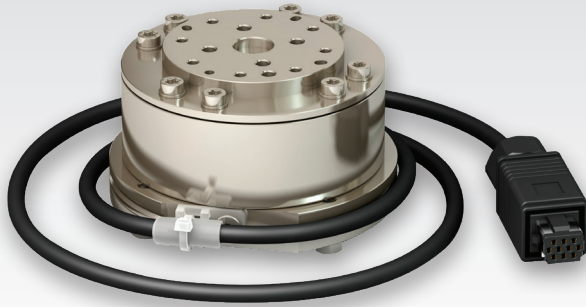


Epson® Force Guide



Intuitive robot force guidance for high-precision performance.

Powerful performance — integrated force control system driven by proprietary Quartz Technology from Epson

Ultra precise — detects force and adjusts motion with amazing precision — down to 0.1 N

Superior rigidity — durable sensor built to withstand excessive force

Fast robot/force guidance response — internal sensor with real-time servo system integration

Point-and-click setup — easy-to-use interface with graphical wizards, charts and more

Fast, easy implementation — helps reduce the amount of coding with decision-based flowcharts and intelligent objects

Real-time monitoring and data logging of force feedback — for quality control

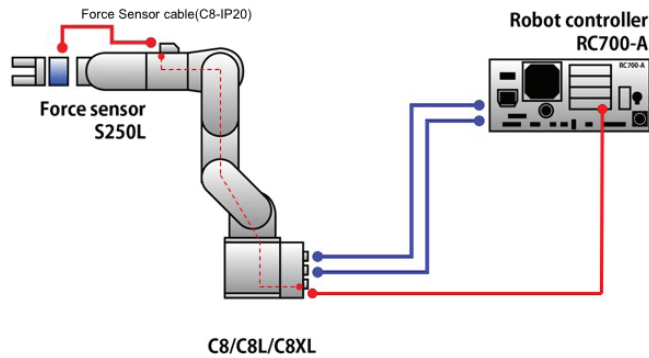
Multi-axis force/torque sensor — includes three linear and three rotational measurement axes

Easy set up and configuration — fully integrated into the Epson RC+® development environment

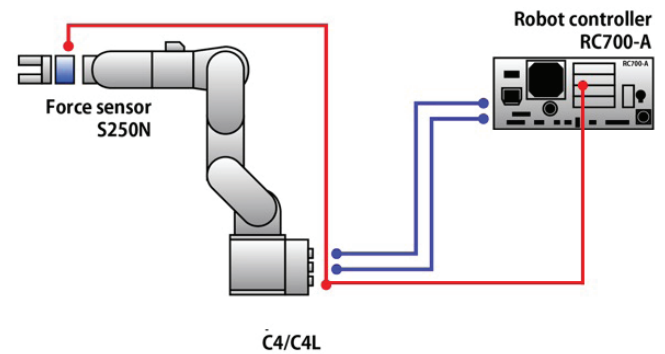
Simplify common force guidance applications — perfect for tasks such as screw driving, part insertion, grinding/polishing and more

Model No.	S250N	S250L	S250P	SH250LH	S250H	S2503		S2506	S25010
Compatible Robots ¹	C4-Series	C8-Series (Standard and Clean/ESD)	C8-Series (Protected)	N6	N2	RS-Series	G3	G6	G10 G20
Cabling Routing	External	Internal	Internal	Internal	Internal	Internal	External	Internal	Internal
Dimensions (diameter x height)	80 x 49 mm	88 x 49 mm	88 x 66 mm	85 x 48 mm	80 x 49 mm	80 x 52 mm		80 x 52 mm	80 x 52 mm
Weight ²	460 g	520 g	680 g	460 g	460 g	620 g		620 g	640 g
Compatible Robot Controller ³	RC700-A								
Measured Degrees of Freedom	6-axis: 3 force components (Fx, Fy, Fz) and 3 torque components (Tx, Ty, Tz)								
Rated Load	Force (Fx, Fy, Fz)					250 N			
	Torque (Tx, Ty, Tz)					18 Nm			
Maximum Allowable Static Load	Force (Fx, Fy, Fz)					1,000 N			
	Torque (Tx, Ty, Tz)					36 Nm			
Measured Resolution ⁴	Force (Fx, Fy, Fz)					± 0.1 N or less (5 sec, 25 °C)			
	Torque (Tx, Ty, Tz)					± 0.003 Nm or less (5 sec, 25 °C)			
Measurement Accuracy ⁵	± 5 % RO or less								
Operating Environment	Temperature								
	Humidity								
Protection Class	IP20	IP20	IP67	IP20	IP20	IP20	—	IP20	IP20
What's in the Box	Force Sensor, Force Control Board, Cables								
Safety Standards	CE Mark, EMC Directive, KC Mark								
Support	Customer Service (562) 290-5920 service@robots.epson.com Applications Support (562) 290-5930 applications@robots.epson.com Sales Inquiries (562) 290-5997 info@robots.epson.com								

Internal Cable Routing Example



External Cable Routing Example



- 1 Robots not supported: G1, LS-Series, T-Series, EZ Modules
- 2 Weight includes force sensor and mounting flange; does not include control board and cables.
- 3 Controllers not supported: RC180 and RC90
- 4 The measurement resolution including the noise level and time drift (25 ° Celsius), when then measurement time is 5 seconds.
- 5 The measurement accuracy when the measurement time is 6 minutes.

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Epson America, Inc. 3840 Kilroy Airport Way, Long Beach, CA 90806
Epson Canada Limited 185 Renfrew Drive, Markham, Ontario L3R 6G3
www.epson.com www.epson.ca

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Contact:

