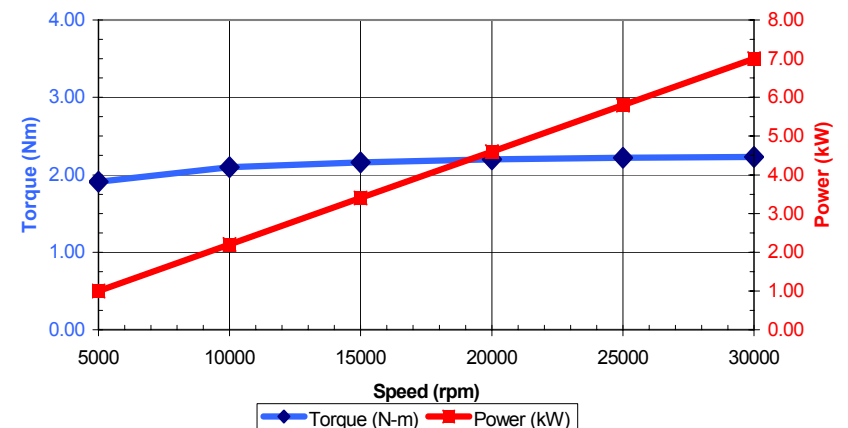


Spindle Datasheet

SC 50101



MOTOR	
Speed Range	5,000 – 30,000 rpm
Torque (S1-100%)	2.2 N-m [20 in-lbs] (S 1)
Power (S1-100%)	7 kW [9.4 hp] at 30,000 rpm (S 1)
Frequency Range	167 - 1,000 Hz
Voltage Range	70 - 350 VAC
Maximum Amperage	19 A (S 1)
Motor Type	AC asynchronous, 4-pole, 3-phase
SPINDLE DRIVE	
Drive Type	Type PCSP frequency converter
BEARINGS	
Bearings	Four (4) angular-contact, hybrid-ceramic 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	0.2 bar [3 psi] positive air pressure at bearing seal
SHAFT DATA	
Stiffness at spindle nose	Axial: 65 N/μm [370,000 lb/in] Radial: 70 N/μm [400,000 lb/in]
Runout Accuracy	≤ 2 μm [0.00008"] radial runout in shaft bore ≤ 2 μm [0.00008"] radial runout at shaft face
Balance Quality	≤ 1 mm/sec radial vibration velocity at maximum speed
SPINDLE COOLING	
Cooling	Liquid circulation through spindle housing using Type RCS 2304 Refrigerated Cooling System
TOOL CLAMPING	
Grinding Arbors	threaded grinding arbors with M14 x 1.5 thread and Ø15 mm pilot diameter
SENSORS	
Motor Protection	PTC thermistor in stator
Speed Sensing	Tachometer
CONNECTIONS	
	<ul style="list-style-type: none"> liquid cooling (2 x Ø8mm tubes) labyrinth air seal (1 x Ø6mm tube) Power Cable (1 meter length with connector)
MOUNTING / WEIGHT	
Housing Diameter	Ø 100 mm h5
Mount Type	Type 9100 plane mount
Net Weight	14.7 kg [32 lb]



Spindle Datasheet

SC 50101



SC 50101 Standard Equipment:

SC 50101 spindle (w/ 1-meter power cable)
Cat. #550411



Included Accessories:

- 1 operating instruction #331969
- 1 round cleaning brush #477450
- 1 straight cleaning brush #477451
- 2 - 27 mm open end wrenches #412589
- 1 wood shipping box #332463

SC 50101 System Components (ordered separately):

Type PCSP Frequency Converter:



Type RCS 2304 Refrigerated Cooling System:



Cat. #330698
(230V, 1-phase, 60 Hz)

Cat. #330697
(230V, 1-phase, 50 Hz)

SC 50101 Accessories (ordered separately):

Type 9100 Plane Mount:



Cat. #410705

Base Tubing Kit:

Cat. #411681 (for liquid cooling, and labyrinth air-seal connections)

- 5m Ø6mm tubing (#328853)
- 10m Ø8mm tubing (#328856)
- 1 tubing cutter (#329378)
- 2 adapter fittings (#330629)

Extension Cable:



Cat. #331108, 3m [9.6 ft]
Cat. #331109, 5m [16 ft]

Filter/Regulator Kit:

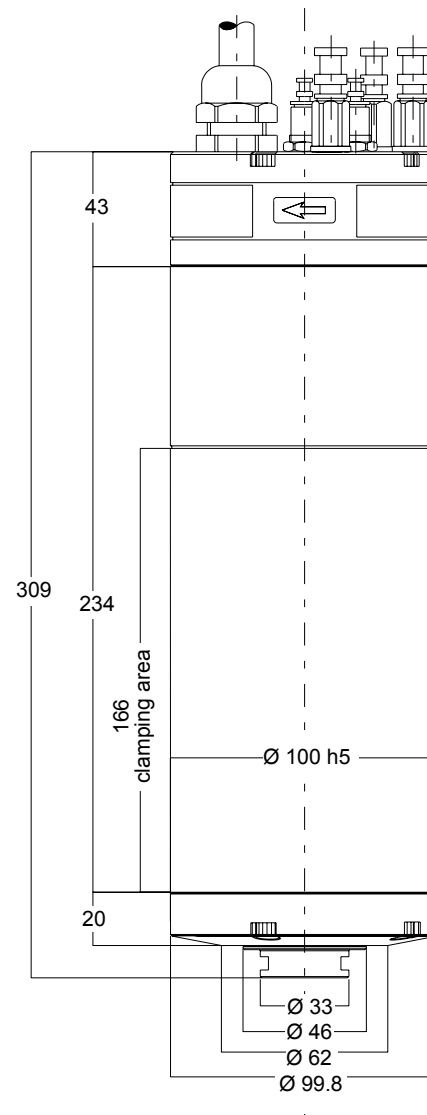
Cat. #329279 (for labyrinth air-seal function)

- 5-micron filter-regulator with bracket
- 5m Ø1/4" tubing (#179525)

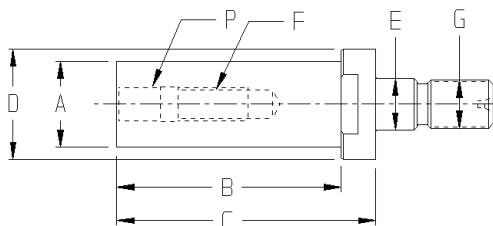
SC 50101 Grinding Arbors:

	A	Ø12	Ø15.9	Ø19.8	Ø24.9
B	35	45	55	65	
C	45	55	65	75	
D	Ø32				
E	Ø15				
F	1/4" – 20		3/8" – 16		
G	M14 x 1.5				
P	0.250"		0.375"		
Type 1	412501	412502	412503	412504	
Type 2	412511	412512	412513	412514	

Type 1: For wheels with threaded shanks
Type 2: For wheels with separate wheel screws



SC 50101 Grinding Arbor



Fischer Precise USA, Inc.
3715 Blue River Avenue
Racine, WI U.S.A. 53405

Phone: (262) 632-6173
Fax: (262) 632-6730
Email: info@fischerprecise.com
www.fischerprecise.com