



Series K rotary joints are precision units for high speeds at machine tools. They supply rotating tools with the media required for machining, such as coolant or air.

- **Series K rotary joints are suitable for**
 - Coolant up to a pressure of 80 bar
 - Minimum quantity lubrication (externally mixed) up to a pressure of 10 bar
 - Dry processing
 - Dry processing with compressed air up to a pressure of 10 bar without speed limitation
 - Cleaning air 10 bar at standstill
 - Rotational speeds of up to 24,000 rpm and 42,000 rpm
- **Additional benefits**
 - Torque transfer by means of octagon for positive locking
 - Elastic connection piece decouples rotary joint and tool clamp
 - Fast and easy clamping at bearing housing
 - Free flow cross-section (spring is outside of flow of medium)
 - Thermal relief of rotating mechanical seal enables dry-run under pressure without speed limitation; no leakage during relief! Patented system.
 - Pressure-relieved rotating mechanical seal, no lifting of sealing surface, optimum material combination for dry-run
 - Labyrinth seal and leak connection protect the bearings
 - Maintenance-free up to 4,000 hours

Connections:

Version B

Housing connection radial with 1/4 inch, can be turned into any position.

• Benefits

- Connections for cooling lubricant and leakage can be in different directions
- In case of horizontal installation, the leak connection must always be at the bottom point so that the liquid can flow off unobstructedly! The supply connection for the cooling lubricant can be mounted anywhere on the radius.

Version C

Housing connection axial with 1/4 inch.

• Benefits

- The cooling lubricant flows axially through the rotary joint without deflection of the flow.
- Optimum version for minimum quantity lubrication, externally mixed; there are no deflections, undercuts or edges that could cause a separation of the aerosol!

Accessories

• Leak monitoring unit

First switching point at 1.8 l/h for user information. Second switching point at 4.2 l/h which allows the machine to be stopped. The leak monitoring system only works with coolant lubrication.

• Benefits

- Status monitoring of the rotary joint
- Spindle is protected from being flooded with cooling lubricant

We reserve the right to technical modifications!



Application Data

Max. speed	42,000 rpm
Max. pressure cooling lubricant	80 bar (1,160 psi)
Dry-run with compressed air	10 bar (145 psi)
Minimum quantity lubrication mode (MQL) max.	10 bar (145 psi)
Cleaning air at standstill max.	10 bar (145 psi)
Filter rating	< 50 µm (< 25.4"x10 ⁻³)

Ordering Information

Example:

K	2	1	B	07	-XXX
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Series K					
Maximum speed 1 = 12,000 rpm 2 = 24,000 rpm 4 = 42,000 rpm					
Number of housing connections 1					
Housing connections B = radial C = axial					
Nominal width 7 mm (0.27538") 8 mm (0.31472")					
Consecutive number for special versions, assigned by the manufacturer.					

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Application Examples



Matec-30 L

Matec-30 L

Rotary joint K and motor spindle
in a machining center, Matec-30 L.

Retrofitted leak monitoring system.
Pre-alarm by sensor at the bottom, main
alarm and off signal by sensor at the top.

Sensor

