



Combi shell mill holders DIN 6358
 Porte-fraises à double usage DIN 6358

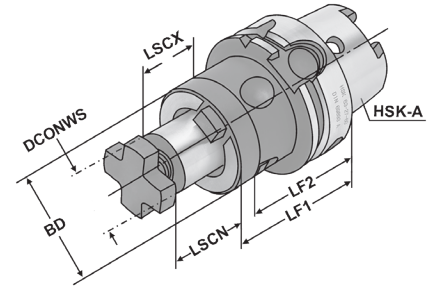
(DIN 69893-1 | HSK-A)



Verwendung:
 Zur Aufnahme von Walzen-, Walzenstirnfräsern oder Messerköpfen mit Längs- oder Quernut.

Application:
 For mounting milling cutters with transverse or longitudinal groove.

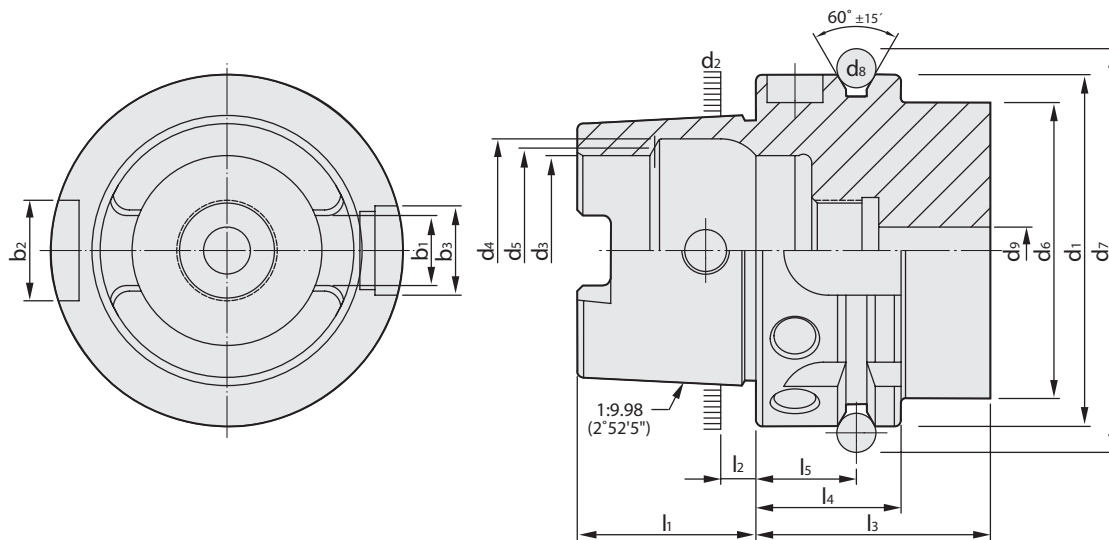
Application:
 Destiné à recevoir les porte-fraises, les fraises cylindriques ou les têtes de fraisage avec rainure longitudinale et transversale.



ISO 12164 Form A $\leq 5\mu\text{m}$ G6.3 15.000 min⁻¹ RFID Chip DIN 6358 h6

| Bestell-Nr. Order no. Référence | HSK | DCONWS | TCDCON | LF1 | LF2 | LSCN | LSCX | BD |
|---------------------------------------|-----------|--------|--------|-----|-----|------|------|----|
| A32.10.16 | HSK-A 32 | 16 | h6 | 55 | 45 | 17 | 27 | 32 |
| A32.10.22 | HSK-A 32 | 22 | h6 | 55 | 43 | 19 | 31 | 40 |
| A32.10.27 | HSK-A 32 | 27 | h6 | 65 | 53 | 21 | 33 | 48 |
| A32.10.32 | HSK-A 32 | 32 | h6 | 65 | 51 | 24 | 38 | 58 |
| A32.10.40 | HSK-A 32 | 40 | h6 | 65 | 51 | 27 | 41 | 70 |
| | | | | | | | | |
| A40.10.16 | HSK-A 40 | 16 | h6 | 50 | 40 | 17 | 27 | 32 |
| A40.10.22 | HSK-A 40 | 22 | h6 | 50 | 38 | 19 | 31 | 40 |
| A40.10.27 | HSK-A 40 | 27 | h6 | 65 | 53 | 21 | 33 | 48 |
| A40.10.32 | HSK-A 40 | 32 | h6 | 65 | 51 | 24 | 38 | 58 |
| | | | | | | | | |
| A50.10.16 | HSK-A 50 | 16 | h6 | 50 | 40 | 17 | 27 | 32 |
| A50.10.22 | HSK-A 50 | 22 | h6 | 50 | 38 | 19 | 31 | 40 |
| A50.10.27 | HSK-A 50 | 27 | h6 | 65 | 53 | 21 | 33 | 48 |
| A50.10.32 | HSK-A 50 | 32 | h6 | 65 | 51 | 24 | 38 | 58 |
| | | | | | | | | |
| A63.10.16 | HSK-A 63 | 16 | h6 | 60 | 50 | 17 | 27 | 32 |
| A63.10.22 | HSK-A 63 | 22 | h6 | 60 | 48 | 19 | 31 | 40 |
| A63.10.27 | HSK-A 63 | 27 | h6 | 60 | 48 | 21 | 33 | 48 |
| A63.10.32 | HSK-A 63 | 32 | h6 | 60 | 46 | 24 | 38 | 58 |
| A63.10.40 | HSK-A 63 | 40 | h6 | 70 | 56 | 27 | 41 | 70 |
| A63.10.16.1 | HSK-A 63 | 16 | h6 | 100 | 90 | 17 | 27 | 32 |
| A63.10.22.1 | HSK-A 63 | 22 | h6 | 100 | 88 | 19 | 31 | 40 |
| A63.10.27.1 | HSK-A 63 | 27 | h6 | 100 | 88 | 21 | 33 | 48 |
| A63.10.32.1 | HSK-A 63 | 32 | h6 | 100 | 86 | 24 | 38 | 58 |
| | | | | | | | | |
| A80.10.16 | HSK-A 80 | 16 | h6 | 60 | 50 | 17 | 27 | 32 |
| A80.10.22 | HSK-A 80 | 22 | h6 | 60 | 48 | 19 | 31 | 40 |
| A80.10.27 | HSK-A 80 | 27 | h6 | 60 | 48 | 21 | 33 | 48 |
| A80.10.32 | HSK-A 80 | 32 | h6 | 60 | 46 | 24 | 38 | 58 |
| A80.10.40 | HSK-A 80 | 40 | h6 | 70 | 56 | 27 | 41 | 70 |
| | | | | | | | | |
| A100.10.16 | HSK-A 100 | 16 | h6 | 60 | 50 | 17 | 27 | 32 |
| A100.10.22 | HSK-A 100 | 22 | h6 | 60 | 48 | 19 | 31 | 40 |
| A100.10.27 | HSK-A 100 | 27 | h6 | 60 | 48 | 21 | 33 | 48 |
| A100.10.32 | HSK-A 100 | 32 | h6 | 60 | 46 | 24 | 38 | 58 |
| A100.10.40 | HSK-A 100 | 40 | h6 | 70 | 56 | 27 | 41 | 70 |

Lieferumfang: Mit Fräseranzugsschraube, Mitnehmerring und Passfeder
Delivery: With tightening bolt, driving ring and feather key
Livraison: Avec vis de serrage, bague d'entraînement et clavette



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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 | 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: | Normative references: | Références normatives: |
|--|---|--|
| ISO 12164-1:2001-12 Hohlkegelschnittstelle mit Plananlage - Teil 1: Schäfte; Maße | ISO 12164-1:2001 Hollow taper interface with flange contact surface - Part 1: Shanks; Dimensions | 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:

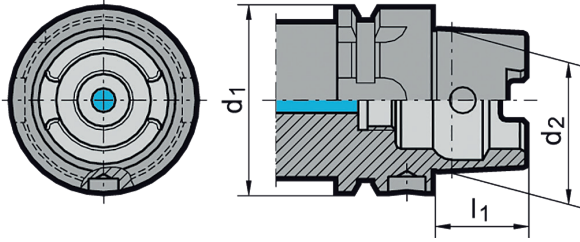
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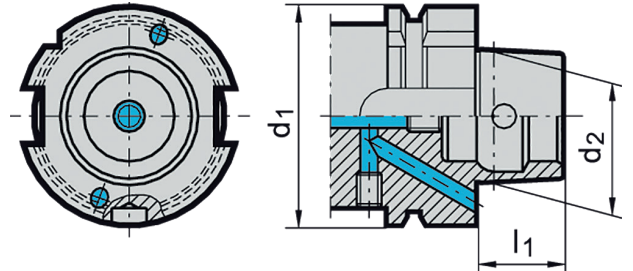
DIN 69063-1 (ISO 12164-1) Form A

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.



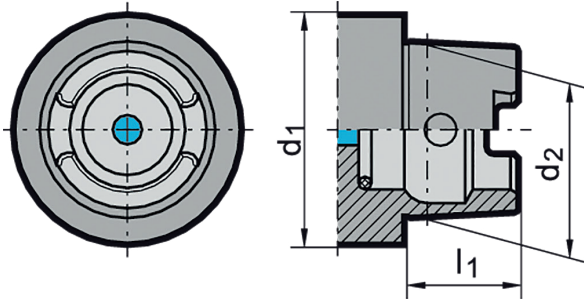
DIN 69063-2 (ISO 12164-1) Form B

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.



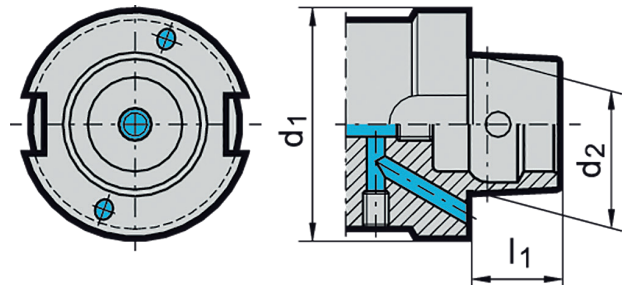
DIN 69063-1 (ISO 12164-1) Form C

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.



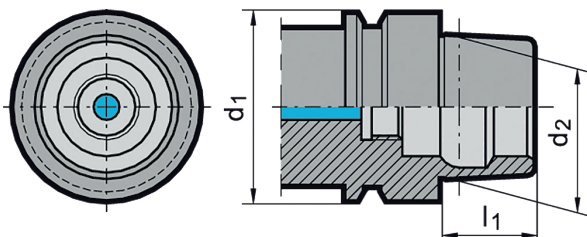
DIN 69063-2 (ISO 12164-2) Form D

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



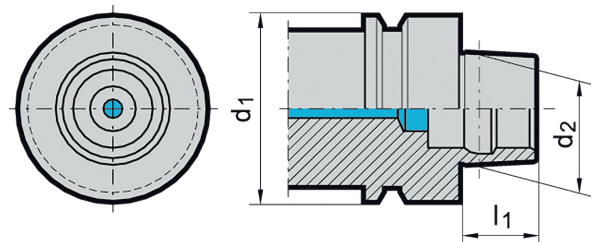
DIN 69063-5 Form E

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.





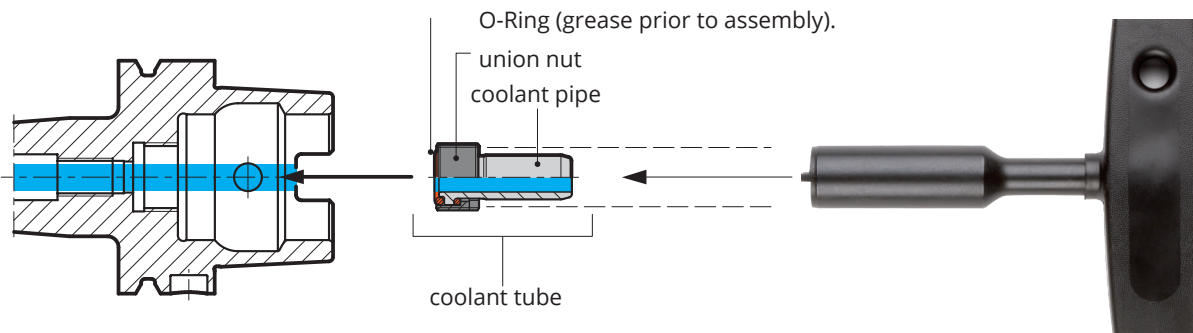
HSK form A, -B or -D holders must be equipped with a coolant tube.

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 |