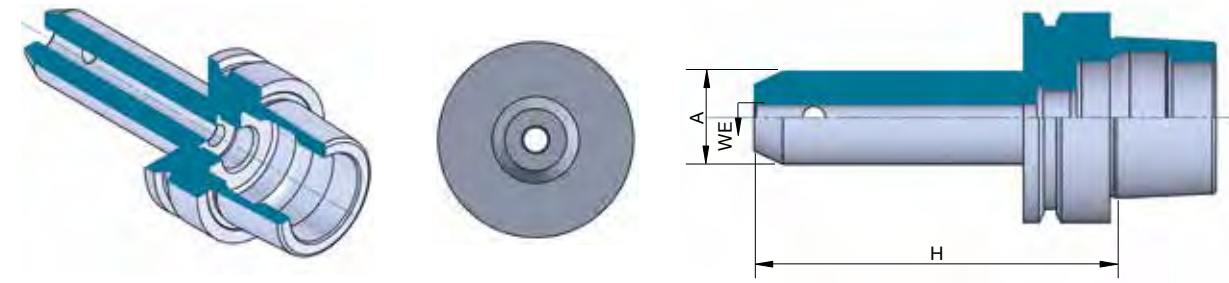
PER FRESE WELDON

END MILL HOLDERS - FORM E



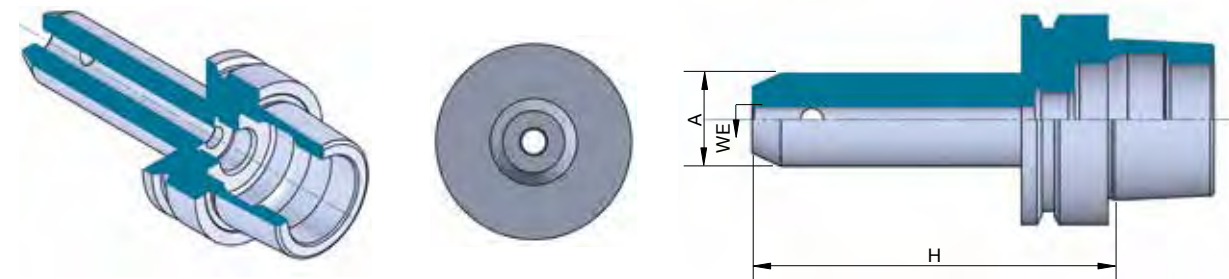
PER FRESE WELDON - END MILL HOLDER - HSK32E

Cod.	TYPE	WE	H	A	AT2	G6.3/24000
HSK.E.32.55.WE6	HSK32E H55 WE6	6	55	25		
HSK.E.32.55.WE8	HSK32E H55 WE8	8	55	28		
HSK.E.32.60.WE10	HSK32E H60 WE10	10	60	35		
HSK.E.32.65.WE12	HSK32E H65 WE12	12	65	42		



PER FRESE WELDON - END MILL HOLDER - HSK40E

Cod.	TYPE	WE	H	A	AT2	G6.3/24000
HSK.E.40.60.WE6	HSK40E H60 WE6	6	60	25		
HSK.E.40.60.WE8	HSK40E H60 WE8	8	60	28		
HSK.E.40.60.WE10	HSK40E H60 WE10	10	60	35		
HSK.E.40.70.WE12	HSK40E H70 WE12	12	70	42		
HSK.E.40.70.WE14	HSK40E H70 WE14	14	70	44		
HSK.E.40.75.WE16	HSK40E H75 WE16	16	75	48		

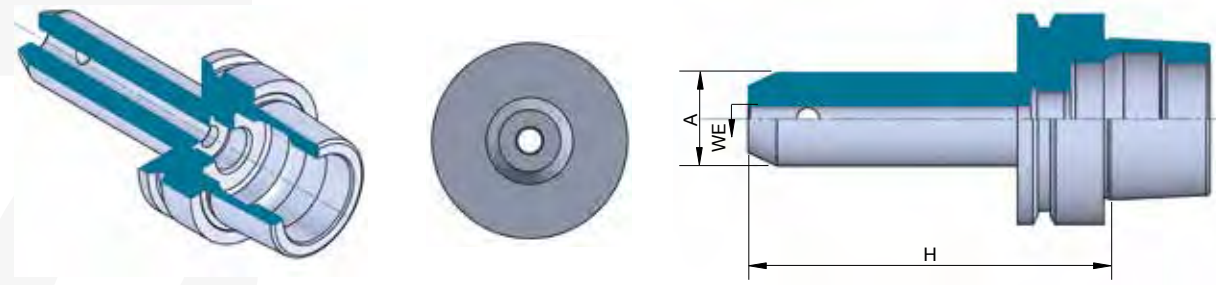


PER FRESE WELDON - END MILL HOLDER - HSK50E

Cod.	TYPE	WE	H	A	AT2	G6.3/24000
HSK.E.50.65.WE6	HSK50E H65 WE6	6	65	25		
HSK.E.50.65.WE8	HSK50E H65 WE8	8	65	28		
HSK.E.50.65.WE10	HSK50E H65 WE10	10	65	35		
HSK.E.50.80.WE12	HSK50E H80 WE12	12	80	42		
HSK.E.50.80.WE14	HSK50E H80 WE14	14	80	44		
HSK.E.50.80.WE16	HSK50E H80 WE16	16	80	48		

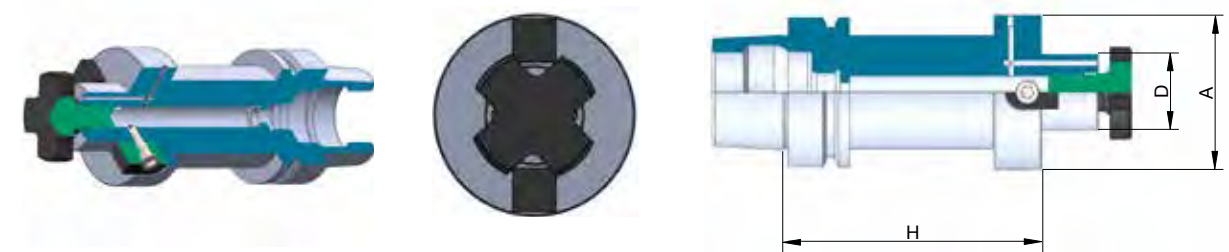
PORTA FRESE FISSO

END MILL HOLDERS - FORM E



PER FRESE WELDON - END MILL HOLDER - HSK63E

Cod.	TYPE	WE	H	A	AT2	G6.3/24000
HSK.E.63.65.WE6	HSK63E H65 WE6	6	65	25		
HSK.E.63.65.WE8	HSK63E H65 WE8	8	65	28		
HSK.E.63.65.WE10	HSK63E H65 WE10	10	65	35		
HSK.E.63.80.WE12	HSK63E H80 WE12	12	80	42		
HSK.E.63.80.WE14	HSK63E H80 WE14	14	80	44		
HSK.E.63.80.WE16	HSK63E H80 WE16	16	80	48		
HSK.E.63.80.WE18	HSK63E H80 WE18	18	80	50		
HSK.E.63.80.WE20	HSK63E H80 WE20	20	80	52		

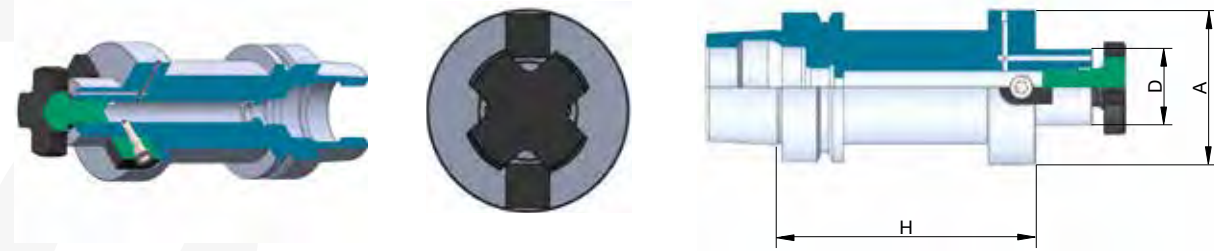
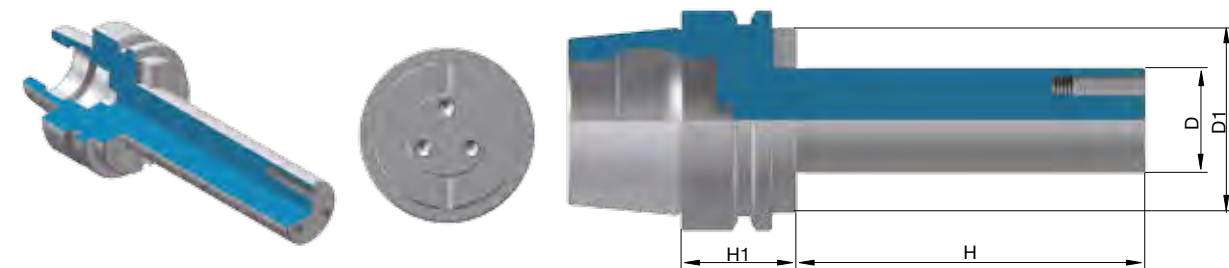


PORTAFRESE FISSO - SHELL END MILL HOLDER - HSK40E

Cod.	TYPE	D	H	A	AT2	G6.3/24000
HSK.E.40.50.D16S	HSK40E H50 D16 FISSO	16	50	38		

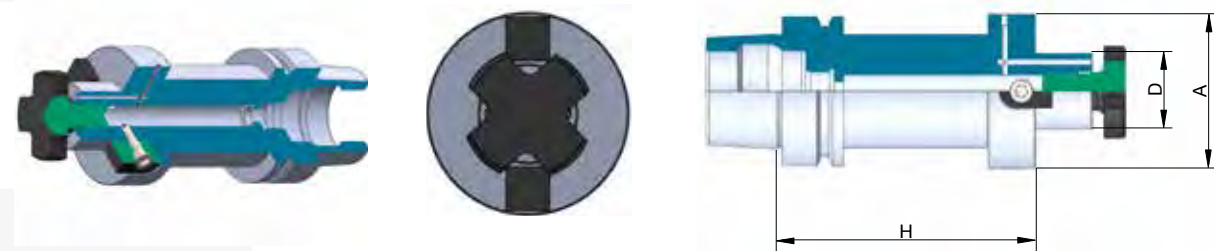
ALBERATI

CUTTER ARBORS - FORM E



PORTAFRESE FISSO - SHELL END MILL HOLDER - HSK50E

Cod.	TYPE	D	AT2		G6.3/24000	
			H	A	H	A
HSK.E.50.50.D16S	HSK50E H50 D16 FISSO	16	50	38		
HSK.E.50.60.D22S	HSK50E H60 D22 FISSO	22	60	48		

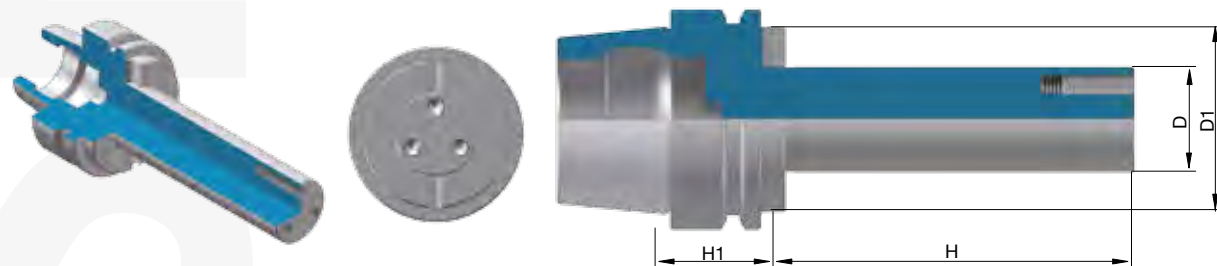


PORTAFRESE FISSO - SHELL END MILL HOLDER - HSK63E

Cod.	TYPE	D	AT2		G6.3/24000	
			H	A	H	A
HSK.E.63.50.D16S	HSK63E H50 D16 FISSO	16	50	38		
HSK.E.63.50.D22S	HSK63E H50 D22 FISSO	22	50	48		

ALBERO PORTA FRESE - CUTTER ARBORS - HSK50E

Cod.	TYPE	H1	D	AT2		G6.3/24000	
				H	D1	H	D1
HSK.E.50.30X100.42	HSK50E D30x100 A=42	42	30	100	45		
HSK.E.50.30X150.42	HSK50E D30x150 A=42	42	30	150	45		
HSK.E.50.30X200.42	HSK50E D30x200 A=42	42	30	200	45		
HSK.E.50.35X100.42	HSK50E D35x100 A=42	42	35	100	49		
HSK.E.50.35X150.42	HSK50E D35x150 A=42	42	35	150	49		
HSK.E.50.35X200.42	HSK50E D35x200 A=42	42	35	200	49		



ALBERO PORTA FRESE - CUTTER ARBORS - HSK63E - A=33

Cod.	TYPE	H1	D	AT2		D1
				G6.3/24000		
HSK.E.63.30X100.33	HSK63E D30X100 A=33	33	30	100		45
HSK.E.63.30X150.33	HSK63E D30X150 A=33	33	30	150		45
HSK.E.63.30X200.33	HSK63E D30X200 A=33	33	30	200		45
HSK.E.63.35X100.33	HSK63E D35X100 A=33	33	35	100		50
HSK.E.63.35X150.33	HSK63E D35X150 A=33	33	35	150		50
HSK.E.63.35X200.33	HSK63E D35X200 A=33	33	35	200		50
HSK.E.63.40X100.33	HSK63E D40X100 A=33	33	40	100		53
HSK.E.63.40X150.33	HSK63E D40X150 A=33	33	40	150		53
HSK.E.63.40X200.33	HSK63E D40X200 A=33	33	40	200		53



ALBERO PORTA FRESE - CUTTER ARBORS - HSK63E - A=42

Cod.	TYPE	H1	D	AT2		D1
				G6.3/24000		
HSK.E.63.30X100.42	HSK63E D30x100 A=42	42	30	100		45
HSK.E.63.30X150.42	HSK63E D30x150 A=42	42	30	150		45
HSK.E.63.30X200.42	HSK63E D30X200 A=42	42	30	200		45
HSK.E.63.35X100.42	HSK63E D35x100 A=42	42	35	100		50
HSK.E.63.35X150.42	HSK63E D35x150 A=42	42	35	150		50
HSK.E.63.35X200.42	HSK63E D35X200 A=42	42	35	200		50
HSK.E.63.40X100.42	HSK63E D40x100 A=42	42	40	100		53
HSK.E.63.40X150.42	HSK63E D40x150 A=42	42	40	150		53
HSK.E.63.40X200.42	HSK63E D40x200 A=42	42	40	200		53T

FLANGIA DI RICAMBIO

Cod.	TYPE	Fig.
FLM.30	FLANGIA DI RICAMBIO MASCHIO D.30	1
FLM.35	FLANGIA DI RICAMBIO MASCHIO D.35	1
FLM.40	FLANGIA DI RICAMBIO MASCHIO D.40	1
FLF.30	FLANGIA DI RICAMBIO FEMMINA D.30	2
FLF.35	FLANGIA DI RICAMBIO FEMMINA D.35	2
FLF.40	FLANGIA DI RICAMBIO FEMMINA D.40	2



HSK - DIN63893 FORMA F

HSK - DIN63893 FORMA F



CALETTAMENTO A CALDO STANDARD

SHRINK FIT HOLDERS STANDARD



IDRAULICO

HYDRAULIC EXPANSIONS CHUCK



PORTAPINZA ER DIN6499

COLLET CHUCK FOR ER DIN6499



PORTAPINZA EOC DIN6388

COLLET CHUCK FOR EOC DIN6388



ALBERATI

CUTTER ARBORS - FORM F

CARATTERISTICHE / SPECIFICATION / CARACTÉRISTIQUES/ TECHNISCHE DATEN

CARATTERISTICHE TECNICHE

- Costruiti in acciaio certificato in barre.
- Eseguiti trattamenti termici da fornitori certificati ISO 9001.
- Rettificati di precisione esternamente, internamente e nelle filettature delle ghiera chiudipinza.
- Controllati con strumenti di misura certificati.
- La tolleranza di precisione dei coni HSK-F è AT2.
- L'errore di concentricità massimo tra il cono e la sede utensile è 0.003 mm.

CARACTÉRISTIQUES

- Fabriqués en bar d'acier certifié.
- Réalisation du traitement thermique par des fournisseurs certifiés ISO 9001.
- Rectification de précision extérieurement, intérieurement et dans les filetages des écrous serre-pince.
- Contrôlés par des instruments de mesure certifiés.
- La tolérance de précision des cônes HSK-F est AT2.
- L'erreur de concentricité maximum entre le cône et le siège de l'outil est de 0.003 mm.

TECHNICAL FEATURES

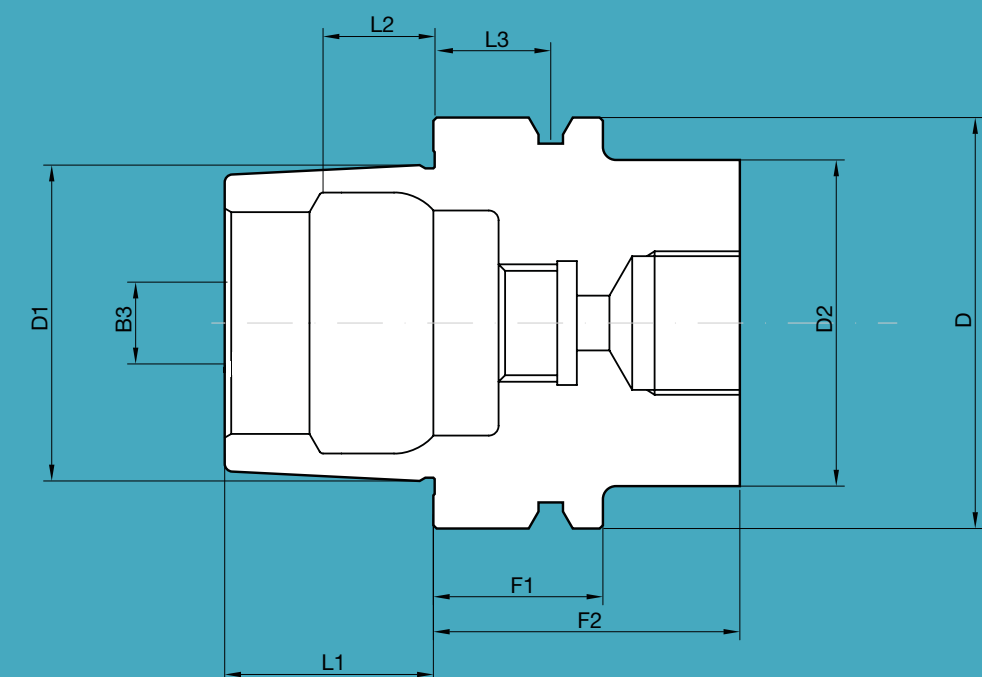
- Manufactured with certificate steel.
- Heat treatments are performed by certified suppliers ISO 9001.
- Precision ground on shank, inside tapers and collet nut threads.
- Tested with high precision inspection and gaging equipment.
- Taper accuracy of HSK-F shanks lower than AT2.
- The maximum error of concentricity between the cone and the seat of tool is 0.003 mm.

MERKMALE

- Gebaut aus zertifiziertem Stabstahl
- Warmbehandlungen von Lieferanten mit Zeugnis ISO 9001
- Genauigkeitgeschliffen aussen, innen und in den Gewinden der Spannmutter für den Zangenverschluss
- Geprüft mit zertifizierten Messinstrumente
- Die Präzisionstoleranz der Kone HSK-F ist AT2
- Die max konzentrische Abweichung zwischen Konus und Werkzeugsitz ist 0.003 mm

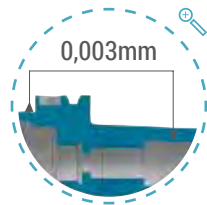
QUOTE / QUOTE / QUOTES / ABMESSUNGEN

HSK	D	D1	D2	L1	L2	L3	F1	F2	COOLANT TUBE
50	50	30	42	20	11,42	18	26	42	M16X1
63	63	38	53	25	14,13	18	26	42	M18X1



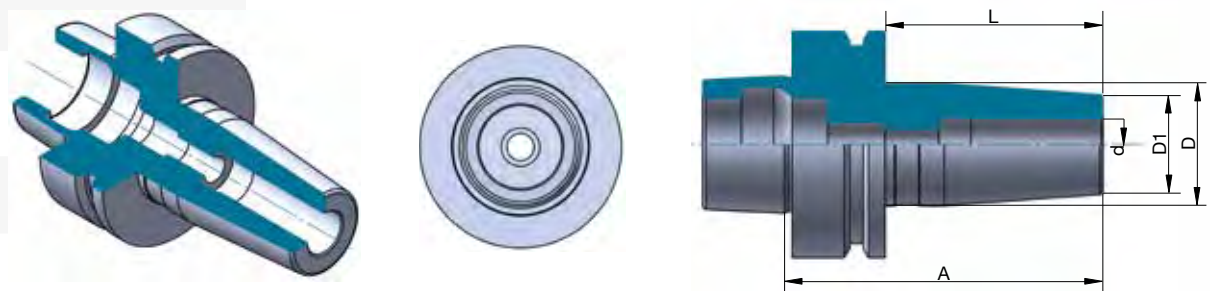
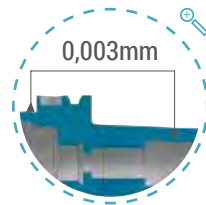
CALETTAMENTO A CALDO STANDARD

SHRINK FIT HOLDERS STANDARD - FORM F



IDRAULICO

HYDRAULIC EXPANSIONS CHUCK - FORM F



CALETTAMENTO STANDARD - SHRINK FIT HOLDER - HSK63F

Cod.	TYPE	d	A	D1	D	L	AT2	
							G6.3/25000	
HSK.F.63.76.CL6	HSK63F H76 CL6	6	76	21	29	50		
HSK.F.63.76.CL8	HSK63F H76 CL8	8	76	21	29	50		
HSK.F.63.76.CL10	HSK63F H76 CL10	10	76	24	32	50		
HSK.F.63.76.CL12	HSK63F H76 CL12	12	76	24	32	50		
HSK.F.63.76.CL16	HSK63F H76 CL16	16	76	27	34	50		
HSK.F.63.76.CL20	HSK63F H76 CL20	20	76	33	42	50		
HSK.F.63.76.CL25	HSK63F H76 CL25	25	76	44	53	50		
HSK.F.63.76.CL30	HSK63F H76 CL30	30	76	44	53	50		

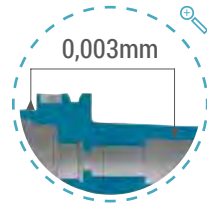


IDRAULICO - HYDRAULIC EXPANSIONS CHUCK - HSK63F

Cod.	TYPE	L	H	D2	L2	D	AT2	
							G6.3/24000	
HSK.F.63.100.HY20	HSK63F H100 D20	100	74	42	58	20		
HSK.F.63.125.HY32	HSK63F H125 D32	125	99	60	99	32		

PORTAPINZA ER DIN6499

COLLET CHUCK ER DIN6499 - FORM F



PORTAPINZA ER - COLLET CHUCK ER - HSK63F

Cod.	TYPE	H	AT2 G6.3/24000	
			CAPACITÀ RANGE	A
HSK.F.63.73.ER32.DX	HSK63F H73 ERX32 DX	73	3 ÷ 20	50
HSK.F.63.73.ER32.SX	HSK63F H73 ERX32 SX	73	3 ÷ 20	50
HSK.F.63.78.ER40.DX	HSK63F H78 ERX40 DX	78	4 ÷ 30	63
HSK.F.63.78.ER40.SX	HSK63F H78 ERX40 SX	78	4 ÷ 30	63

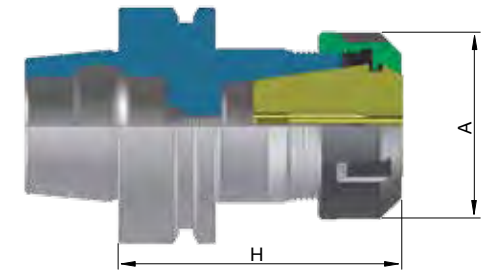
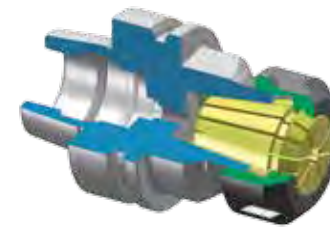
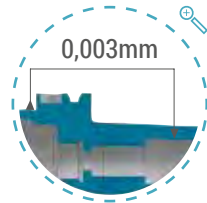


PORTAPINZA ER - COLLET CHUCK ER - HSK50F

Cod.	TYPE	H	AT2 G6.3/24000	
			CAPACITÀ RANGE	A
HSK.F.50.73.ER32.DX	HSK50F H73 ERX32 SX	73	3 ÷ 20	50
HSK.F.50.73.ER32.SX	HSK50F H73 ERX32 SX	73	3 ÷ 20	50
HSK.F.50.75.ER40.DX	HSK50F H75 ERX40 SX	75	4 ÷ 30	63
HSK.F.50.75.ER40.SX	HSK50F H75 ERX40 SX	75	4 ÷ 30	63

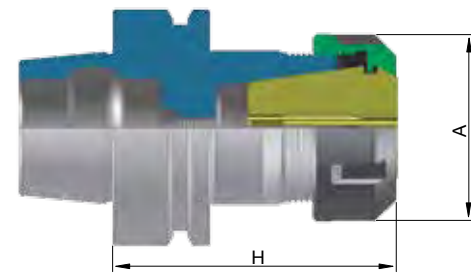
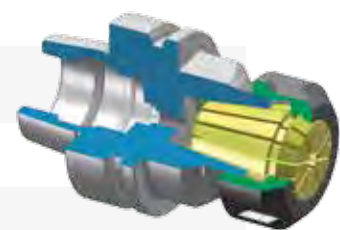
PORTAPINZA EOC DIN6388

COLLET CHUCK EOC DIN6388 - FORM F



PORTAPINZA PER EOC - COLLET CHUCK FOR EOC - HSK63F

Cod.	TYPE	H	AT2 G6.3/24000	
			CAPACITÀ RANGE	A
HSK.F.63.78.EOC25.DX	HSK63F H78 EOC25 DX	78	2 ÷ 25	60
HSK.F.63.78.EOC25.SX	HSK63F H78 EOC25 SX	78	2 ÷ 25	60

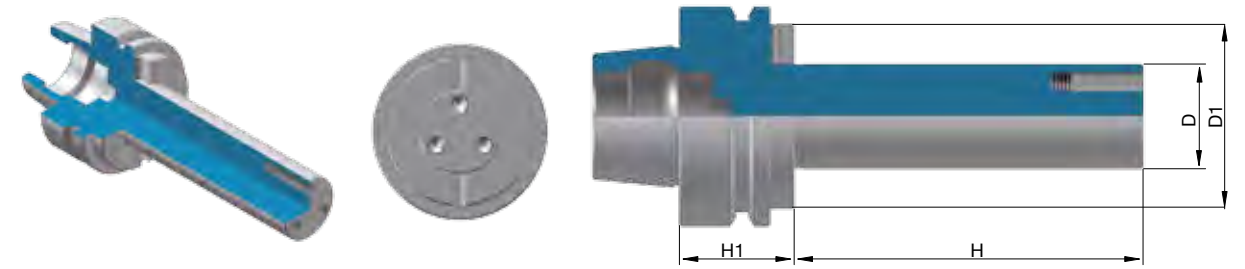
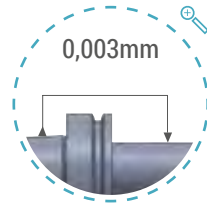


PORTAPINZA PER EOC - COLLET CHUCK FOR EOC - HSK50F

Cod.	TYPE	H	AT2 G6.3/24000	
			CAPACITÀ RANGE	A
HSK.F.50.80.EOC25.DX	HSK50F H80 EOC25 DX	80	2 ÷ 25	60
HSK.F.50.80.EOC25.SX	HSK50F H80 EOC25 SX	80	2 ÷ 25	60

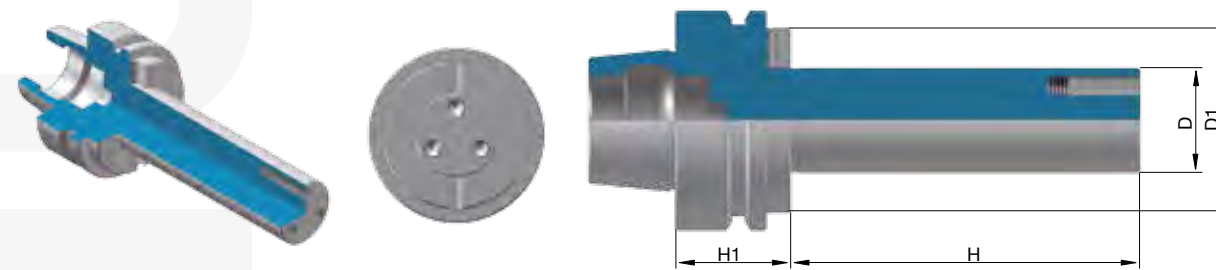
ALBERATI

CUTTER ARBORS - FORM F



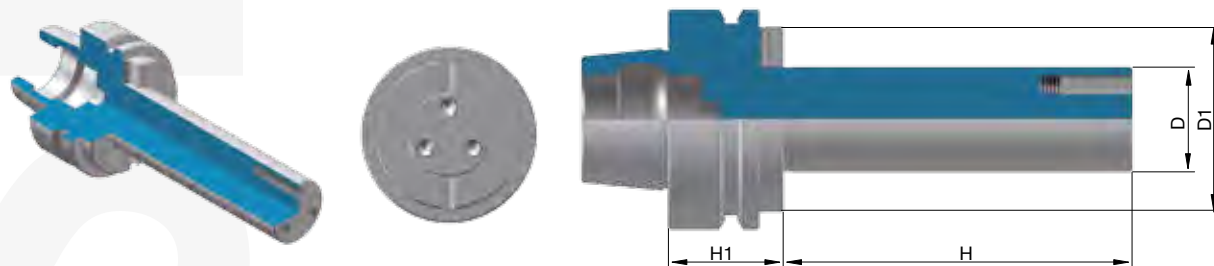
ALBERO PORTA FRESE - CUTTER ARBORS - HSK63F - A=33

Cod.	TYPE	H1	D	AT2		G6.3/24000	
				H	D1		
HSK.F.63.30X80.33	HSK63F D30x80 A=33	33	30	80	45		
HSK.F.63.30X100.33	HSK63F D30x100 A=33	33	30	100	45		
HSK.F.63.30X110.33	HSK63F D30x110 A=33	33	30	110	45		
HSK.F.63.30X120.33	HSK63F D30x120 A=33	33	30	120	45		
HSK.F.63.30X130.33	HSK63F D30x130 A=33	33	30	130	45		
HSK.F.63.30X160.33	HSK63F D30x160 A=33	33	30	160	45		
HSK.F.63.30X200.33	HSK63F D30x200 A=33	33	30	200	45		
HSK.F.63.35X80.33	HSK63F D35x80 A=33	33	35	80	50		
HSK.F.63.35X100.33	HSK63F D35x100 A=33	33	35	100	50		
HSK.F.63.35X110.33	HSK63F D35x110 A=33	33	35	110	50		
HSK.F.63.35X120.33	HSK63F D35x120 A=33	33	35	120	50		
HSK.F.63.35X130.33	HSK63F D35x130 A=33	33	35	130	50		
HSK.F.63.35X160.33	HSK63F D35x160 A=33	33	35	160	50		
HSK.F.63.35X200.33	HSK63F D35x200 A=33	33	35	200	50		
HSK.F.63.40X80.33	HSK63F D40x80 A=33	33	40	80	53		
HSK.F.63.40X100.33	HSK63F D40x100 A=33	33	40	100	53		
HSK.F.63.40X110.33	HSK63F D40x110 A=33	33	40	110	53		
HSK.F.63.40X120.33	HSK63F D40x120 A=33	33	40	120	53		
HSK.F.63.40X130.33	HSK63F D40x130 A=33	33	40	130	53		
HSK.F.63.40X160.33	HSK63F D40x160 A=33	33	40	160	53		
HSK.F.63.40X200.33	HSK63F D40x200 A=33	33	40	200	53		



ALBERO PORTA FRESE - CUTTER ARBORS - HSK50F - A=42

Cod.	TYPE	H1	D	AT2		G6.3/24000	
				H	D1		
HSK.F.50.30X100.42	HSK50F D30x100 A=42	42	30	100	45		
HSK.F.50.30X150.42	HSK50F D30x150 A=42	42	30	150	45		
HSK.F.50.30X200.42	HSK50F D30x200 A=42	42	30	200	45		
HSK.F.50.35X100.42	HSK50F D35x100 A=42	42	35	100	49		
HSK.F.50.35X150.42	HSK50F D35x150 A=42	42	35	150	49		
HSK.F.50.35X200.42	HSK50F D35x200 A=42	42	35	200	49		



ALBERO PORTA FRESE - CUTTER ARBORS - HSK63F - A=42

Cod.	TYPE	H1	D	AT2		D1
				G6.3/24000		
HSK.F.63.30X80.42	HSK63F D30x80 A=42	42	30	80		45
HSK.F.63.30X100.42	HSK63F D30x100 A=42	42	30	100		45
HSK.F.63.30X110.42	HSK63F D30x110 A=42	42	30	110		45
HSK.F.63.30X120.42	HSK63F D30x120 A=42	42	30	120		45
HSK.F.63.30X130.42	HSK63F D30x130 A=42	42	30	130		45
HSK.F.63.30X160.42	HSK63F D30x160 A=42	42	30	160		45
HSK.F.63.30X200.42	HSK63F D30x200 A=42	42	30	200		45
HSK.F.63.35X80.42	HSK63F D35x80 A=42	42	35	80		50
HSK.F.63.35X100.42	HSK63F D35x100 A=42	42	35	100		50
HSK.F.63.35X110.42	HSK63F D35x110 A=42	42	35	110		50
HSK.F.63.35X120.42	HSK63F D35x120 A=42	42	35	120		50
HSK.F.63.35X130.42	HSK63F D35x130 A=42	42	35	130		50
HSK.F.63.35X160.42	HSK63F D35x160 A=42	42	35	160		50
HSK.F.63.35X200.42	HSK63F D35x200 A=42	42	35	200		50
HSK.F.63.40X80.42	HSK63F D40x80 A=42	42	40	80		53
HSK.F.63.40X100.42	HSK63F D40x100 A=42	42	40	100		53
HSK.F.63.40X110.42	HSK63F D40x110 A=42	42	40	110		53
HSK.F.63.40X120.42	HSK63F D40x120 A=42	42	40	120		53
HSK.F.63.40X130.42	HSK63F D40x130 A=42	42	40	130		53
HSK.F.63.40X160.42	HSK63F D40x160 A=42	43	40	160		53
HSK.F.63.40X200.42	HSK63F D40x200 A=42	43	40	200		53

FLANGIA DI RICAMBIO

Cod.	TYPE	Fig.
FLM.30	FLANGIA DI RICAMBIO MASCHIO D.30	1
FLM.35	FLANGIA DI RICAMBIO MASCHIO D.35	1
FLM.40	FLANGIA DI RICAMBIO MASCHIO D.40T	1
FLF.30	FLANGIA DI RICAMBIO FEMMINA D.30	2
FLF.35	FLANGIA DI RICAMBIO FEMMINA D.35	2
FLF.40	FLANGIA DI RICAMBIO FEMMINA D.40	2

