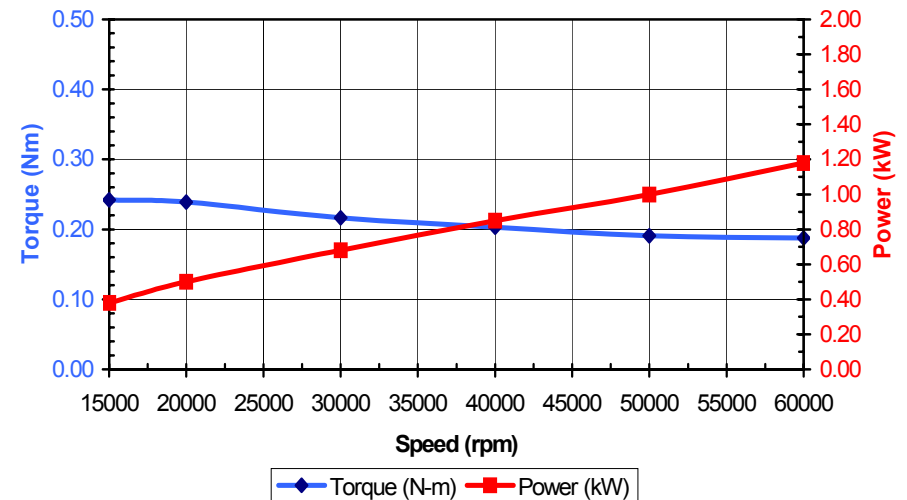


Spindle Datasheet

SC 60



MOTOR	
Speed Range	15 000 – 60 000 rpm
Torque (S1-100%)	0.25 N-m [2.2 in-lb]
Power (S1-100%)	1.2 kW [1.6 hp] at 60 000 rpm
Frequency Range	250 to 1000 Hz
Voltage Range	64 to 182 VAC
Maximum Amperage	4.8 amps at full torque (S1-100%)
Motor Type	AC asynchronous, 2-pole, 3-phase induction motor
SPINDLE DRIVE	
Drive Type	Type PCS 410 frequency converter
BEARINGS	
Bearings	Four (4) angular-contact, hybrid-ceramic, high-precision bearings, ABEC 7/9 precision
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"] radial runout in spindle taper.
Balance Quality	≤ 1 mm/sec radial vibration velocity at maximum rpm
SPINDLE COOLING	
Cooling	Liquid circulation (1 part Dowtherm® SR1 to 2 parts distilled water) through spindle housing using Type 7136 / 7137 cooling system.
TOOL CLAMPING	
Toolchange	Manual
Collets	Type SRP 6 (6mm, 1/4" maximum collet capacity)
SENSORS	
Motor Protection	PTC thermistor in stator
Speed Sensing	Tachometer
CONNECTIONS	
	<ul style="list-style-type: none"> • liquid cooling (2 x Ø6mm / Ø1/4" tubes) • labyrinth air seal (1 x Ø1/8" tube) • power cable (1 meter length with connector) • monitor cable (1 meter length with connector)
MOUNTING / WEIGHT	
Housing Diameter	Ø61.91 mm h5 [2.4374" +0/-0.0006"] or Ø60 mm h5 [2.3622" +0/-0.0006"]
Mount Type	Type 9060 plane mount
Net Weight	3.25 kg [7.2 lb]



Spindle Datasheet

SC 60



SC 60 Standard Equipment:

SC 60 spindle (w/ 1-meter power cable and Ø61.91 housing) Cat. #550333



Wrenches:

- 2 SRP 6 spanner wrenches #307423
- 1 collet assembly tool #176051

Documentation:

- 1 operating instructions #176535
- 1 safety instructions #329139
- 1 warranty registration card #176991

SC 60 System Components (ordered separately):

Type PCS 410 Frequency Converter:

Cat. #: 332762



Type 7136 / 7137 Cooling System:

Cat. #332370 (115 V)
Cat. #332371 (230 V)



SC 60 Accessories (ordered separately):

Type SRP 6 Collets:



- | | |
|---------------------|--------------------|
| Cat. #314031, 3/32" | Cat. #316773, 3 mm |
| Cat. #314032, 1/8" | Cat. #316774, 4 mm |
| Cat. #314034, 3/16" | Cat. #316776, 6 mm |
| Cat. #314036, 1/4" | |

Extension Cable Sets (power and monitor cables):

- Cat. #331297, 3m (9.6 ft)
Cat. #331298, 5m (16 ft)



Filter/Regulator Kit:

Cat. #328159 (for labyrinth air-seal function)

- 5-micron filter-regulator with bracket
- 5m Ø1/8" tubing (#179679)



Base Tubing Kit:

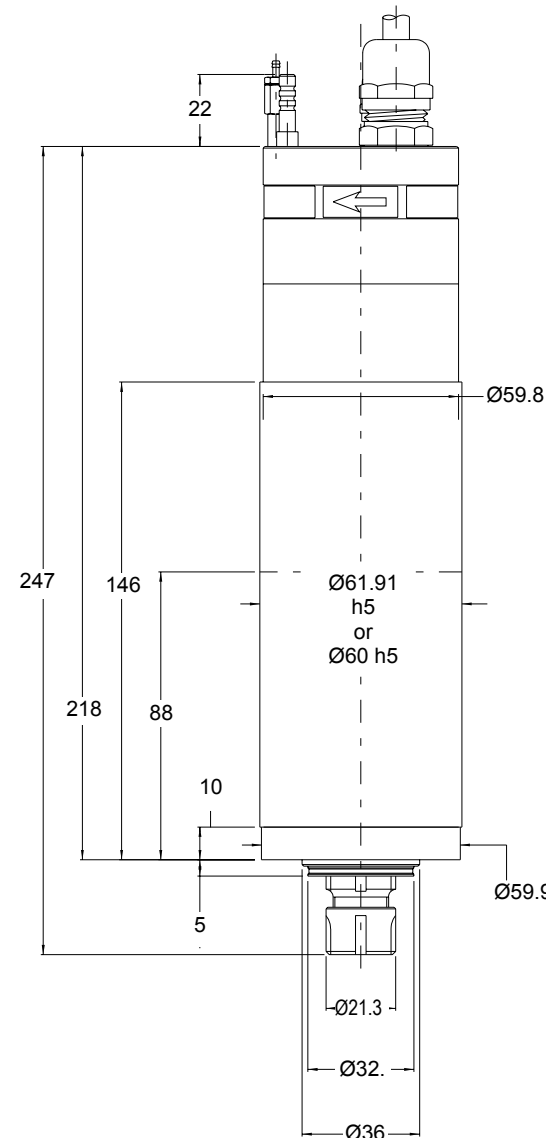
Cat. #332004 (for liquid cooling connections)

- 5m Ø1/4" tubing (#179525)
- 1 tubing cutter (#329378)
- 2 adapter fittings (#176519)

Type 9060 plane mount:

Cat. #406706 (Ø 61.91mm)

Cat. #406705 (Ø 60mm)



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