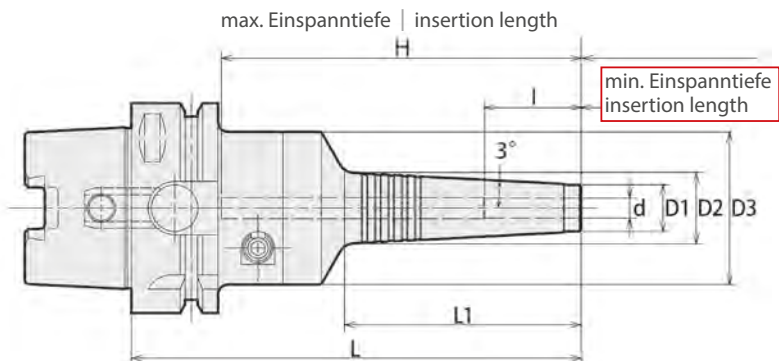




# HSK100A

DIN 69893 | ISO 12164

6.0  
25.0

0.003  
3xD

G2.5  
25.000  
min<sup>-1</sup>



| Halter   Holder |          |         | d  | D <sub>1</sub> | D <sub>2</sub> | D <sub>3</sub> | L   | L <sub>1</sub> | I  | H   |  |  |
|-----------------|----------|---------|----|----------------|----------------|----------------|-----|----------------|----|-----|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| HSK100A         | -PHC06SA | -105 -H | 6  | 13             | 15,8           | 46             | 105 | 26             | 29 | 71  | -                                                                                     | L-4T                                                                                  |
|                 |          | -150 -H | 6  | 13             | 20,5           | 46             | 150 | 71             | 29 | 116 | -                                                                                     | L-4T                                                                                  |
|                 |          | -165 -H | 6  | 13             | 22,2           | 46             | 165 | 87             | 29 | 131 | -                                                                                     | L-4T                                                                                  |
|                 |          | -180 -H | 6  | 13             | 23,7           | 46             | 180 | 102            | 29 | 146 | -                                                                                     | L-4T                                                                                  |
|                 |          | -195 -H | 6  | 13             | 25,4           | 46             | 195 | 118            | 29 | 161 | -                                                                                     | L-4T                                                                                  |
|                 | -PHC08SA | -105 -H | 8  | 15             | 17,9           | 46             | 105 | 27             | 29 | 71  | -                                                                                     | L-4T                                                                                  |
|                 |          | -150 -H | 8  | 15             | 22,6           | 46             | 150 | 72             | 29 | 116 | -                                                                                     | L-4T                                                                                  |
|                 |          | -165 -H | 8  | 15             | 24,2           | 46             | 165 | 87             | 29 | 131 | -                                                                                     | L-4T                                                                                  |
|                 |          | -180 -H | 8  | 15             | 25,8           | 46             | 180 | 103            | 29 | 146 | -                                                                                     | L-4T                                                                                  |
|                 |          | -195 -H | 8  | 15             | 27,4           | 46             | 195 | 118            | 29 | 161 | -                                                                                     | L-4T                                                                                  |
|                 | -PHC10SA | -150 -H | 10 | 17             | 24,6           | 46             | 150 | 72             | 40 | 116 | -                                                                                     | L-4T                                                                                  |
|                 |          | -165 -H | 10 | 17             | 26,3           | 46             | 165 | 87             | 40 | 131 | -                                                                                     | L-4T                                                                                  |
|                 |          | -180 -H | 10 | 17             | 27,8           | 46             | 180 | 103            | 40 | 146 | -                                                                                     | L-4T                                                                                  |
|                 |          | -195 -H | 10 | 17             | 29,5           | 46             | 195 | 119            | 40 | 161 | -                                                                                     | L-4T                                                                                  |
|                 | -PHC12SA | -150 -H | 12 | 19             | 26,7           | 46             | 150 | 73             | 40 | 116 | HS12-d                                                                                | L-4T                                                                                  |
|                 |          | -165 -H | 12 | 19             | 28,3           | 46             | 165 | 88             | 40 | 131 | HS12-d                                                                                | L-4T                                                                                  |
|                 |          | -180 -H | 12 | 19             | 30,0           | 46             | 180 | 104            | 40 | 146 | HS12-d                                                                                | L-4T                                                                                  |
|                 |          | -195 -H | 12 | 19             | 31,5           | 46             | 195 | 119            | 40 | 161 | HS12-d                                                                                | L-4T                                                                                  |
|                 | -PHC16SA | -150 -H | 16 | 23             | 30,6           | 52,5           | 150 | 72             | 40 | 90  | -                                                                                     | L-4T                                                                                  |
|                 |          | -180 -H | 16 | 23             | 33,8           | 52,5           | 180 | 103            | 40 | 120 | -                                                                                     | L-4T                                                                                  |
|                 |          | -195 -H | 16 | 23             | 35,5           | 52,5           | 195 | 119            | 40 | 135 | -                                                                                     | L-4T                                                                                  |
|                 | -PHC20SA | -150 -H | 20 | 28             | 34,7           | 62             | 150 | 63             | 40 | 85  | HS20-d                                                                                | L-6T                                                                                  |
|                 |          | -180 -H | 20 | 28             | 37,8           | 62             | 180 | 93             | 40 | 115 | HS20-d                                                                                | L-6T                                                                                  |
|                 |          | -195 -H | 20 | 28             | 39,5           | 62             | 195 | 109            | 40 | 130 | HS20-d                                                                                | L-6T                                                                                  |
|                 |          | -150 -H | 25 | 37             | 43,9           | 62             | 150 | 65             | 50 | 84  | -                                                                                     | L-6T                                                                                  |
|                 | -PHC25SA | -180 -H | 25 | 37             | 47,1           | 62             | 180 | 96             | 50 | 115 | -                                                                                     | L-6T                                                                                  |
|                 |          | -195 -H | 25 | 37             | 48,8           | 62             | 195 | 112            | 50 | 130 | -                                                                                     | L-6T                                                                                  |

- Schafttoleranz h6
- HSK-Kühlmittelrohr und L-T 6kant im Lieferumfang enthalten
- HSK mit Bohrung für Handspannung
- Längeneinstellschraube optional

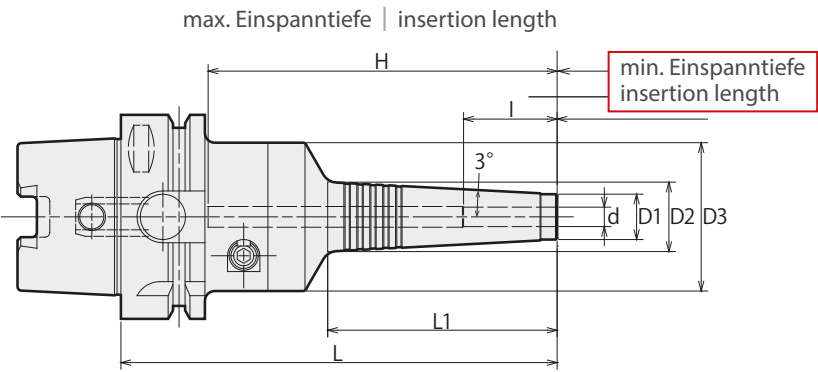
- Tool shank diameter tolerance must be within h6
- HSK-Coolant pipe and L-T hex wrench included in delivery
- HSK with holes for manual clamping,
- length adjustment screw optional



# PHC-SA-C

mit Kühlmittelnuten  
with coolant channels

cool series



HSK100A

DIN 69893 | ISO 12164

6.0

25.0

0.003

3xD

G2.5

25.000

min<sup>-1</sup>

HA

HB

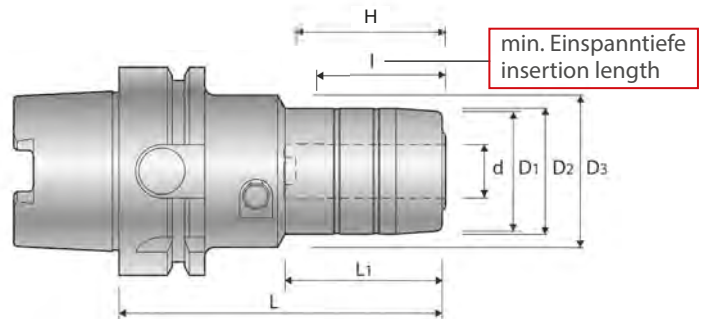
| Halter   Holder |          |      |    | d  | D <sub>1</sub> | D <sub>2</sub> | D <sub>3</sub> | L   | L <sub>1</sub> | I  | H   |      |
|-----------------|----------|------|----|----|----------------|----------------|----------------|-----|----------------|----|-----|------|
| HSK100A         | -PHC06SA | -150 | -C | 6  | 14             | 21,5           | 46             | 150 | 71             | 29 | 116 | L-4T |
|                 |          | -195 | -C | 6  | 14             | 26,4           | 46             | 195 | 118            | 29 | 161 | L-4T |
|                 | -PHC08SA | -150 | -C | 8  | 16             | 23,6           | 46             | 150 | 72             | 29 | 116 | L-4T |
|                 |          | -195 | -C | 8  | 16             | 28,4           | 46             | 195 | 118            | 29 | 161 | L-4T |
|                 | -PHC10SA | -150 | -C | 10 | 18             | 25,6           | 46             | 150 | 72             | 40 | 116 | L-4T |
|                 |          | -195 | -C | 10 | 18             | 30,5           | 46             | 195 | 119            | 40 | 161 | L-4T |
|                 | -PHC12SA | -150 | -C | 12 | 20             | 27,7           | 46             | 150 | 73             | 40 | 116 | L-4T |
|                 |          | -195 | -C | 12 | 20             | 32,5           | 46             | 195 | 119            | 40 | 161 | L-4T |
|                 | -PHC16SA | -150 | -C | 16 | 24             | 31,6           | 52,5           | 150 | 72             | 40 | 90  | L-4T |
|                 |          | -195 | -C | 16 | 24             | 36,5           | 52,5           | 195 | 119            | 40 | 135 | L-4T |
|                 | -PHC20SA | -150 | -C | 20 | 29             | 35,7           | 62             | 150 | 63             | 40 | 85  | L-6T |
|                 |          | -195 | -C | 20 | 29             | 40,5           | 62             | 195 | 109            | 40 | 130 | L-6T |
|                 | -PHC25SA | -150 | -C | 25 | 38             | 44,9           | 62             | 150 | 65             | 50 | 85  | L-6T |
|                 |          | -195 | -C | 25 | 38             | 49,8           | 62             | 195 | 112            | 50 | 130 | L-6T |

- Schafttoleranz h6
  - HSK-Kühlmittelrohr und L-T 6kant im Lieferumfang enthalten
  - HSK mit Bohrung für Handspannung
  - Längeneinstellschraube optional
- Tool shank diameter tolerance must be within h6
  - HSK-Coolant pipe and L-T hex wrench included in delivery
  - HSK without holes for manual clamping
  - length adjustment screw optional

Zubehör  
Accessories  
Seite | Page  
162



max. Einspanntiefe | insertion length



### HSK100A

DIN 69893 | ISO 12164

3.0  
32.0

0.003  
50

max  
25.000  
min<sup>-1</sup>



Tol.  
h6

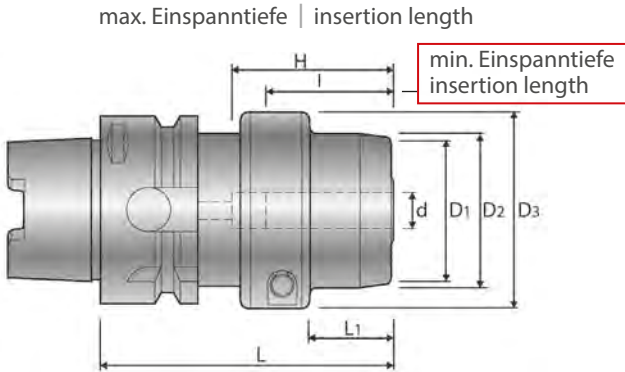


| Halter   Holder |         |        | d  | D <sub>1</sub> | D <sub>2</sub> | D <sub>3</sub> | L   | L <sub>1</sub> | I  | H  |  |  |
|-----------------|---------|--------|----|----------------|----------------|----------------|-----|----------------|----|----|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| HSK100A         | -PHC06A | -90-H  | 6  | 24             | 26             | 46             | 90  | 30             | 29 | 34 | -                                                                                     | L-4T                                                                                  |
|                 |         | -120-H | 6  | 24             | 26             | 46             | 120 | 41             | 29 | 45 | -                                                                                     | L-4T                                                                                  |
|                 |         | -150-H | 6  | 24             | 26             | 46             | 150 | 41             | 29 | 45 | -                                                                                     | L-4T                                                                                  |
|                 | -PHC08A | -90-H  | 8  | 26             | 28             | 46             | 90  | 30             | 29 | 34 | -                                                                                     | L-4T                                                                                  |
|                 |         | -120-H | 8  | 26             | 28             | 46             | 120 | 41             | 29 | 45 | -                                                                                     | L-4T                                                                                  |
|                 |         | -150-H | 8  | 26             | 28             | 46             | 150 | 41             | 29 | 45 | -                                                                                     | L-4T                                                                                  |
|                 | -PHC10A | -105-H | 10 | 28             | 30             | 52             | 105 | 44             | 40 | 50 | -                                                                                     | L-4T                                                                                  |
|                 |         | -135-H | 10 | 28             | 30             | 52             | 135 | 64             | 40 | 70 | -                                                                                     | L-4T                                                                                  |
|                 |         | -165-H | 10 | 28             | 30             | 52             | 165 | 64             | 40 | 70 | -                                                                                     | L-4T                                                                                  |
|                 | -PHC12A | -105-H | 12 | 30             | 32             | 52             | 105 | 45             | 40 | 50 | PHS12-d                                                                               | L-4T                                                                                  |
|                 |         | -135-H | 12 | 30             | 32             | 52             | 135 | 65             | 40 | 70 | PHS12-d                                                                               | L-4T                                                                                  |
|                 |         | -165-H | 12 | 30             | 32             | 52             | 165 | 65             | 40 | 70 | PHS12-d                                                                               | L-4T                                                                                  |
|                 | -PHC14A | -105-H | 14 | 34             | 36             | 52             | 105 | 46             | 40 | 50 | -                                                                                     | L-4T                                                                                  |
|                 |         | -135-H | 14 | 34             | 36             | 52             | 136 | 66             | 40 | 70 | -                                                                                     | L-4T                                                                                  |
|                 |         | -165-H | 14 | 34             | 36             | 52             | 165 | 66             | 40 | 70 | -                                                                                     | L-4T                                                                                  |
|                 | -PHC16A | -106-H | 16 | 36             | 38             | 52             | 105 | 46             | 40 | 50 | -                                                                                     | L-4T                                                                                  |
|                 |         | -135-H | 16 | 36             | 38             | 52             | 135 | 66             | 40 | 70 | -                                                                                     | L-4T                                                                                  |
|                 |         | -165-H | 16 | 36             | 38             | 52             | 165 | 66             | 40 | 70 | -                                                                                     | L-4T                                                                                  |
|                 | -PHC20A | -105-H | 20 | 40             | 42             | 46             | 105 | 49             | 40 | 50 | PHS20-d                                                                               | L-4T                                                                                  |
|                 |         | -135-H | 20 | 40             | 42             | 46             | 135 | 69             | 40 | 70 | PHS20-d                                                                               | L-4T                                                                                  |
|                 |         | -165-H | 20 | 40             | 42             | 46             | 165 | 69             | 40 | 70 | PHS20-d                                                                               | L-4T                                                                                  |
|                 | -PHC25A | -120-H | 25 | 50             | 52             | 62             | 120 | 59             | 50 | 64 | -                                                                                     | L-6T                                                                                  |
|                 |         | -165-H | 25 | 50             | 52             | 62             | 165 | 79             | 50 | 80 | -                                                                                     | L-6T                                                                                  |
|                 | -PHC32A | -135-H | 32 | 60             | 62             | -              | 135 | -              | 65 | 80 | -                                                                                     | L-6T                                                                                  |
|                 |         | -165-H | 32 | 60             | 62             | -              | 165 | -              | 65 | 80 | -                                                                                     | L-6T                                                                                  |

- HSK-Kühlmittelrohr im Lieferumfang enthalten
- HSK mit Bohrung für Handspannung
- Mit axialer Längeneinstellung

- HSK-Coolant pipe included in delivery
- HSK with holes for manual clamping,
- With axial length adjustment





HSK100A

DIN 69893 | ISO 12164

6.0

32.0

0.003

50

max

20.000

min<sup>-1</sup>



Tol.

h6



mit erhöhter Spannkraft

with enhanced clamping force

| Halter   Holder |         |      | d  | D <sub>1</sub> | D <sub>2</sub> | D <sub>3</sub> | L   | L <sub>1</sub> | I  | H   |  |  |
|-----------------|---------|------|----|----------------|----------------|----------------|-----|----------------|----|-----|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| HSK100A         | -PHC16H | -75  | 16 | -              | 44             | 56             | 75  | 21             | 45 | 51  | -                                                                                     | L-4T                                                                                  |
|                 | -PHC20H | -105 | 20 | 48             | 50             | 60             | 105 | 32             | 50 | 70  | PHS20-H-d                                                                             | L-4T                                                                                  |
|                 | -PHC25H | -105 | 25 | 58             | 60             | 69             | 105 | 35             | 55 | 70  | -                                                                                     | L-5T                                                                                  |
|                 |         | -135 | 25 | 58             | 60             | 69             | 135 | 35             | 55 | 100 | -                                                                                     | L-5T                                                                                  |
|                 | -PHC32H | -110 | 32 | 63             | 63             | 75             | 110 | 47             | 65 | 78  | PHS32-H-d                                                                             | L-5T                                                                                  |
|                 |         | -135 | 32 | 63             | 63             | 75             | 135 | 47             | 65 | 100 | PHS32-H-d                                                                             | L-5T                                                                                  |

- HSK-Kühlmittelrohr im Lieferumfang enthalten

• HSK mit Bohrung für Handspannung

• HSK-Coolant pipe included in delivery

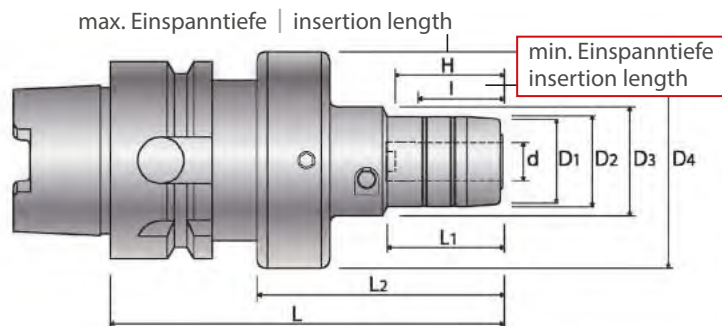
• HSK with holes for manual clamping

# PHC·Z

R "0" series

## Dehnspannfutter mit Rundlauf „0“

### Hydro Chuck with run-out „0“



### HSK100A

DIN 69893 | ISO 12164

3.0  
20.0

PHC·Z

6.0  
12.0

PHZ·S

0-2  
μm

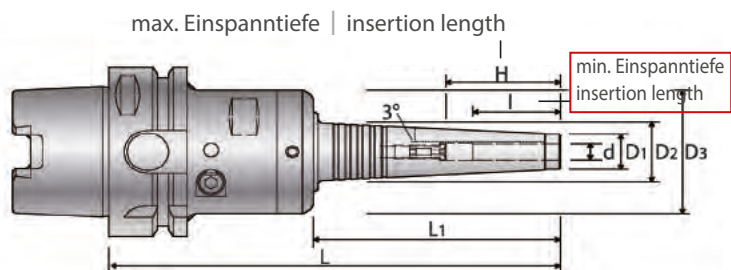
max  
15.000  
min<sup>-1</sup>



Tol.  
h6



| Halter   Holder |         |      | d  | D <sub>1</sub> | D <sub>2</sub> | D <sub>3</sub> | D <sub>4</sub> | L   | L <sub>1</sub> | L <sub>2</sub> | I  | H  |  |  |  |
|-----------------|---------|------|----|----------------|----------------|----------------|----------------|-----|----------------|----------------|----|----|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| HSK100A         | -PHCZ12 | -120 | 12 | 30             | 32             | 52             | 76             | 120 | 45             | 91             | 40 | 50 | PHS12-d                                                                             | L-4T                                                                                | L-5T                                                                                |
|                 | -PHCZ20 | -120 | 20 | 40             | 42             | 46             | 69             | 120 | 50             | 91             | 40 | 50 | PHS20-d                                                                             | L-4T                                                                                | L-5T                                                                                |



# PHZ·S

mit superschlanker Bauform  
with super-slim design

| Halter   Holder |         |        | d  | D <sub>1</sub> | D <sub>2</sub> | D <sub>3</sub> | L   | L <sub>2</sub> | I  | H  |  |  |  |
|-----------------|---------|--------|----|----------------|----------------|----------------|-----|----------------|----|----|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| HSK100A         | -PHZ06S | -165-H | 6  | 13             | 21,5           | 46             | 165 | 82             | 29 | 37 | -                                                                                     | L-4T                                                                                  | L-3T                                                                                  |
|                 |         | -190-H | 6  | 13             | 24,6           | 46             | 190 | 112            | 29 | 37 | -                                                                                     | L-4T                                                                                  | L-3T                                                                                  |
|                 | -PHZ08S | -165-H | 8  | 15             | 23,5           | 46             | 165 | 82             | 29 | 50 | -                                                                                     | L-4T                                                                                  | L-3T                                                                                  |
|                 |         | -190-H | 8  | 15             | 26,6           | 46             | 190 | 112            | 29 | 50 | -                                                                                     | L-4T                                                                                  | L-3T                                                                                  |
|                 | -PHZ10S | -165-H | 10 | 17             | 25,5           | 46             | 165 | 82             | 40 | 50 | -                                                                                     | L-4T                                                                                  | L-3T                                                                                  |
|                 |         | -190-H | 10 | 17             | 28,2           | 46             | 190 | 112            | 40 | 50 | -                                                                                     | L-4T                                                                                  | L-3T                                                                                  |
|                 | -PHZ12S | -165-H | 12 | 19             | 27,4           | 46             | 165 | 82             | 40 | 70 | HS12-d                                                                                | L-4T                                                                                  | L-3T                                                                                  |
|                 |         | -190-H | 12 | 19             | 28,2           | 46             | 190 | 112            | 40 | 70 | HS12-d                                                                                | L-4T                                                                                  | L-3T                                                                                  |

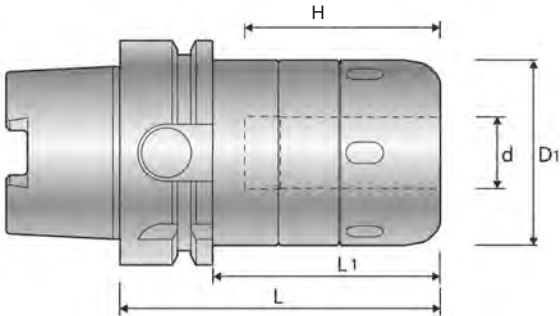
- HSK-Kühlmittelrohr im Lieferumfang enthalten
  - HSK mit Bohrung für Handspannung
  - Mit axialer Längeneinstellung
- \* 6kant-Schlüssel für Einstellring

- HSK-Coolant pipe included in delivery
  - HSK with holes for manual clamping
  - With axial length adjustment.
- \* Hex wrench for Rotor ring.



CT·SA

Hochleistungs-Kraftspannfutter  
High Performance Milling Chuck



**HSK100A**

DIN 69893 | ISO 12164

4.0  
32.0

0.005  
3x D

max  
15.000  
min<sup>-1</sup>

| Halter   Holder |         |                       | d  | D <sub>1</sub> | L   | L <sub>1</sub> | H   |           |           |
|-----------------|---------|-----------------------|----|----------------|-----|----------------|-----|-----------|-----------|
| HSK100A         | -CT16SA | -90-H <sup>1</sup>    | 16 | 45             | 90  | -              | 55  | MC16-d    | HS-1-16   |
|                 |         | -105-H                | 16 | 45             | 105 | -              | 70  | MC16-d    | HS-1-16   |
|                 | -CT20SA | -90-H                 | 20 | 52             | 90  | -              | 55  | MC20-d-SL | HS-2-20   |
|                 |         | -105-H                | 20 | 52             | 105 | -              | 70  | MC20-d    | HS-2-20   |
|                 |         | -120-H                | 20 | 52             | 120 | -              | 80  | MC20-d    | HS-2-20   |
|                 |         | -135-H                | 20 | 52             | 135 | -              | 80  | MC20-d    | HS-2-20   |
|                 |         | -150-H                | 20 | 52             | 150 | -              | 80  | MC20-d    | HS-2-20   |
|                 | -CT25SA | -90-H <sup>1, 2</sup> | 25 | 61             | 90  | 61             | 55  | -         | HS-2.5-25 |
|                 |         | -105-H                | 25 | 61             | 105 | -              | 70  | MC25-d    | HS-2.5-25 |
|                 |         | -120-H                | 25 | 61             | 120 | -              | 80  | MC25-d    | HS-2.5-25 |
|                 |         | -135-H                | 25 | 61             | 135 | -              | 80  | MC25-d    | HS-2.5-25 |
|                 |         | -150-H                | 25 | 61             | 150 | -              | 80  | MC25-d    | HS-2.5-25 |
|                 | -CT32SA | -90-H <sup>1, 2</sup> | 32 | 73             | 90  | 61             | 55  | -         | HS-3-32   |
|                 |         | -105-H <sup>1</sup>   | 32 | 73             | 105 | 76             | 70  | MC32-d    | HS-3-32   |
|                 |         | -120-H <sup>1</sup>   | 32 | 73             | 120 | 91             | 85  | MC32-d    | HS-3-32   |
|                 |         | -135-H <sup>1</sup>   | 32 | 73             | 135 | 106            | 100 | MC32-d    | HS-3-32   |
|                 |         | -150-H <sup>1</sup>   | 32 | 73             | 150 | 121            | 115 | MC32-d    | HS-3-32   |

CTS·P

mit erhöhter Spannkraft  
with enhanced clamping force

| Halter   Holder |        |       | d  | D <sub>1</sub> | L   | L <sub>1</sub> | H  |        |       |
|-----------------|--------|-------|----|----------------|-----|----------------|----|--------|-------|
| HSK100A         | -CT20S | -115P | 20 | 52             | 115 | 86             | 80 | MC20-d | RS-20 |
|                 | -CT25S | -115P | 25 | 61             | 115 | 86             | 80 | MC20-d | RS-25 |
|                 | -CT32S | -115P | 32 | 73             | 115 | 86             | 80 | MC20-d | RS-32 |

- HSK-Kühlmittelrohr im Lieferumfang enthalten
- HSK mit Bohrung für Handspannung
- <sup>1</sup> MC-A Spannhülsen nicht einsetzbar
- <sup>2</sup> MC Spannhülsen nicht einsetzbar, nur Direktspannung

- HSK-Coolant pipe included in delivery
- HSK with holes for manual clamping
- <sup>1</sup> MC-A Collets cannot be used
- <sup>2</sup> MC straight collets cannot be used, only direct chucking.

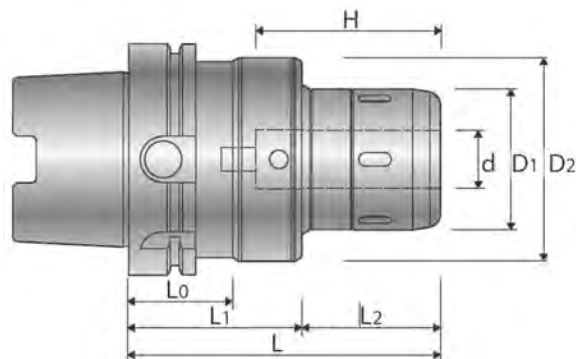


# CTZ·SA

R"0" series

## Kraftspannfutter mit Rundlauf „0“

### Milling Chuck with run-out „0“



# HSK100A

DIN 69893 | ISO 12164

4.0  
32.0

0-2  
µm

max  
10.000  
min<sup>-1</sup>



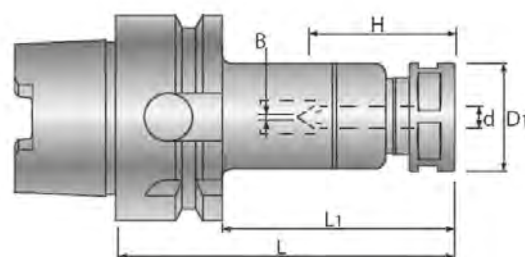
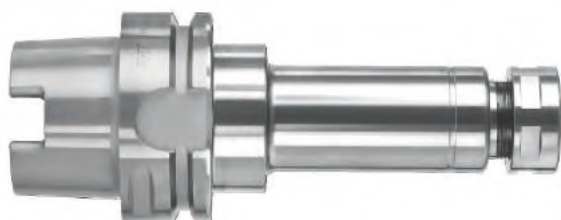
| Halter   Holder |          |                   | d  | D <sub>1</sub> | D <sub>2</sub> | L   | L <sub>1</sub> | L <sub>2</sub> | L <sub>0</sub> | H   |  |  |  |
|-----------------|----------|-------------------|----|----------------|----------------|-----|----------------|----------------|----------------|-----|--------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| HSK100A         | -CTZ25SA | -135              | 25 | 61             | 74             | 135 | 65             | 70             | -              | 80  | MC25-d                                                                               | HS-2.5-25                                                                            | L-6L                                                                                 |
|                 |          | -150              | 25 | 61             | 74             | 150 | 65             | 85             | -              | 80  | MC25-d                                                                               | HS-2.5-25                                                                            | L-6L                                                                                 |
|                 | -CTZ32SA | -135 <sup>1</sup> | 32 | 68             | 80             | 135 | 65             | 70             | -              | 100 | MC32-d                                                                               | HS-3-32                                                                              | L-6L                                                                                 |
|                 |          | -150 <sup>1</sup> | 32 | 68             | 80             | 150 | 65             | 85             | -              | 115 | MC32-d                                                                               | HS-3-32                                                                              | L-6L                                                                                 |
|                 | -CTZ42SA | -135 <sup>1</sup> | 42 | 88             | 99             | 135 | 76             | 59             | 45             | 105 | MC42-d                                                                               | HS-4-42                                                                              | L-6L                                                                                 |
|                 |          | -150 <sup>1</sup> | 42 | 88             | 99             | 150 | 76             | 74             | 45             | 110 | MC42-d                                                                               | HS-4-42                                                                              | L-6L                                                                                 |

- HSK-Kühlmittelrohr im Lieferumfang enthalten
- HSK ohne Bohrung für Handspannung
- <sup>1</sup> MC-A Spannhülsen nicht einsetzbar
- \* 6kant-Schlüssel für Einstellring

- HSK-Coolant pipe included in delivery
- HSK without holes for manual clamping
- <sup>1</sup> MC-A Collets cannot be used
- \*Hex wrench for Rotor ring







# HSK100A

DIN 69893 | ISO 12164

1.0  
-  
22.0

**0.005**  
**4xD**

max  
20.000  
min<sup>-1</sup>



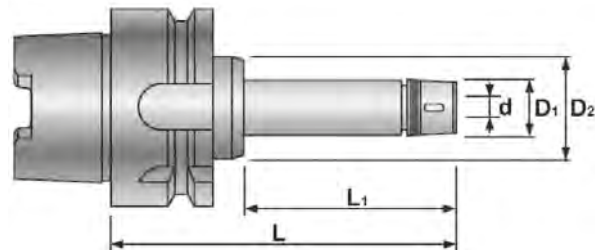
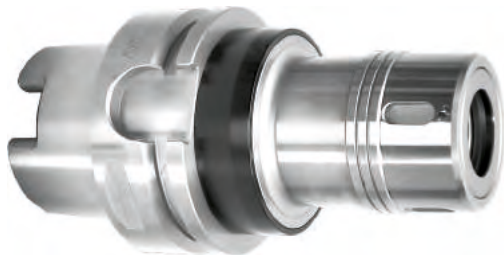
| Halter   Holder |         |        | d        | D <sub>1</sub> | L   | L <sub>1</sub> | H      | B   |  |  |
|-----------------|---------|--------|----------|----------------|-----|----------------|--------|-----|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| HSK100A         | -HDC12A | -90-H  | 3.0-12.0 | 32             | 90  | 61             | 33-38  | 0-5 | FDC-12                                                                                | S-3L                                                                                  |
|                 |         | -120-H | 3.0-12.0 | 32             | 120 | 91             | 33-56  | 0-5 | FDC-12                                                                                | S-3L                                                                                  |
|                 |         | -150-H | 3.0-12.0 | 32             | 150 | 121            | 33-66  | 0-5 | FDC-12                                                                                | S-3L                                                                                  |
|                 |         | -180-H | 3.0-12.0 | 32             | 180 | 151            | 33-66  | 0-5 | FDC-12                                                                                | S-3L                                                                                  |
|                 |         | -210-H | 3.0-12.0 | 32             | 210 | 181            | 33-66  | 0-5 | FDC-12                                                                                | S-3L                                                                                  |
|                 | -HDC16A | -90-H  | 4.0-16.0 | 36             | 90  | 61             | 54     | -   | FDC-16                                                                                | S-4L                                                                                  |
|                 |         | -120-H | 4.0-16.0 | 36             | 120 | 91             | 38-59  | 0-6 | FDC-16                                                                                | S-4L                                                                                  |
|                 |         | -150-H | 4.0-16.0 | 36             | 150 | 121            | 38-79  | 0-6 | FDC-16                                                                                | S-4L                                                                                  |
|                 |         | -180-H | 4.0-16.0 | 36             | 180 | 151            | 38-79  | 0-6 | FDC-16                                                                                | S-4L                                                                                  |
|                 |         | -210-H | 4.0-16.0 | 36             | 210 | 181            | 38-79  | 0-6 | FDC-16                                                                                | S-4L                                                                                  |
|                 | -HDC22A | -90-H  | 4.0-22.0 | 46             | 90  | 61             | 54     | -   | FDC-22                                                                                | S-5L                                                                                  |
|                 |         | -120-H | 4.0-22.0 | 46             | 120 | 91             | 47-56  | 0-8 | FDC-22                                                                                | S-5L                                                                                  |
|                 |         | -150-H | 4.0-22.0 | 46             | 150 | 121            | 47-80  | 0-8 | FDC-22                                                                                | S-5L                                                                                  |
|                 |         | -180-H | 4.0-22.0 | 46             | 180 | 151            | 47-100 | 0-8 | FDC-22                                                                                | S-5L                                                                                  |
|                 |         | -210-H | 4.0-22.0 | 46             | 210 | 181            | 47-100 | 0-8 | FDC-22                                                                                | S-5L                                                                                  |

- Spannmutter, HSK-Kühlmittelrohr und Einstellschraube im Lieferumfang enthalten
- HSK mit Bohrung für Handspannung

- Cap nut, HSK-Coolant pipe and preset screw included in delivery
- HSK with holes for manual clamping







# HSK100A

DIN 69893 | ISO 12164

3.0  
22.0

0.005  
4xD

G2.5  
20.000  
min<sup>-1</sup>



| Halter   Holder |         |        | d        | D <sub>1</sub> | D <sub>2</sub> | L   | L <sub>1</sub> |  |  |
|-----------------|---------|--------|----------|----------------|----------------|-----|----------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| HSK100A         | -GDC12A | -90-H  | 3.0-12.0 | 34             | 84             | 90  | 46             | FDC-12                                                                                | FK-0034                                                                               |
|                 |         | -120-H | 3.0-12.0 | 34             | 84             | 120 | 76             | FDC-12                                                                                | FK-0034                                                                               |
|                 |         | -150-H | 3.0-12.0 | 34             | 84             | 150 | 106            | FDC-12                                                                                | FK-0034                                                                               |
|                 | -GDC16A | -90-H  | 4.0-16.0 | 38             | 84             | 90  | 46             | FDC-16                                                                                | FK-0034                                                                               |
|                 |         | -120-H | 4.0-16.0 | 38             | 84             | 120 | 76             | FDC-16                                                                                | FK-0034                                                                               |
|                 |         | -150-H | 4.0-16.0 | 38             | 84             | 150 | 106            | FDC-16                                                                                | FK-0034                                                                               |
|                 | -GDC22A | -90-H  | 4.0-22.0 | 49             | 84             | 90  | 46             | FDC-22                                                                                | FK-0045                                                                               |
|                 |         | -120-H | 4.0-22.0 | 49             | 84             | 120 | 76             | FDC-22                                                                                | FK-0045                                                                               |
|                 |         | -150-H | 4.0-22.0 | 49             | 84             | 150 | 106            | FDC-22                                                                                | FK-0045                                                                               |

- Spannmutter und HSK-Kühlmittelrohr im Lieferumfang enthalten
- HSK mit Bohrung für Handspannung
- Einstellschraube optional

- Cap nut and HSK-Coolant pipe included in delivery
- HSK with holes for manual clamping
- Preset screw optional

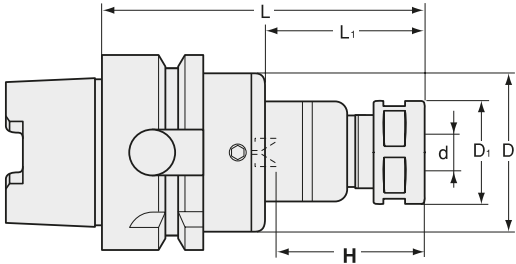


# HDZ•A

R"0" series

## Spannzangenfutter mit Rundlauf „0“

### Collet Chuck with run-out „0“



### HSK100A

DIN 69893 | ISO 12164

3.0  
22.0

0-2  
µm

max  
15.000  
min<sup>-1</sup>

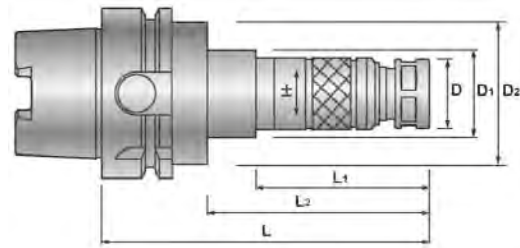


| Halter   Holder |         |                    | d        | D <sub>1</sub> | D <sub>2</sub> | L   | L <sub>1</sub> | H     |  |  |  |
|-----------------|---------|--------------------|----------|----------------|----------------|-----|----------------|-------|--------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| HSK100A         | -HDZ12  | -90-H              | 3.0-12.0 | 32             | 52             | 90  | 41             | 33-40 | FDC-12                                                                               | S-3L                                                                                 | L-4T                                                                                 |
|                 |         | -120-H             | 3.0-12.0 | 32             | 52             | 120 | 71             | 33-58 | FDC-12                                                                               | S-3L                                                                                 | L-4T                                                                                 |
|                 |         | -150-H             | 3.0-12.0 | 32             | 52             | 150 | 101            | 33-68 | FDC-12                                                                               | S-3L                                                                                 | L-4T                                                                                 |
|                 | -HDZ16  | -90-H              | 3.0-16.0 | 36             | 62             | 90  | 41             | 38-40 | FDC-16                                                                               | S-4L                                                                                 | L-4T                                                                                 |
|                 |         | -120-H             | 3.0-16.0 | 36             | 62             | 120 | 71             | 38-61 | FDC-16                                                                               | S-4L                                                                                 | L-4T                                                                                 |
|                 |         | -150-H             | 3.0-16.0 | 36             | 62             | 150 | 101            | 38-81 | FDC-16                                                                               | S-4L                                                                                 | L-4T                                                                                 |
|                 | -HDZ22A | -90-H <sup>1</sup> | 4.0-22.0 | 46             | 76             | 90  | 37             | 56    | FDC-22                                                                               | S-5L                                                                                 | L-5T                                                                                 |
|                 |         | -120-H             | 4.0-22.0 | 46             | 76             | 120 | 67             | 47-59 | FDC-22                                                                               | S-5L                                                                                 | L-5T                                                                                 |
|                 |         | -150-H             | 4.0-22.0 | 46             | 76             | 150 | 97             | 47-83 | FDC-22                                                                               | S-5L                                                                                 | L-5T                                                                                 |

- Spannmutter, HSK-Kühlmittelrohr und Einstellschraube im Lieferumfang enthalten
  - HSK mit Bohrung für Handspannung
  - Mit axialer Längeneinstellung
- <sup>1</sup> Ohne Einstellschraube

- Cap nut, HSK-Coolant pipe and preset screw included in delivery
  - HSK with holes for manual clamping
  - With axial length adjustment
- <sup>1</sup> Without preset screw





## HSK100A

DIN 69893 | ISO 12164

SFH

mit easy-Längeneinstellung  
with easy-length adjustment

M3  
M30

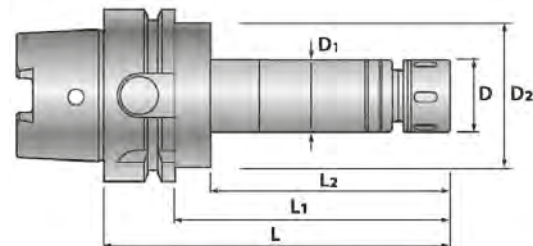
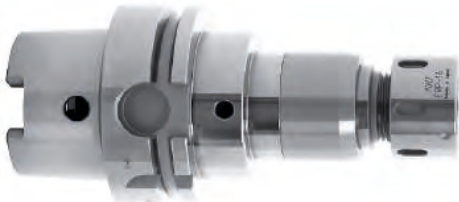
| Halter   Holder |        |      | Schneidbereich<br>Tapping range | D  | D <sub>1</sub> | D <sub>2</sub> | L   | L <sub>1</sub> | L <sub>2</sub> |  |  |
|-----------------|--------|------|---------------------------------|----|----------------|----------------|-----|----------------|----------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| HSK100A         | -SFH12 | -135 | M3-M8                           | 26 | 34             | 46             | 135 | 55             | 89             | FSC-09                                                                              | S-1L                                                                                |
|                 |        | -150 | M3-M8                           | 26 | 34             | 46             | 150 | 70             | 104            | FSC-09                                                                              | S-1L                                                                                |
|                 |        | -180 | M3-M8                           | 26 | 34             | 46             | 180 | 100            | 134            | FSC-09                                                                              | S-1L                                                                                |
|                 | -SFH18 | -155 | M5-M20                          | 36 | 40             | 46             | 155 | 68             | 108            | FSC-16                                                                              | S-4L                                                                                |
|                 |        | -180 | M5-M20                          | 36 | 40             | 46             | 180 | 93             | 133            | FSC-16                                                                              | S-4L                                                                                |
|                 | -SFH30 | -180 | M20-M30                         | 46 | 50             | -              | 180 | 87             | 151            | FSC-22                                                                              | S-5L                                                                                |

- HSK-Kühlmittelrohr und Spannmutter im Lieferumfang enthalten
- HSK ohne Bohrung für Handspannung

- HSK-Coolant pipe and cap nut included in delivery
- HSK without holes for manual clamping

Im Bestellformular bitte Steigung des Gewindewerkzeugs angeben

When ordering please specify pitch of tap



## SFH-S

SFH-S

für ER-GB-Spannzangen  
for ER-GB Collets

M3  
M27

| Halter   Holder |         |      | Schneidbereich<br>Tapping range | D  | D <sub>1</sub> | D <sub>2</sub> | L   | L <sub>1</sub> | L <sub>2</sub> |  |  |
|-----------------|---------|------|---------------------------------|----|----------------|----------------|-----|----------------|----------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| HSK100A         | -SFH12S | -110 | M3-M12                          | 32 | 34             | 46             | 110 | 81             | 64             | ER16-GB                                                                               | FK-0034                                                                               |
|                 | -SFH18S | -130 | M3-M20                          | 42 | 40             | 46             | 135 | 106            | 88             | ER25-GB                                                                               | HS-1-16                                                                               |
|                 | -SFH30S | -150 | M4-M27                          | 50 | 50             | 50             | 150 | 121            | 121            | ER32-GB                                                                               | HS-2-20                                                                               |

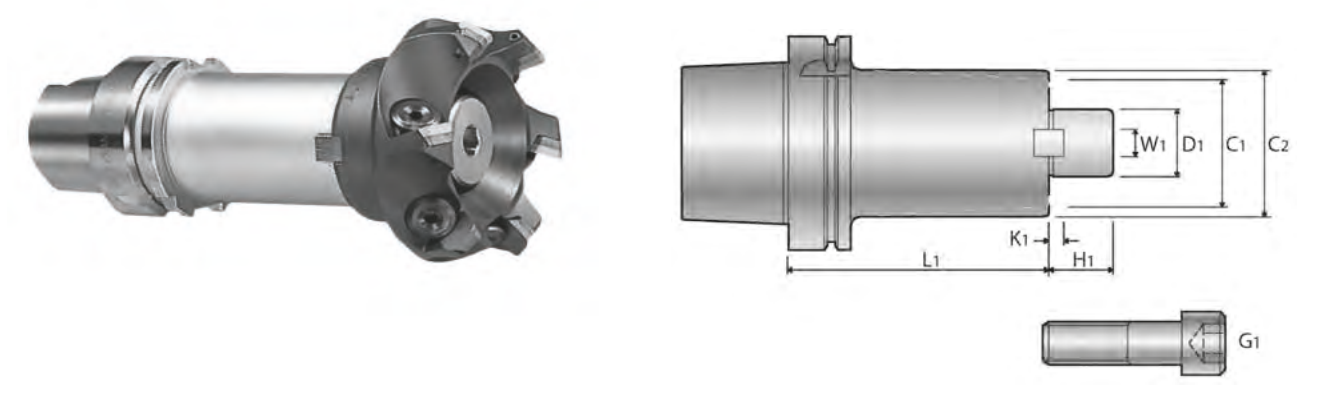
- HSK-Kühlmittelrohr und Spannmutter im Lieferumfang enthalten
- HSK mit Bohrung für Handspannung

- HSK-Coolant pipe and cap nut included in delivery
- HSK with holes for manual clamping



FMC

Aufsteck-Fräsdorn extra lang  
Face Mill Arbor extra long

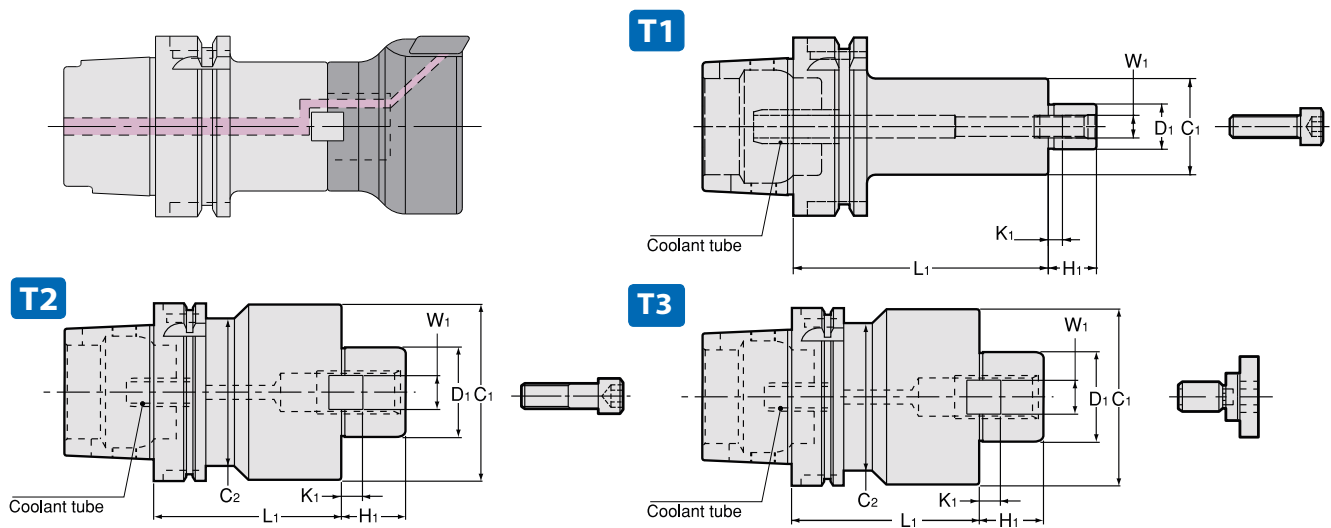


| HSK100A         |        |      | konische Bauform<br>conical design |                |                |                |                |                |                |                |                           |
|-----------------|--------|------|------------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|---------------------------|
| Halter   Holder |        |      | D <sub>1</sub><br>(h6)             | L <sub>1</sub> | C <sub>1</sub> | C <sub>2</sub> | H <sub>1</sub> | W <sub>1</sub> | K <sub>1</sub> | G <sub>1</sub> | Messerkopf<br>Cutter<br>Ø |
| HSK100A         | -FMC22 | -185 | 22                                 | 185            | 45             | 85             | 18             | 10.5           | 5              | M10            | 50 63                     |
|                 |        | -285 | 22                                 | 285            | 45             | 85             | 18             | 10.5           | 5              | M10            | 50 63                     |
|                 |        | -388 | 22                                 | 388            | 45             | 85             | 18             | 10.5           | 5              | M10            | 50 63                     |
|                 | -FMC27 | -185 | 27                                 | 185            | 70             | 85             | 20             | 12.5           | 6              | M12            | 80                        |
|                 |        | -285 | 27                                 | 285            | 70             | 85             | 20             | 12.5           | 6              | M12            | 80                        |
|                 |        | -385 | 27                                 | 385            | 70             | 85             | 20             | 12.5           | 6              | M12            | 80                        |

- HSK-Kühlmittelrohr im Lieferumfang enthalten
- HSK ohne Bohrung für Handspannung

- HSK-Coolant pipe included in delivery
- HSK without holes for manual clamping

<sup>1</sup> Straight shank type



## HSK100A

DIN 69893 | ISO 12164



mit Kühlkanalbohrungen  
with Coolant channels

| Halter   Holder |         |      | Type      | D <sub>1</sub><br>(h6) | L <sub>1</sub> | C <sub>1</sub> | C <sub>2</sub> | H <sub>1</sub> | W <sub>1</sub> | K <sub>1</sub> | G <sub>1</sub> | Messerkopf<br>Cutter<br>Ø |
|-----------------|---------|------|-----------|------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|---------------------------|
| HSK100A         | -FMH16A | -34  | -75-H T1  | 16                     | 75             | 34             | -              | 17             | 8              | 5              | M8             | 40 50                     |
|                 |         |      | -105-H T1 | 16                     | 105            | 34             | -              | 17             | 8              | 5              | M8             | 40 50                     |
|                 |         |      | -135-H T1 | 16                     | 135            | 34             | -              | 17             | 8              | 5              | M8             | 40 50                     |
|                 |         |      | -150-H T1 | 16                     | 150            | 34             | -              | 17             | 8              | 5              | M8             | 40 50                     |
|                 |         |      | -200-H T1 | 16                     | 200            | 34             | -              | 17             | 8              | 5              | M8             | 40 50                     |
|                 |         |      | -250-H T1 | 16                     | 250            | 34             | -              | 17             | 8              | 5              | M8             | 40 50                     |
|                 | -FMH22A | -47  | -75-H T1  | 22                     | 75             | 47             | -              | 18             | 10             | 5              | M10            | 50 63                     |
|                 |         |      | -105-H T1 | 22                     | 105            | 47             | -              | 18             | 10             | 5              | M10            | 50 63                     |
|                 |         |      | -135-H T1 | 22                     | 135            | 47             | -              | 18             | 10             | 5              | M10            | 50 63                     |
|                 |         |      | -150-H T1 | 22                     | 150            | 47             | -              | 18             | 10             | 5              | M10            | 50 63                     |
|                 |         |      | -200-H T1 | 22                     | 200            | 47             | -              | 18             | 10             | 5              | M10            | 50 63                     |
|                 |         |      | -250-H T1 | 22                     | 250            | 47             | -              | 18             | 10             | 5              | M10            | 50 63                     |
|                 |         | -60  | -75-H T1  | 22                     | 75             | 60             | -              | 18             | 10             | 5              | M10            | 50 63                     |
|                 |         |      | -105-H T1 | 22                     | 105            | 60             | -              | 18             | 10             | 5              | M10            | 50 63                     |
|                 |         |      | -135-H T1 | 22                     | 135            | 60             | -              | 18             | 10             | 5              | M10            | 50 63                     |
|                 |         |      | -150-H T1 | 22                     | 150            | 60             | -              | 18             | 10             | 5              | M10            | 50 63                     |
|                 | -FMH27A | -60  | -200-H T1 | 22                     | 200            | 60             | -              | 18             | 10             | 5              | M10            | 50 63                     |
|                 |         |      | -250-H T1 | 22                     | 250            | 60             | -              | 18             | 10             | 5              | M10            | 50 63                     |
|                 |         |      | -75-H T1  | 27                     | 75             | 60             | -              | 20             | 12             | 6              | M12            | 80                        |
|                 |         |      | -105-H T1 | 27                     | 105            | 60             | -              | 20             | 12             | 6              | M12            | 80                        |
|                 |         |      | -135-H T1 | 27                     | 135            | 60             | -              | 20             | 12             | 6              | M12            | 80                        |
|                 |         |      | -150-H T1 | 27                     | 150            | 60             | -              | 20             | 12             | 6              | M12            | 80                        |
|                 |         | -76  | -200-H T1 | 27                     | 200            | 60             | -              | 20             | 12             | 6              | M12            | 80                        |
|                 |         |      | -75-H T1  | 27                     | 75             | 76             | -              | 20             | 12             | 6              | M12            | 80                        |
|                 |         |      | -105-H T1 | 27                     | 105            | 76             | -              | 20             | 12             | 6              | M12            | 80                        |
|                 |         |      | -135-H T1 | 27                     | 135            | 76             | -              | 20             | 12             | 6              | M12            | 80                        |
|                 | -FMH32A | -96  | -150-H T1 | 27                     | 150            | 76             | -              | 20             | 12             | 6              | M12            | 80                        |
|                 |         |      | -200-H T1 | 27                     | 200            | 76             | -              | 20             | 12             | 6              | M12            | 80                        |
|                 |         |      | -75-H T2  | 32                     | 75             | 96             | 85             | 22             | 14             | 7              | M16            | 100                       |
|                 |         |      | -105-H T2 | 32                     | 105            | 96             | 85             | 22             | 14             | 7              | M16            | 100                       |
|                 |         | -100 | -135-H T3 | 40                     | 75             | 100            | 85             | 26             | 16             | 8.5            | M20            | 100 125                   |
|                 |         |      | -105-H T3 | 40                     | 105            | 100            | 85             | 26             | 16             | 8.5            | M20            | 100 125                   |
|                 |         |      | -135-H T3 | 40                     | 135            | 100            | 85             | 26             | 16             | 8.5            | M20            | 100 125                   |

- HSK-Kühlmittelrohr im Lieferumfang enthalten
- HSK mit Bohrung für Handspannung

- HSK-Coolant pipe included in delivery
- HSK with holes for manual clamping