







PRODUCT DESCRIPTION

Power output S6 40%	2.0 kW
Power output S1 100%	1.4 kW
Rotation speed	to 60.000 min-1
Diameter	62 mm
Spindle interface	Collet ER11



FEATURES

-  Oil/Air mist lubrication
-  Ceramic bearing
-  Permanent grease lubricated bearings
-  Air seal
-  Speed control
-  Motor temperature control

It is possible to operate the spindle without liquid cooling. Available Spindle speed without cooling is 50.000 rpm and 400 watts output respectively

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.	60.000
Power output S1/S6 40% (kW)	1.4 / 2.0
Torque S1/S6 40% (Nm)	0.24 / 0.32
Frequency range (Hz) max.	1000
Max. voltage (Volt)	210
Nominal current (Amp.)	5.5
Maximum current (Amp.)	8

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 _{ss}
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Bearing data

Bearings	ceramic - hybrid
Lubrication	grease
Temperature protection	-
Recommended air seal (bar)	1
Air seal requirements (l/min)	ca. 40

Spindle cooling

Recommended coolant	liquid water
Cooling requirements (kW)	0.4 - 0.5
Coolant temperature (° C)	20 ± 2
Max. coolant pressure (bar)	3
Flow rate	min. 1.3 l/min

Shaft data

Run-out accuracy	
- Axial eccentricity (µm)	-
- Spindle taper (µm)	< 2
Balance quality	G 0.4
Vibration (mm/s)	< 1
Static axial stiffness (N/µm)	13
Static radial stiffness (N/µm)	22

Connections

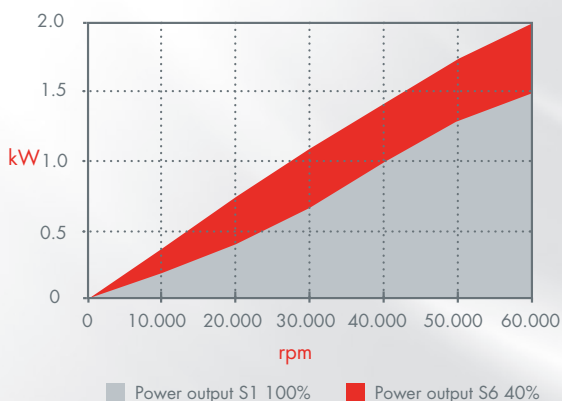
Power connection	8-pol
ATC control	-
Encoder / Speed sensor	-
Coolant	2 x Ø 8mm (1/8")
Air seal	1 x Ø 6mm (1/8")
ATC	-
Taper air purge	-
Coolant mist system	connection plug male (1/8")

Tooling

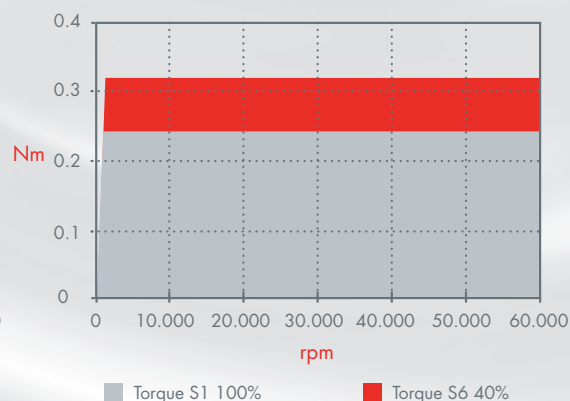
Spindle interface	ER 11
Tool clamping / release pressure (bar)	-
Taper cleaning pres. (bar)	-
Max. Tool diameter (mm)	7

Spindle diameter (mm)	62 mm
Spindle arretation	Spindle bracket / mounting flange
Weight (kg)	2

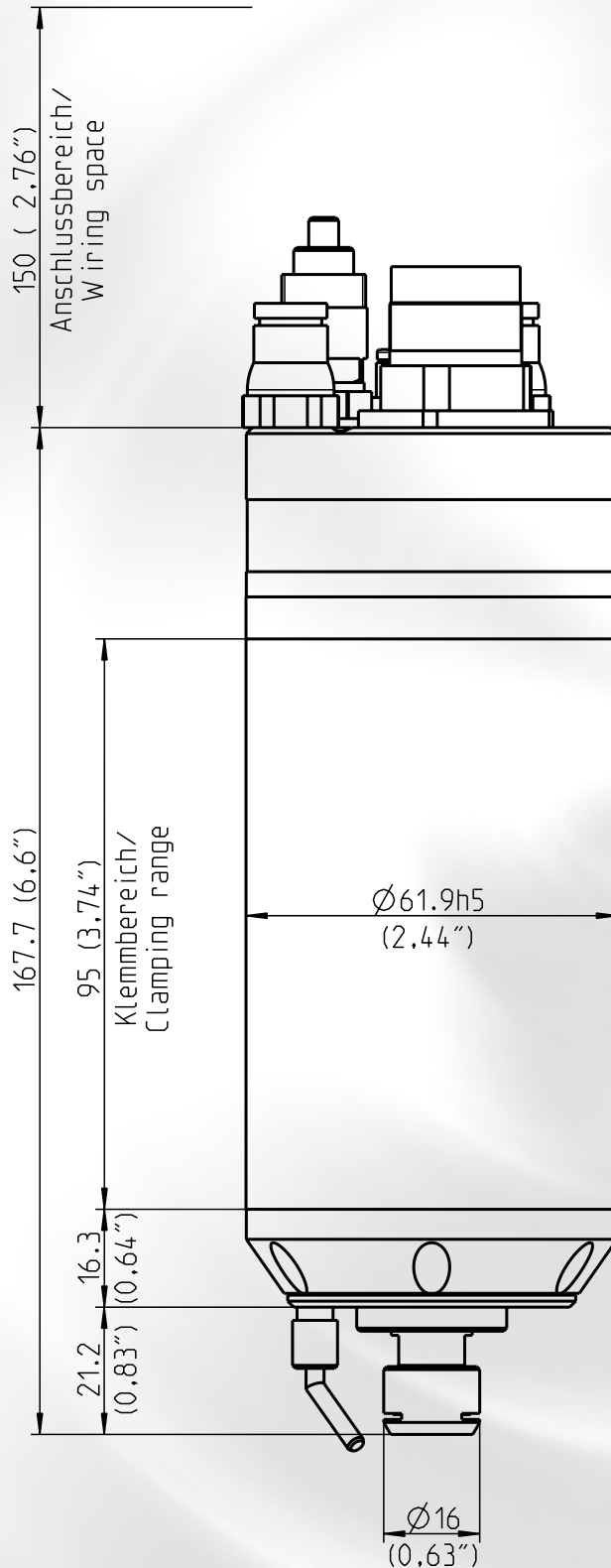
Power diagramm



Torque diagram



MAßZEICHNUNG
DIMENSIONAL DRAWING



Spindelanschlüsse Spindle connections

1 Leistungsstecker / Power connection

PIN	Funktion
	Erde Schutzleiter / Ground
1	Motorphase U
3	Motorphase W
4	Motorphase V
A	Feldplatte / Speed sensor (+ 5 Volt)
B	Feldplatte / Speed sensor
C	PTC - Motortemperaturüberwachung Motor protection
D	Umformer Masse / Ground converter

2 Stecker Werkzeugüberwachung / ATC control plug

Nicht vorhanden / not available

3 Minimalmengensprühanschluss Coolant mist system connection

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

