

Collet chucks for collets ISO 15488 (DIN 6499) ER-system
Mandrins à pinces pour pinces ISO 15488 (DIN 6499) système ER

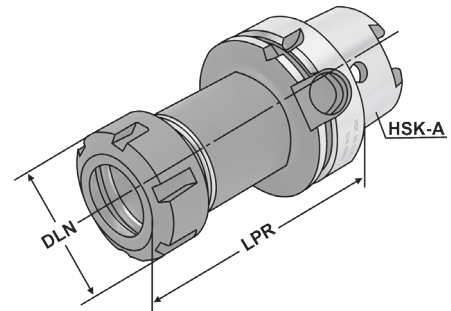
(DIN 69893-1 | HSK-A)



Verwendung:
Zur Aufnahme von Werkzeugen mit Zylinderschaft in Spannzangen.

Application:
For mounting straight-shank tools in collets.

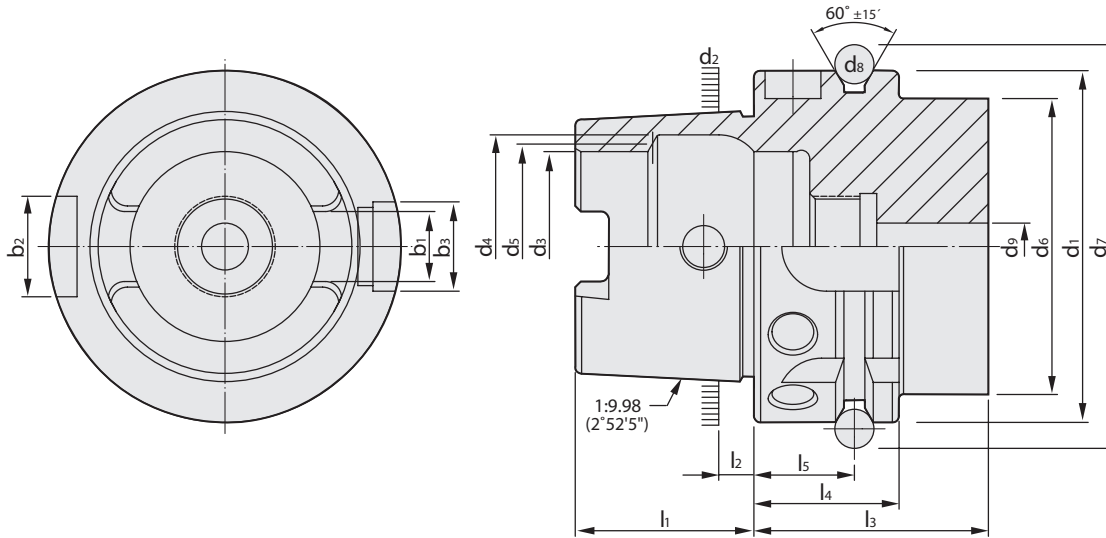
Application:
Destiné à recevoir les outils avec les queues de forme cylindrique dans les pinces de serrage.



Bestell-Nr. Order no. Référence	HSK	DCONWS Spannbereich Capacity Capacité	Typ	LPR	DLN	THID
A63.02.10.130	HSK-A 63	1 - 10	426E ER 16	130	32	M10 x 1,5
A63.02.13.130	HSK-A 63	2 - 13	428E ER 20	130	35	M12 x 1,75
A63.02.16.130	HSK-A 63	2 - 16	430E ER 25	130	42	M16 x 2,0
A63.02.20.130	HSK-A 63	2 - 20	470E ER 32	130	50	M16 x 2,0
A63.02.26.130	HSK-A 63	3 - 26	472E ER 40	130	63	M16 x 2,0
A63.02.10.1	HSK-A 63	1 - 10	426E ER 16	160	32	M10 x 1,5
A63.02.13.1	HSK-A 63	2 - 13	428E ER 20	160	35	M12 x 1,75
A63.02.16.1	HSK-A 63	2 - 16	430E ER 25	160	42	M16 x 2,0
A63.02.20.1	HSK-A 63	2 - 20	470E ER 32	160	50	M16 x 2,0
A63.02.26.1	HSK-A 63	3 - 26	472E ER 40	160	63	M16 x 2,0
A63.02.10.3	HSK-A 63	1 - 10	426E ER 16	200	32	M10 x 1,5
A63.02.13.3	HSK-A 63	2 - 13	428E ER 20	200	35	M12 x 1,75
A63.02.16.3	HSK-A 63	2 - 16	430E ER 25	200	42	M16 x 2,0
A63.02.20.3	HSK-A 63	2 - 20	470E ER 32	200	50	M16 x 2,0
A63.02.26.3	HSK-A 63	3 - 26	472E ER 40	200	63	M16 x 2,0
A100.02.10	HSK-A 100	1 - 10	426E ER 16	100	32	M10 x 1,5
A100.02.16	HSK-A 100	2 - 16	430E ER 25	100	42	M16 x 2,0
A100.02.20	HSK-A 100	2 - 20	470E ER 32	100	50	M16 x 2,0
A100.02.26	HSK-A 100	3 - 26	472E ER 40	120	63	M16 x 2,0
A100.02.10.2	HSK-A 100	1 - 10	426E ER 16	160	32	M10 x 1,5
A100.02.16.2	HSK-A 100	2 - 16	430E ER 25	160	42	M16 x 2,0
A100.02.20.2	HSK-A 100	2 - 20	470E ER 32	160	50	M16 x 2,0
A100.02.26.2	HSK-A 100	3 - 26	472E ER 40	160	63	M16 x 2,0
A100.02.10.3	HSK-A 100	1 - 10	426E ER 16	200	32	M10 x 1,5
A100.02.16.3	HSK-A 100	2 - 16	430E ER 25	200	42	M16 x 2,0
A100.02.20.3	HSK-A 100	2 - 20	470E ER 32	200	50	M16 x 2,0
A100.02.26.3	HSK-A 100	3 - 26	472E ER 40	200	63	M16 x 2,0

Lieferumfang: Mit gewuchteter Spannmutter
Delivery: With balanced clamping nut
Livraison: Avec écrou de serrage équilibré





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HSK	d ₁ h10	d ₂ H10	d ₃ H10	d ₄ H11	d ₅	d ₆ max	d ₇ 0 -0,1	d ₈	d ₉ max	l ₁ 0 -0,2	l ₂	l ₃ min	l ₄ 0 -0,1	l ₅ ±0,1	b ₁ ±0,04	b ₂ H10	b ₃ H10
25	25	19,006	14	16,4	15	20	28,5	3	3	13	2,5	20	10	4,5	6,05	6	7
32	32	24,007	17	20,5	19	26	37	4	4,2	16	3,2	35	20	16	7,05	7	9
40	40	30,007	21	25,5	23	34	45	4	5	20	4	35	20	16	8,05	9	11
50	50	38,009	26	32	29	42	59,3	7	6,8	25	5	42	26	18	10,54	12	14
63	63	48,010	34	40	37	53	72,3	7	8,4	32	6,3	42	26	18	12,54	16	18
80	80	60,012	42	50	46	68	88,8	7	10,2	40	8	42	26	18	16,04	18	20
100	100	75,013	53	63	58	88	109,75	7	12	50	10	45	29	20	20,02	20	22
125	125	95,016	67	80	73	111	134,75	7	14	63	12,5	45	29	20	25,02	25	28

Vorgewuchtet G 6,3 15.000 min-1
 Pre-balanced G 6,3 15.000 min-1
 Pré-équilibré G 6,3 15.000 min-1

G 2,5 Feinwuchten gegen Aufpreis
 G 2.5 Fine balancing at extra charge
 G 2,5 Equilibrage fin contre un supplément

Werkstoff: Legierter Einsatzstahl mit einer Zugfestigkeit im Kern von min. 950 N / mm². Einsatzgehärtet HRC 60 ± 2 (HV 700 ± 50), Härtetiefe 0,8 mm ± 0,2 mm, brüniert und präzisionsgeschliffen.

Material: Alloyed case-hardened steel, tensile core strength of min. 950 N / mm². Case hardened HRC 60 ± 2 (HV 700 ± 50), hardening depth 0.8 mm ± 0.2 mm, black-finished and precisely grinded.

Matière: Acier de cémentation allié. Résistance à la traction dans le noyau de min 950 N / mm². Cémentation à HRC 60 ± 2 (HV 700 ± 50), profondeur de cémentation 0,8 mm ± 0,2 mm, bruni et rectifié précisément.

Normative Verweise:

ISO 12164-1:2001-12
 Hohlkegelschnittstelle mit Plananlage
 - Teil 1: Schäfte; Maße

Normative references:

ISO 12164-1:2001
 Hollow taper interface with flange contact surface
 - Part 1: Shanks; Dimensions

Références normatives:

ISO 12164-1:2001
 Interfaces à cône creux-face
 - Partie 1: Queues; Dimensions

DIN 69893-1:2011
 Kegel-Hohlschäfte mit Plananlage besteht aus:
 - Teil 1: Kegel-Hohlschäfte Form A und Form C;
 Maße und Ausführung

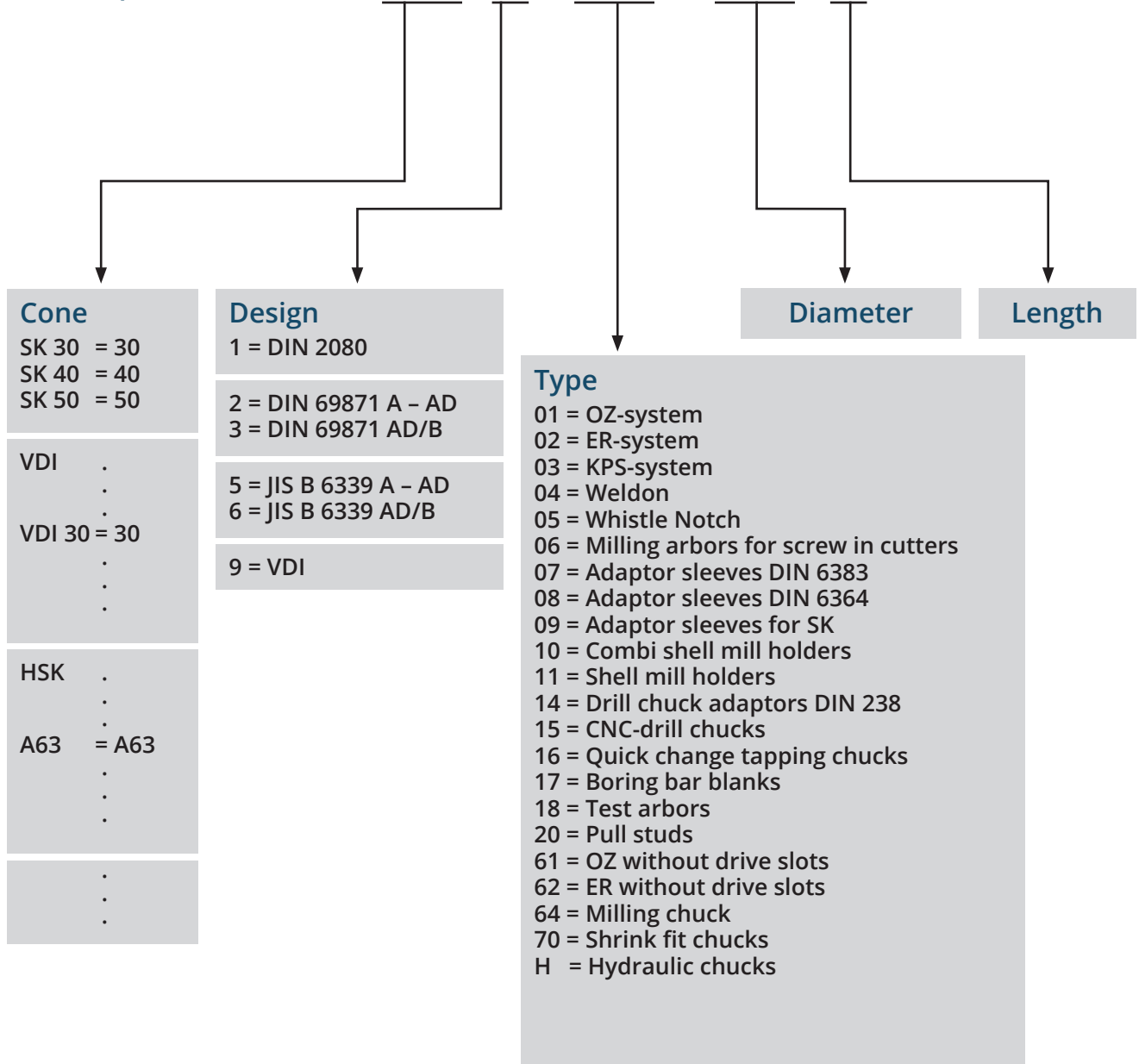
DIN 69893-1:2011
 Hollow taper shanks with flange contact surface:
 - Part 1: Hollow taper shanks type A and type C;
 Dimensions and design

DIN 69893-1:2011
 Queues creuses coniques à surface de contact plane:
 - Partie 1: Queues creuses coniques type A et type C;
 Dimensions et conception



Example:

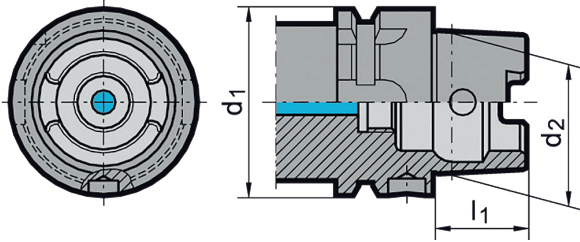
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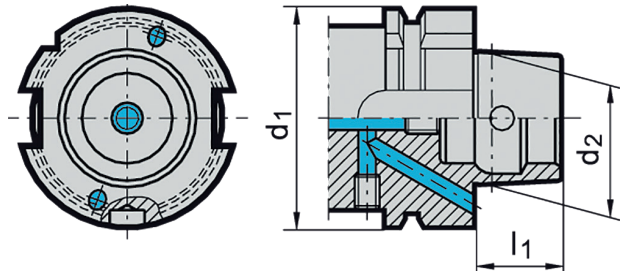
DIN 69063-1 (ISO 12164-1) Form A

Standard type for machining centres and milling machines. HSK for automatic tool change with gripper groove and index notch. Manual operation is via access hole in taper. Form B relies on driving dogs on the joint face as shank isn't slotted. Torque is transmitted through highly accurate connection.



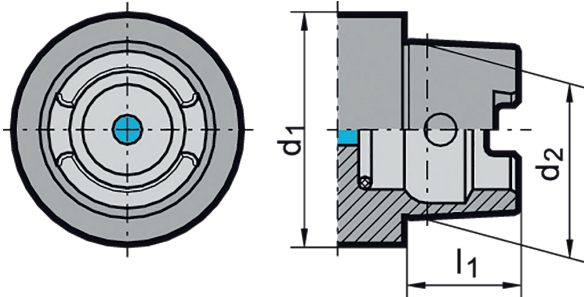
DIN 69063-2 (ISO 12164-1) Form B

For machining centres, milling and turning machines. With enlarged flange size for rigid machining. For automatic tool change. Coolant supply through the flange. Drive keys at the flange. Hole for data carrier DIN STD 69873 at the flange.



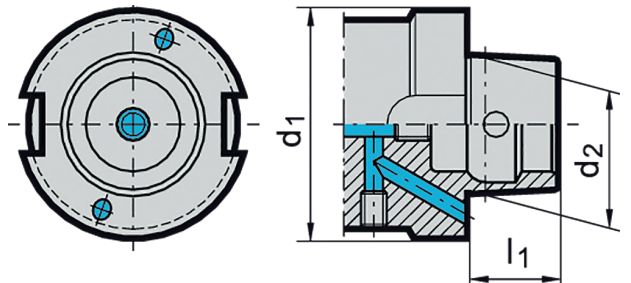
DIN 69063-1 (ISO 12164-1) Form C

For transfer lines, special machines and modular tooling systems. HSK for manual tool change. Operation is via access hole in taper. Form D relies on driving dogs on the joint face as shank isn't slotted. Torque is transmitted through highly accurate connection.



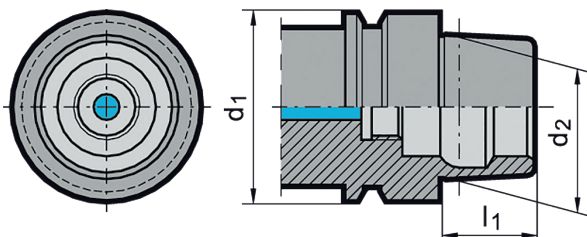
DIN 69063-2 (ISO 12164-2) Form D

For special machines. With enlarged flange size for rigid machining. For manual tool change. Coolant supply through the flange. Drive keys at the flange.



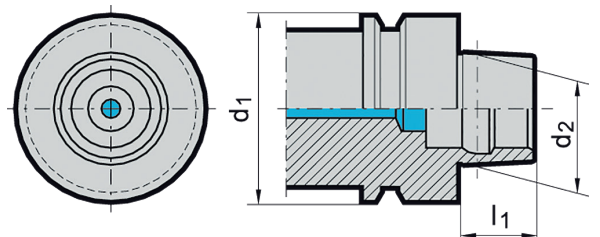
DIN 69063-5 Form E

For high-speed applications. For automatic tool change. HSK for automatic tool change. Torque is transmitted through highly accurate connection. Version with access hole acc. to DIN 69893-1 by arrangement.



DIN 69063-6 Form F

For high-speed applications mainly in woodworking industries. HSK for automatic tool change. Torque is transmitted through highly accurate connection. Version with access hole acc. to DIN 69893-1 by arrangement.





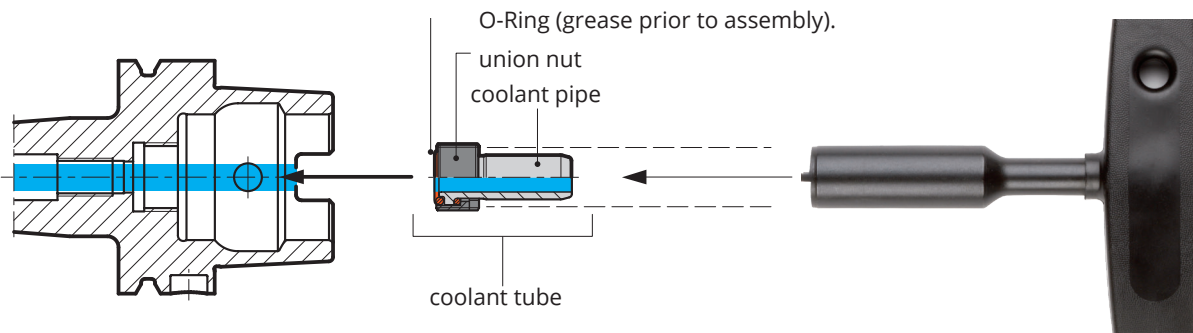
HSK form A, -B or -D holders must be equipped with a coolant tube.

Using holders without a coolant tube could cause unseen machine spindle damage.

DIN 69893 Form C, -E and -F do not require a coolant tube. Through coolant and sealing functions are provided by the locking unit.

The coolant tube is ideally mounted in vertical direction – from the bottom to the top. In this manner the sealing ring is prevented from being compressed during location which would cause the loss of its sealing function.

After mounting, the coolant pipe can be moved only to a minimum degree according to DIN ($\pm 1^\circ$).



Installation

1. The HSK holder must be clean, free of swarf and undamaged.
2. Grease the O-rings prior to assembly.
3. Centrally insert the complete coolant tube (coolant pipe, union nut and 2 O-rings) in the HSK with the assistance of the socket spanner.
4. Screw in the coolant tube and tighten (see table for torque figures)
5. Check coolant pipe for radial mobility.

Torque figures

for HSK	Mt (Nm)
32	7
40	11
50	15
63	20
80	25
100	30