

SC 80

MOTOR	
Speed Range	10 000 – 40 000 rpm
Torque (S1-100%)	0.6 N-m [5.3 in-lb]
Power (S1-100%)	2.6 kW [3.5 hp] at 40 000 rpm
Frequency Range	333 to 1333 Hz
Voltage Range	88 to 350 VAC
Maximum Amperage	8.0 amps at full torque (S1-100%)
Motor Type	AC asynchronous, 4-pole, 3-phase induction motor
SPINDLE DRIVE	
Drive Type	Type PCSP 810 frequency converter
BEARINGS	
Bearings	Four (4) angular-contact, ABEC 7/9 precision Hybrid-ceramic front bearings, steel rear bearings
Mounting	Front and rear duplex sets, mounted in “O” arrangement with shaft length compensation to provide constant spring pre-load
Lubrication	Permanent grease lubrication
Labyrinth air-seal	0.5 bar [7 psi] positive air pressure at bearing seal
SHAFT DATA	
Runout Accuracy	≤ 2 μm [0.00008”] maximum radial runout in spindle taper. ≤ 1 mm/sec maximum allowable vibration velocity at maximum speed (measured radially on spindle housing at front and rear bearings)
Balance Quality	
SPINDLE COOLING	
Cooling	Liquid circulation (1 part Dowtherm® SR1 to 2 parts distilled water) through spindle housing using Type RCS 1001 cooling system.
TOOL CLAMPING	
Toolchange	Manual
Collets	Type SRP 20 (12mm, 1/2” maximum collet capacity)
SENSORS	
Motor Protection	PTC thermistor in stator
Speed Sensing	Tachometer
CONNECTIONS	
	<ul style="list-style-type: none"> liquid cooling (2 x Ø1/4” tubes) labyrinth air seal (1 x Ø1/4” tube) power cable (1 meter length with connector) monitor cable (1 meter length with connector)
MOUNTING / WEIGHT	
Housing Diameter	Ø80mm h5 [3.1496 “ +0/-0.0006”]
Mount Type	Type 9080 plane mount
Net Weight	8.1 kg [17.9 lb]



