



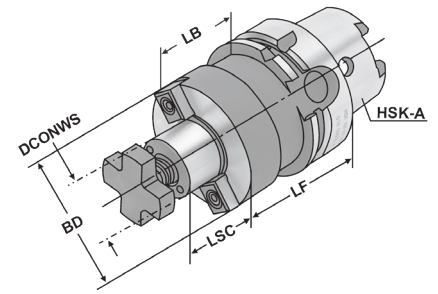
Shell mill holders DIN 6357 with enlarged contact face and coolant exit bores on the end face
 Porte-fraises à trou lisse DIN 6357 avec surface de contact agrandie et arrosage frontal



Verwendung:
 Zur Aufnahme von Messerköpfen und Fräsern mit Quernut.

Application:
 For mounting milling cutters with transversal groove.

Application:
 Destiné à recevoir les fraises et les fraises avec des rainures transversales.



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Bestell-Nr. Order no. Référence	HSK	DCONWS	TCDCON	LF	LSC	LB	BD
A40.11.16	HSK-A 40	16	h6	50	17	30	40
A40.11.22	HSK-A 40	22	h6	50	19	30	48
A40.11.27	HSK-A 40	27	h6	55	21	35	60
A40.11.32	HSK-A 40	32	h6	60	24	40	78
A50.11.16	HSK-A 50	16	h6	50	17	24	40
A50.11.22	HSK-A 50	22	h6	60	19	34	48
A50.11.27	HSK-A 50	27	h6	60	21	34	60
A50.11.32	HSK-A 50	32	h6	60	24	34	78
A63.11.16	HSK-A 63	16	h6	50	17	24	38
A63.11.22	HSK-A 63	22	h6	50	19	24	48
A63.11.27	HSK-A 63	27	h6	60	21	34	58
A63.11.32	HSK-A 63	32	h6	60	24	34	78
A63.11.40	HSK-A 63	40	h6	60	27	34	88
A63.11.16.1	HSK-A 63	16	h6	100	17	74	38
A63.11.22.1	HSK-A 63	22	h6	100	19	74	48
A63.11.27.1	HSK-A 63	27	h6	100	21	74	58
A63.11.32.1	HSK-A 63	32	h6	100	24	74	78
A63.11.40.1	HSK-A 63	40	h6	100	27	74	88
A63.11.16.2	HSK-A 63	16	h6	160	17	134	38
A63.11.22.2	HSK-A 63	22	h6	160	19	134	48
A63.11.27.2	HSK-A 63	27	h6	160	21	134	58
A63.11.32.2	HSK-A 63	32	h6	160	24	134	78
A63.11.40.2	HSK-A 63	40	h6	160	27	134	88

DCONWS = 40

Für große Planfräser mit vier zusätzlichen Gewindebohrungen nach DIN 2079.
 For large diameter face mill cutters with four additional threaded holes according to DIN 2079.
 Pour fraises à surfacer à grands diamètres avec 4 taraudages supplémentaires suivant DIN 2079.

Lieferumfang: Mit Mitnehmersteinen, Kreuzschraube und Zylinderkopfschraube nach DIN 912 für Fräser mit innerer Kühlmittelzufuhr.

Delivery: With drivers, cross head retaining screw and cylinder head retaining screw for cutters with central coolant.

Livraison: Avec tenon d entraînement, vis cruciforme et vis à têtes cylindrique suivant DIN 912 pour les fraises avec arrosage central.





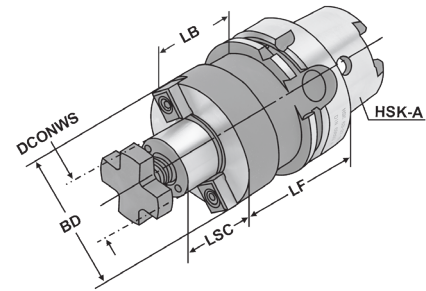
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Verwendung:
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 Destiné à recevoir les fraises et les fraises avec des rainures transversales.



Bestell-Nr. Order no. Référence	HSK	DCONWS	TCDCON	LF	LSC	LB	BD
A80.11.22	HSK-A 80	22	h6	50	19	24	48
A80.11.27	HSK-A 80	27	h6	50	21	24	58
A80.11.32	HSK-A 80	32	h6	60	24	34	78
A80.11.40	HSK-A 80	40	h6	60	27	34	88
A100.11.16	HSK-A 100	16	h6	50	17	21	38
A100.11.22	HSK-A 100	22	h6	50	19	21	48
A100.11.27	HSK-A 100	27	h6	50	21	21	58
A100.11.32	HSK-A 100	32	h6	50	24	21	78
A100.11.40	HSK-A 100	40	h6	70	27	41	88
A100.11.60	HSK-A 100	60	h6	70	40	41	130
A100.11.16.1	HSK-A 100	16	h6	100	17	71	38
A100.11.22.1	HSK-A 100	22	h6	100	19	71	48
A100.11.27.1	HSK-A 100	27	h6	100	21	71	58
A100.11.32.1	HSK-A 100	32	h6	100	24	71	78
A100.11.40.1	HSK-A 100	40	h6	100	27	71	88
A100.11.16.2	HSK-A 100	16	h6	160	17	131	38
A100.11.22.2	HSK-A 100	22	h6	160	19	131	48
A100.11.27.2	HSK-A 100	27	h6	160	21	131	58
A100.11.32.2	HSK-A 100	32	h6	160	24	131	78
A100.11.40.2	HSK-A 100	40	h6	160	27	131	88

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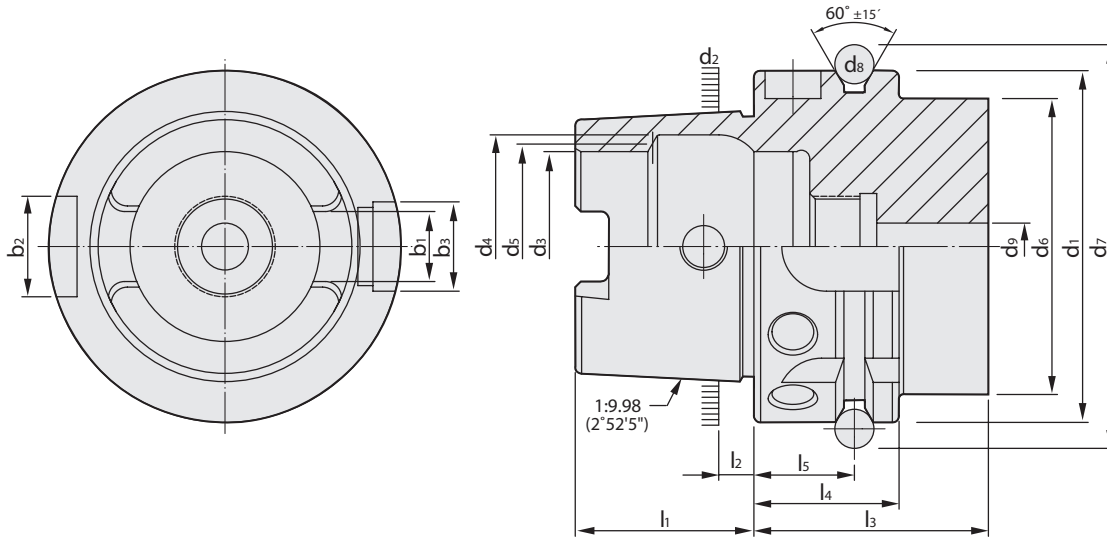
DCONWS = 40 & 60 Für große Planfräser mit vier zusätzlichen Gewindebohrungen nach DIN 2079.
 For large diameter face mill cutters with four additional threaded holes according to DIN 2079.
 Pour fraises à surfacer à grands diamètres avec 4 taraudages supplémentaires suivant DIN 2079.

Lieferumfang: Mit Mitnehmersteinen, Kreuzschraube und Zylinderkopfschraube nach DIN 912 für Fräser mit innerer Kühlmittelzufuhr.
 Bei DCONWS = 60 nur mit vier Befestigungsschrauben nach DIN 912.

Delivery: With drivers, cross head retaining screw and cylinder head retaining screw for cutters with central coolant.
 For DCONWS = 60 only with four fixation screws according to DIN 912.

Livraison: Avec tenon d entraînement, vis cruciforme et vis à têtes cylindrique suivant DIN 912 pour les fraises avec arrosage central.
 Pour DCONWS = 60 est seulement avec quatre vis de fixation suivant DIN 912.





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HSK	d ₁	d ₂	d ₃	d ₄	d ₅	d ₆	d ₇	d ₈	d ₉	l ₁	l ₂	l ₃	l ₄	l ₅	b ₁	b ₂	b ₃
	h10		H10	H11		max	⁰ _{-0,1}		max	⁰ _{-0,2}		min	⁰ _{-0,1}	±0,1	±0,04	H10	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

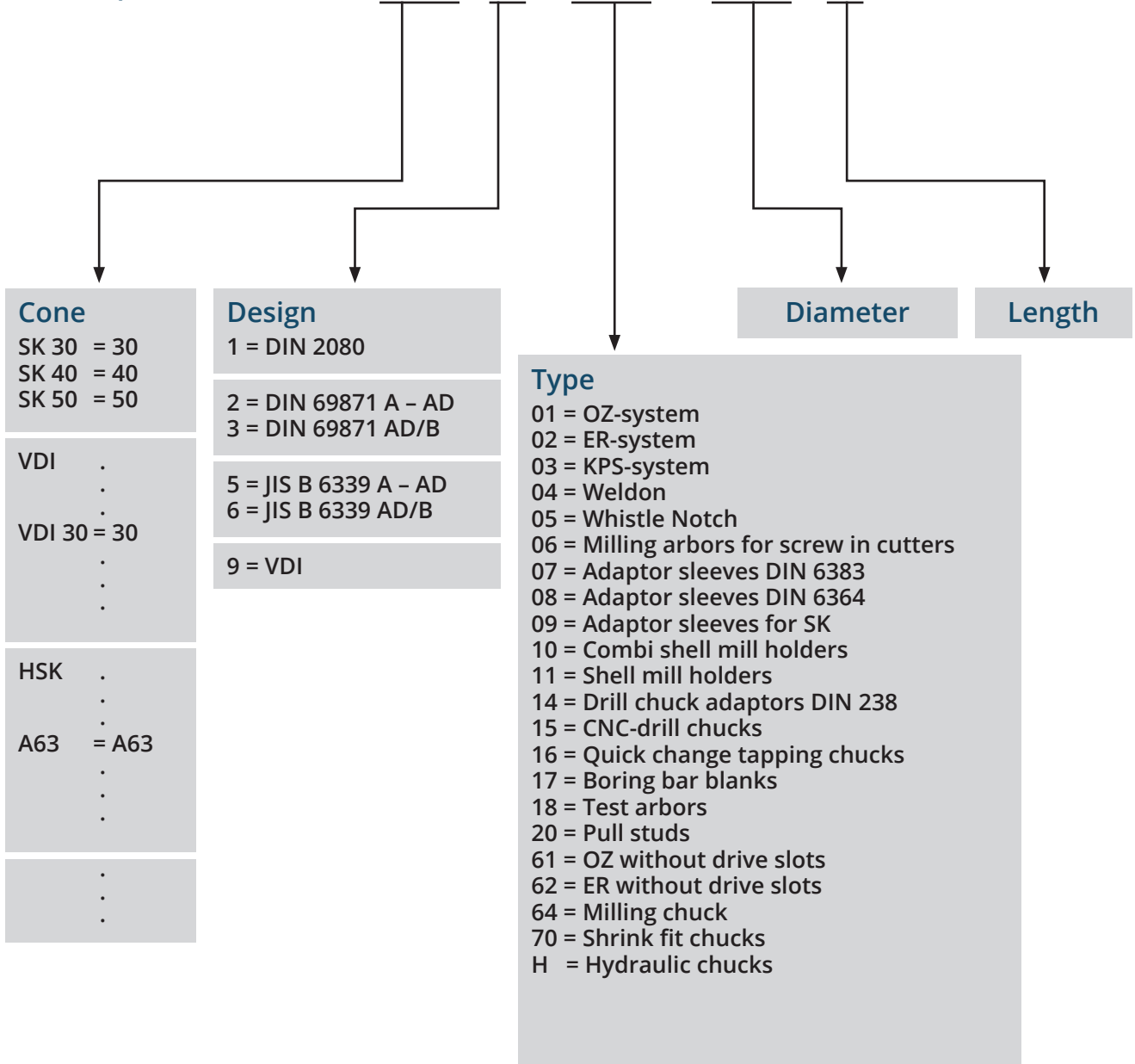
DIN 69893-1:2011
 Hollow taper shanks with flange contact surface:
 - Part 1: Hollow taper shanks type A and type C;
 Dimensions and design

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:

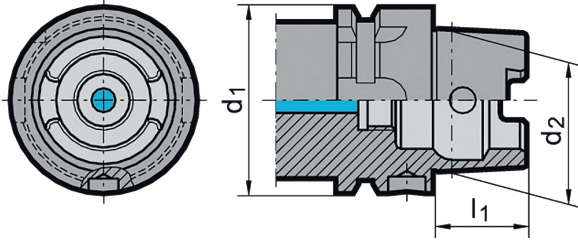
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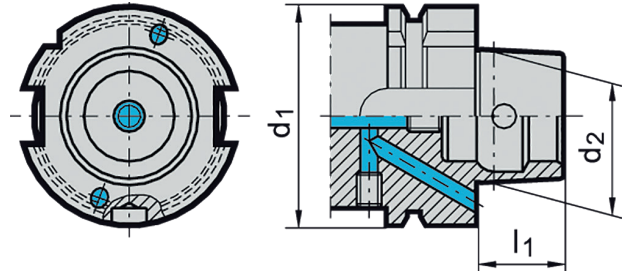
DIN 69063-1 (ISO 12164-1) Form A

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.



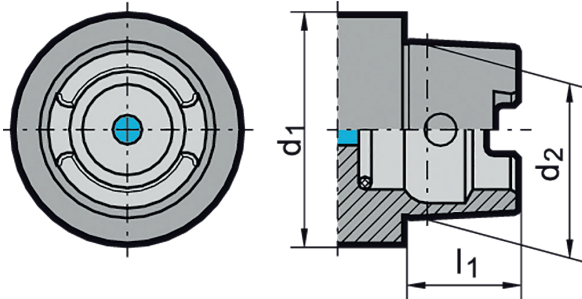
DIN 69063-2 (ISO 12164-1) Form B

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.



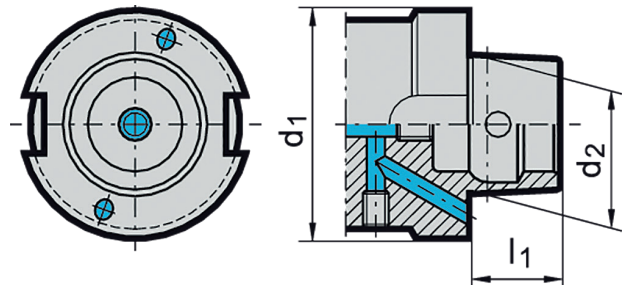
DIN 69063-1 (ISO 12164-1) Form C

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.



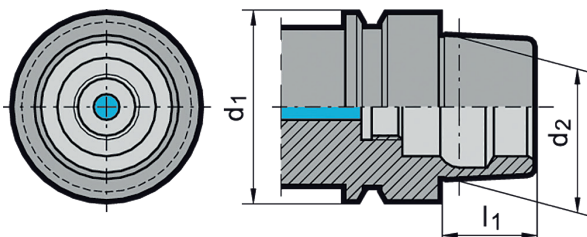
DIN 69063-2 (ISO 12164-2) Form D

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



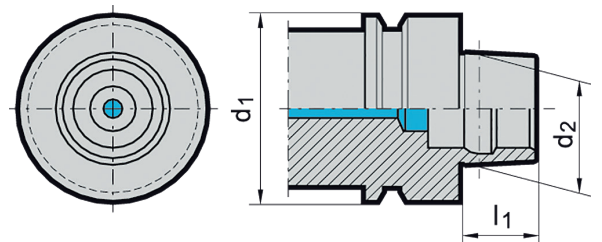
DIN 69063-5 Form E

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.





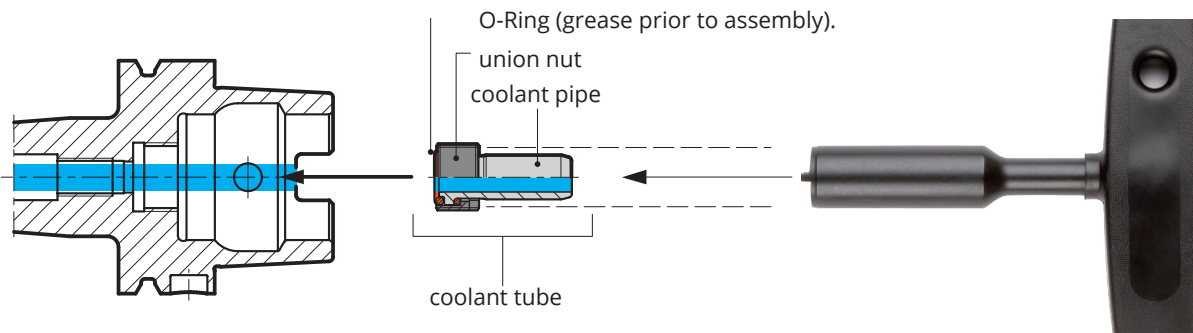
HSK form A, -B or -D holders must be equipped with a coolant tube.

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