



- For light-duty high-speed machining on milling, grinding, drilling and engraving
- Excellent spindle shaft sealing
- Outstanding smooth-running
- Ultimate precision

General

Intended application	Light duty
Diameter	120 mm
Spindletype	flange
Flange diameter	140 mm
Housing	Yes
Length	548 mm
Weight	27 kg
Operating position	any
Max. Speed	20000 1/min
Documented duty cycle must be adhered to for warranty conditions and spindle life time	
Tool interface	HSK-E40
Direction of rotation	left + right
Spindle cooling medium	waterbased fluid

Motor data

Motor type	Async star
Voltage S1	350 V
Current S1	27 A
Number of poles	4
Max. frequency	667 Hz
S1 Condition	—
- Power	10.5 kW
- Torque	5 N-m
Power Sx definition	
Nominal speed	20000 1/min
Motor temperature max.	140 °C
Length of powercables	0.7 m

Spindle cooling system

Spindle cooling system	front + motor
Spindle cooling connection	serial
Cooling power required	1.58 kW
Flow-rate (water) delta T= 5K	4 l/min
Cooling pressure spindle max.	5 bar

Process cooling

Sensor technology

Acceleration sensor	Yes
Acceleration sensor type	IBIS
Tool detection	digital 3xPNP
.	Tool released
.	Clamped without tool
.	Tool clamped
Motor temperature sensor	PTC + Pt100 + KTY
Bearing temperature sensor	front + rear (Pt100)

Bearings

Number of bearings	4
Bearing-type front	Ball-bearing ceramic
Bearing-type rear	Ball-bearing ceramic
Bearing diameter front	45 mm
Bearing diameter rear	35 mm
Bearing temperature front permitted	60 °C
Bearing temperature rear permitted	60 °C
Bearing preload	springloaded

Lubrication

Bearing lubrication	grease
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Spindle sealing

Front seal	labyrinth
Frontseal air consumption	50 NI/min
Front seal pressure dyn.	0.2-0.4 bar

Clamping system / Tool interface

Tool release pressure min.	6 bar
Tool release pressure max.	10 bar
Taper blow-out	air 2-3 bar
Volume cylindre clamping	0 cm ³
Volume cylindre unclamp	192 cm ³

Shaft locking

Options