








## PRODUCT DESCRIPTION

Power output S6 40%	4.4 kW
Power output S1 100%	3.0 kW
Rotation speed	to 50.000 rpm
Diameter	80 mm
Spindlehousing	stainless steel
Spindle interface	HSK - C32

## FEATURES

-  Modular spindle cartridge
-  Hybrid-ceramic-bearings
-  Permanent grease lubricated bearings
-  Air seal
-  Liquid cooling
-  Speed sensor
-  Motor temperature control



### Available equipment:

Frequency converter, Cooling unit, Supply lines, Tool cooling system, Spindlebracket, Automatic Tool changer, Collet chucks, Collets, Spindle Cartridge

## TECHNICAL SPECIFICATIONS

### Motor data

Motor type	asynchron
Number of pol's	2
Speed range (rpm) max.	50.000
Power output S1/S6 40% (kW)	3.0 / 4.4
Torque S1/S6 40% (Nm)	0.6 / 0.9
Frequency range (Hz) max.	834
Max. voltage (Volt)	210
Nominal current (Amp.)	12
Maximum current (Amp.)	16

### ATC control

Number of sensors	-
Type of sensors	-
Controlled positions	
- tool clamped	-
- tool unclamped	-
- clamped no tool	-

### Speed control

Inductive sensor	6 Impulse/RPM 1V <sub>ss</sub>
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### Bearing data

Bearings	ceramic - hybrid
Lubrication	grease
Temperature protection	-
Recommended air seal (bar)	1 - 2
Air seal requirements (l/min)	80

### Spindle cooling

Recommended coolant	liquid water
Cooling requirements (kW)	0.5
Coolant temperature (° C)	20 ± 2
Max. coolant pressure (bar)	3

### Shaft data

Run-out accuracy	
- Axial eccentricity (µm)	< 1
- Spindle taper (µm)	< 1
Balance quality	G 0.4
Vibration (mm/s)	< 1.5
Static axial stiffness (N/µm)	18
Static radial stiffness (N/µm)	34

### Connections

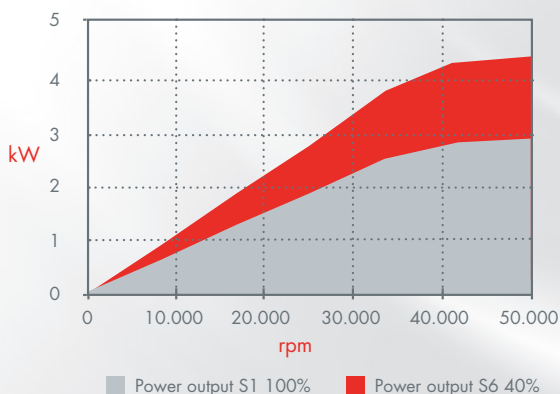
Power connection	8 - pol
ATC control	-
Encoder / Speed sensor	integrated into power connection
Coolant	2 x Ø 8mm (1/8")
Air seal	1 x Ø 6mm (1/8")
ATC	-
Taper air purge	-
Coolant mist system	-

### Tooling

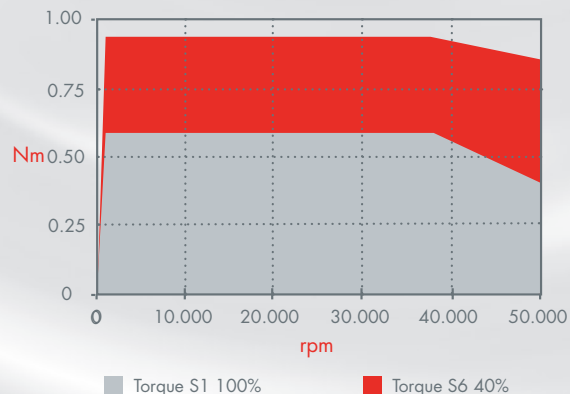
Spindle interface	HSK - C32
Tool clamping / release pressure (bar)	-
Taper cleaning pres. (bar)	-
Max. Tool diameter (mm)	10

Spindle diameter (mm)	80 mm
Spindle arretation	Spindle bracket / mounting flange
Weight (kg)	6.0

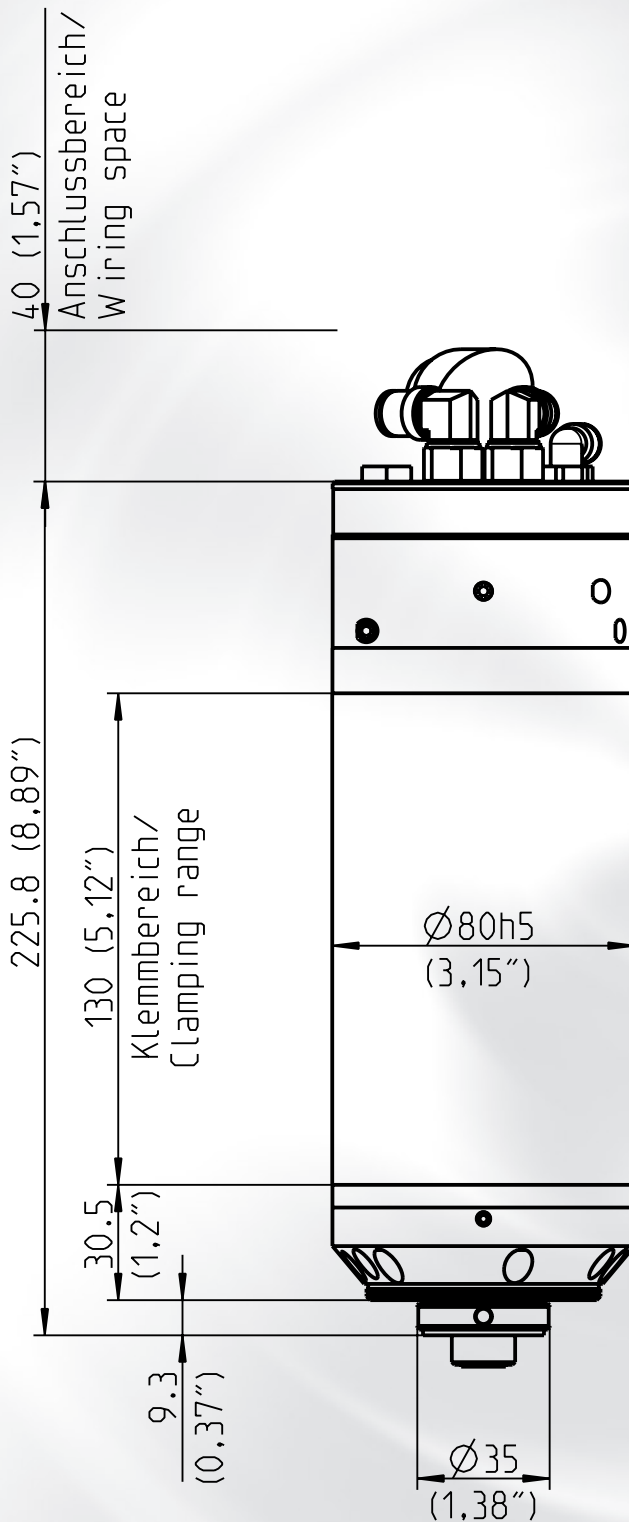
### Power diagramm



### Torque diagram



MAßZEICHNUNG  
DIMENSIONAL DRAWING



## Spindelanschlüsse Spindle connections

- 1 Leistungsstecker 8-pol  
Power connection 8-pin
- 2 Stecker Werkzeugüberwachung /  
ATC control plug  
Nicht vorhanden / not available
- 3 Minimalmengensprühanschluss  
Coolant mist system connection  
Nicht vorhanden / not available
- 4 Kegelreinigungsanschluss  
Taper air purge connection  
Nicht vorhanden / not available
- 5 Kühlmittelanschluss Vorlauf  
Coolant connection forward flow
- 6 Kühlmittelanschluss Rücklauf  
Coolant connection return flow
- 7 Sperrluftanschluss  
Air seal connection
- 8 Werkzeugwechselanschluss  
Tool change connection  
Nicht vorhanden / not available

