

TOOLING SYSTEMS HSK63A MQL (MINIMUM QUANTITY LUBRICATION)



Erickson[™] HSK Shank Tooling System • HSK63A Series

WIDIA[™] has further developed their successful products, hydraulic chucks and Shrink Fit toolholders, by replacing the individual components for use in wet, dry, and MQL (Minimum Quantity Lubrication) machining applications. The HSK63A Series, well known in the automotive industry, is mainly used for holemaking applications. In dry/MQL machining, more than 70% of the heat is dissipated by the chips creating less abrasive wear.

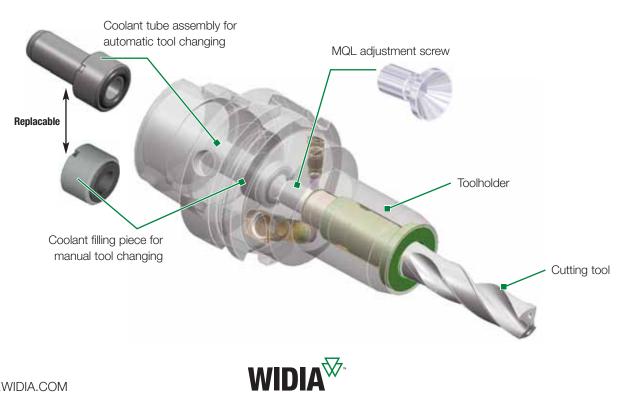


- DIN 69090 1-3 standard.
- Open-source solution.
- Universal for wet, MQL, or dry machining.
- Designed for all straight shanks.
- Equal dimensions for wet and MQL tools.





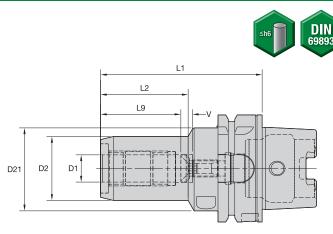




HSK63A Shank Tools

Hydraulic Chucks Standard Trend Line • MQL







G 2.5

ERICKSON

HCT • MQL • Metric





| | | 1 | | I. | | \otimes | | |
|--------------|----------------------|-----------|----------------|---------------------|-----------------------------|-----------------------------|---------------------------|------|
| order number | catalog number | D1 D2 D | 21 L1 L2 L9 V | actuation wrench | wrench size actuation screw | length adjustment wrench | wrench size stop screw | kg |
| 5006410 | HSK63AHCTMQL1C06080M | 6 25,7 5 | 0 80 34 27 10 | 170.135 | 5 mm | 170.002 | 2.5 mm | 1,00 |
| 5006411 | HSK63AHCTMQL1C08080M | 8 27,7 5 | 0 80 34 27 10 | 170.135 | 5 mm | 170.003 | 3 mm | 1,02 |
| 5006413 | HSK63AHCTMQL1C10085M | 10 29,7 5 | 0 85 39 31 10 | 170.135 | 5 mm | 170.004 | 4 mm | 1,06 |
| 5006414 | HSK63AHCTMQL1C12090M | 12 31,6 5 | 0 90 45 36 10 | 170.135 | 5 mm | - | 5 mm | 1,09 |
| 5006415 | HSK63AHCTMQL1C14090M | 14 33,6 5 | 0 90 46 36 10 | 170.135 | 5 mm | - | 5 mm | 1,11 |
| 5006416 | HSK63AHCTMQL1C16095M | 16 37,6 5 | 0 95 52 39 10 | 170.135 | 5 mm | - | 5 mm | 1,21 |
| 5006417 | HSK63AHCTMQL1C18095M | 18 39,6 5 | 0 95 52 39 10 | 170.135 | 5 mm | - | 5 mm | 1,24 |
| 5006418 | HSK63AHCTMQL1C20100M | 20 41,6 5 | 0 100 58 41 10 | 170.135 | 5 mm | - | 5 mm | 1,31 |
| 5006419 | HSK63AHCTMQL1C25120M | 25 49,8 7 | 0 120 53 47 10 | 170.136 | 6 mm | 170.005 | 5 mm | 2,10 |
| 5006430 | HSK63AHCTMQL1C32125M | 32 59,8 7 | 5 125 59 51 10 | 170.136 | 6 mm | 170.005 | 5 mm | 2,45 |

NOTE: Do not overtorque actuation screw. Tighten by hand until stop is felt.

Wrenches must be ordered separately.

Supplied with adjusting stop screw.

Reduction sleeves are available and must be ordered separately.

HSK coolant unit and wrench are available and must be ordered separately.

Shank of the cutting tool according to DIN69090.



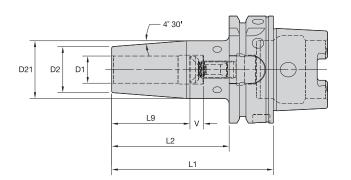


HSK63A Shank Tools

Shrink Fit Toolholders General Purpose (GP) • MQL

DIN 69893

- Balanceable fine tune with optional M6 set screws.
- Suitable for carbide and HSS cutting tools (requirements below).





Cutting Tool Shank Requirements metric (ISO standard)

| include (iee blandard) | | | | | | | | |
|--------------------------------|----|--------------|--|--|--|--|--|--|
| cutting tool shank diameter | | tolerance | | | | | | |
| 3 | h4 | 0,000/-0,003 | | | | | | |
| 4 | h4 | 0,000/-0,004 | | | | | | |
| 5 | h5 | 0,000/-0,005 | | | | | | |
| 6 | h6 | 0,000/-0,008 | | | | | | |
| 8 & 10 | h6 | 0,000/-0,009 | | | | | | |
| 12, 14, 16, & 18 | h6 | 0,000/-0,011 | | | | | | |
| 20 & 25 | h6 | 0,000/-0,013 | | | | | | |
| 32 | h6 | 0,000/-0,016 | | | | | | |
| | | | | | | | | |

ERICKSON[°]

■ HPVTT • MQL • Metric

| order number | catalog number | D1 | D2 | D21 | L1 | L2 | 2 L9 | v | screw | wrench size stop screw | kg |
|--------------|------------------------|----|----|-----|-----|----|------|------|-----------------|---------------------------|------|
| 5008181 | HSK63AHPVTTMQL1C06080M | 6 | 21 | 27 | 80 | 54 | 26 | 10,0 | 06ASMQL1C05170M | 2.5 mm | 0,82 |
| 5008182 | HSK63AHPVTTMQL1C08080M | 8 | 21 | 27 | 80 | 54 | 26 | 10,0 | 08ASMQL1C06180M | 3 mm | 0,82 |
| 5008183 | HSK63AHPVTTMQL1C10085M | 10 | 24 | 32 | 85 | 59 | 31 | 10,0 | 10ASMQL1C08180M | 4 mm | 0,90 |
| 5008184 | HSK63AHPVTTMQL1C12090M | 12 | 24 | 32 | 90 | 64 | 36 | 10,0 | 12ASMQL1C10180M | 5 mm | 0,91 |
| 5008185 | HSK63AHPVTTMQL1C14090M | 14 | 27 | 34 | 90 | 64 | 36 | 10,0 | 14ASMQL1C10195M | 5 mm | 0,96 |
| 5008186 | HSK63AHPVTTMQL1C16095M | 16 | 27 | 34 | 95 | 69 | 39 | 10,0 | 16ASMQL1C10220M | 5 mm | 0,97 |
| 5008187 | HSK63AHPVTTMQL1C18095M | 18 | 33 | 42 | 95 | 69 | 39 | 10,0 | 18ASMQL1C10220M | 5 mm | 1,14 |
| 5008188 | HSK63AHPVTTMQL1C20100M | 20 | 33 | 42 | 100 | 74 | 41 | 10,0 | 20ASMQL1C10235M | 5 mm | 1,16 |
| 5008189 | HSK63AHPVTTMQL1C25115M | 25 | 44 | 53 | 115 | 89 | 47 | 10,0 | 25ASMQL1C10275M | 5 mm | 1,73 |
| 5008210 | HSK63AHPVTTMQL1C32120M | 32 | 44 | 53 | 120 | 94 | 51 | 10,0 | 32ASMQL1C10305M | 5 mm | 1,61 |

NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.

Supplied with adjusting stop screw.

Adjusting stop screw, see page 7.

Optional M6~1.0P x 5mm lg fine-balancing screw set (10 pieces) is available.

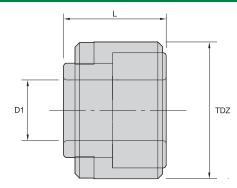
Order number is MS1276PKG and must be ordered separately.

HSK coolant unit and wrench are available and must be ordered separately.

Shank of the cutting tool according to DIN69090.



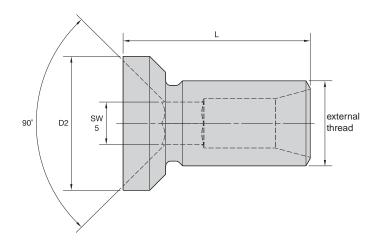






FP • MQL

| | | 0 | D1 | | _ | |
|--------------|-----------------------|------|------|-------|------|-----------|
| order number | catalog number | mm | in | mm | in | TDZ |
| 5086819 | HSK40AFPMQL1C050095M | 5,00 | .197 | 9,50 | .374 | M12 X 1.0 |
| 5086840 | HSK50AFPMQL1C064115M | 6,40 | .252 | 11,50 | .453 | M16 X 1.0 |
| 5086841 | HSK63AFPMQL1C080135M | 8,00 | .315 | 13,50 | .532 | M18 X 1.0 |
| 5086842 | HSK80AFPMQL1C080155M | 8,00 | .315 | 15,50 | .610 | M20 X 1.5 |
| 5086843 | HSK100AFPMQL1C080175M | 8,00 | .315 | 17,50 | .689 | M24 X 1.5 |





AS • MQL

| | | | D2 | I | _ | external | I.D. |
|--------------|-----------------|----|-------|-------|-------|-------------|------------|
| order number | catalog number | mm | in | mm | in | thread size | drive size |
| 5086710 | 06ASMQL1C05170M | 6 | .226 | 17,00 | .669 | M5 | 2.5 mm |
| 5086711 | 08ASMQL1C06180M | 8 | .305 | 18,00 | .709 | M6 | 3 mm |
| 5086712 | 10ASMQL1C08180M | 10 | .384 | 18,00 | .709 | M8 X 1 | 4 mm |
| 5086713 | 12ASMQL1C10180M | 12 | .463 | 18,00 | .709 | M10 X 1 | 5 mm |
| 5086714 | 14ASMQL1C10195M | 14 | .541 | 19,50 | .768 | M10 X 1 | 5 mm |
| 5086715 | 16ASMQL1C10220M | 16 | .620 | 22,00 | .866 | M10 X 1 | 5 mm |
| 5086716 | 18ASMQL1C10220M | 18 | .699 | 22,00 | .866 | M10 X 1 | 5 mm |
| 5086717 | 20ASMQL1C10235M | 20 | .778 | 23,50 | .925 | M10 X 1 | 5 mm |
| 5086718 | 25ASMQL1C10275M | 25 | 1.026 | 27,50 | 1.083 | M10 X 1 | 5 mm |
| 5086719 | 32ASMQL1C10305M | 32 | 1.250 | 30,50 | 1.201 | M10 X 1 | 5 mm |





Environmental responsibility

We are deeply committed to offering environmentally responsible products that deliver high performance and proven value. With decades of experience in tooling and manufacturing, combined with the synergy of superior engineering, we offer customers some of the most effective opportunities for sustainable manufacturing in the industry.



Sustainable engineering

Leading the way with innovation, engineering, and service in standard and custom tooling. A proven methodology and partnership.

Successful project engineering requires planning, teamwork, and disciplined execution. Through our extensive experience in developing and implementing new project engineering strategies, we have pioneered a proven methodology to help you manufacture new products and bring them to market quickly. Service deliverables are carefully outlined and jointly agreed to before the project begins. We formally evaluate progress and results with you throughout the project through our stage-gate management systems.

With our best-in-class process, you'll experience accelerated time to market, lower overall costs, and reduced risks to implement new technologies.



TOOLING SYSTEMS HSK63Q MQL (MINIMUM QUANTITY LUBRICATION)

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