

RCS2-SRGD7BD

Robo Cylinder, Rod Type with Double Guide, Actuator Width 75mm, 200V Servo Motor, Short-Length Model

Model Specification Items	RCS2	—SRGD7BD—	I	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Series	Type	Encoder type	Motor type	Lead	Stroke	Applicable controller	Cable length	Options
	I: Incremental	60: 60W Servo motor 100: 100W Servo motor 150: 150W Servo motor		16: 16mm 8: 8mm 4: 4mm	50: 50mm 300: 300mm (50mm pitch increments)	T1: XSEL-J/K T2: SCON SSEL XSEL-P/Q	N: None P: 1m S: 3m M: 5m X <input type="checkbox"/> : Custom Length R <input type="checkbox"/> : Robot Cable	See options below.	

* See page Pre-47 for details on the model descriptions.



Technical References Appendix P.5

- POINT**
Notes on selection
- When operated at the rated acceleration, the maximum load capacity is the load capacity at the rated acceleration.
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 - The values for the horizontal load capacity assume the use of an external guide, so that there is no external force from any direction other than the forward/backward direction of the rod. See the technical resources (page A-112) for the allowable weight using the supplied guide alone.
 - See page A-71 for details on push motion.

Actuator Specifications

Leads and Payloads

Model number	Motor output (W)	Lead (mm)	Rated Acceleration (G)	Load Capacity at Rated Acceleration		Max Acceleration (G)	Load Capacity at Max. Acceleration		Rated thrust (N)	Stroke (mm)
				Horizontal (kg)	Vertical (kg)		Horizontal (kg)	Vertical (kg)		
RCS2-SRGD7BD-I-60-16-①-②-③-④	60	16	0.25	5	1	0.35	2.5	(N/A)	63	50~300 (every 50mm)
RCS2-SRGD7BD-I-60-8-①-②-③-④		8	0.15	10	4	0.25	5	1.5	127	
RCS2-SRGD7BD-I-60-4-①-②-③-④		4	0.05	20	9	0.15	10	4	254	
RCS2-SRGD7BD-I-100-16-①-②-③-④	100	16	0.3	10	2.5	0.4	5	0.5	103	
RCS2-SRGD7BD-I-100-8-①-②-③-④		8	0.2	22	8	0.3	10	3.5	207	
RCS2-SRGD7BD-I-100-4-①-②-③-④		4	0.1	40	18.5	0.2	20	8	414	
RCS2-SRGD7BD-I-150-16-①-②-③-④	150	16	0.3	15	5.5	0.4	7.5	2	157	
RCS2-SRGD7BD-I-150-8-①-②-③-④		8	0.2	35	13.5	0.3	17.5	6	314	
RCS2-SRGD7BD-I-150-4-①-②-③-④		4	0.1	55	21.5	0.2	27.5	10	628	

Stroke and Maximum Speed

Stroke Lead	Stroke	50~300 (every 50mm)
	16	800
8	400	
4	200	

(Unit: mm/s)

Code explanation ① Stroke ② Applicable controller ③ Cable length ④ Options *See page A-71 for details on push motion.

① Stroke

① Stroke (mm)	Standard price		
	Motor Output (W)		
	60W	100W	150W
50	—	—	—
100	—	—	—
150	—	—	—
200	—	—	—
250	—	—	—
300	—	—	—

③ Cable Length

Type	Cable symbol	Standard Price
Standard	P (1m)	—
	S (3m)	—
	M (5m)	—
Special length	X06 (6m) ~ X10 (10m)	—
	X11 (11m) ~ X15 (15m)	—
	X16 (16m) ~ X20 (20m)	—
	R01 (1m) ~ R03 (3m)	—
Robot Cable	R04 (4m) ~ R05 (5m)	—
	R06 (6m) ~ R10 (10m)	—
	R11 (11m) ~ R15 (15m)	—
	R16 (16m) ~ R20 (20m)	—

* See page A-59 for cables for maintenance.

④ Options

Name	Option code	See page	Standard price
Connector cable exit direction	A1~A3	→ A-41	—
Brake	B	→ A-42	—
Foot bracket	FT	→ A-49	—
Guide mounting direction	GS2~GS4	→ A-50	—
Extended rod tip	RE	→ A-54	—

Actuator Specifications

Item	Description
Drive System	Ball screw, ø12mm, rolled C10
Positioning Repeatability	±0.02mm
Lost Motion	0.1mm or less
Guide	Double guide (guide rod diameter ø16mm, ball bush type)
Rod diameter	ø35mm
Non-rotating accuracy of rod	±0.08 deg
Ambient operating temperature, humidity	0 to 40°C, 85% RH or less (Non-condensing)

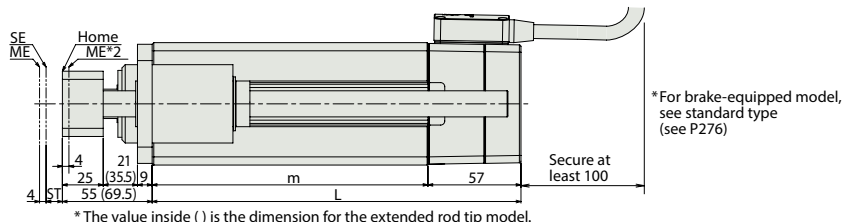
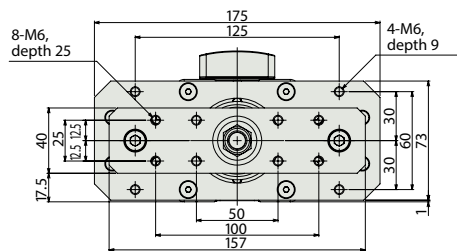
Dimensional Drawings

CAD drawings can be downloaded from the website. www.intelligentactuator.com

For Special Orders Appendix P.15

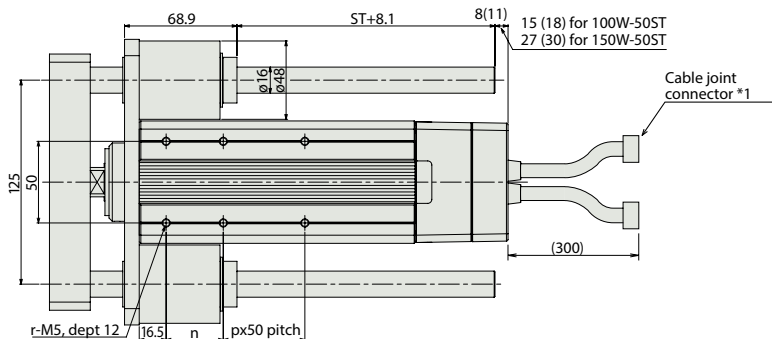


*The SRGD7BD is not available in non-motor end configuration, due to its construction.



Note:
A slit is provided in the side of the actuator body to prevent pauses due to forward/backward operation. Please make a separate request for a dustproof/splash-proof model. Please be careful when operating in the dusty environment. The dust may enter inside from the slit.

- (*1) Connect the motor and encoder cables here. See page A-59 for details on cables.
 - (*2) After homing, the slider moves to the ME, therefore, please watch for any interference with surrounding objects.
- SI: Stroke
SE: Stroke end
ME: Mechanical end



Dimensions and Weight by Stroke

Stroke		50	100	150	200	250	300
L	60W	126	176	226	276	326	376
	100W	133	176	226	276	326	376
	150W	145	176	226	276	326	376
m	60W	69	119	169	219	269	319
	100W	76	119	169	219	269	319
	150W	88	119	169	219	269	319
n		25	35	35	35	35	35
p		0	0	1	2	3	4
r		4	4	6	8	10	12
Weight (kg)	60W	4.3	5	5.7	6.4	7.2	7.9
	100W	4.5	5.1	5.9	6.6	7.3	8
	150W	4.8	5.3	6.1	6.8	7.5	8.2

Applicable Controllers

RCS2 series actuators can be operated with the controllers indicated below. Select the type according to your intended application.

Name	External view	Model number	Features	Maximum number of positioning points	Input power	Power-supply capacity	Standard price	Reference page
Positioner mode		SCON-CA-①-I-NP-2-②	Up to 512 positioning points are supported.	512 points	Single-phase 100VAC	408 VA max.	—	→ P643
Solenoid valve mode			Actuators can be operated through the same control used for solenoid valves.	7 points				
Field network type			Movement by numerical specification is supported.	768 points				
Pulse-train input control type			Dedicated pulse-train input type	(—)				
Program control type 1 or 2 axes		SSEL-CS-1-①-I-NP-2-②	Program operation is supported Up to two axes can be operated	20,000 points	3-phase 200VAC (XSEL-P/Q only)	—	—	→ P685
Program control type 1 or 6 axes		XSEL-③-1-①-I-N1-EEE-2-④	Program operation is supported Up to six axes can be operated	20,000 points				

* This is for the single-axis SSEL, and XSEL.
 * ① Indicates the power-supply voltage type (1: 100 V / 2: Single-phase 200 V).
 * ② Indicates the power-supply voltage type (1: 100 V / 2: Single-phase 200 V / 3: Three-phase 200 V).
 * ③ Indicates the wattage (60/100/150).
 * ④ Indicates the XSEL type (J / K / P / Q).

Please note that this model cannot be connected to the XSEL-P/Q type (5-axis/6-axis), XSEL-R/S type, or MSCON.

- Slider Type
- Mini
- Standard
- Controllers Integrated
- Rod Type
- Mini
- Standard
- Controllers Integrated
- Table/ Arm/ Flat Type
- Mini
- Standard
- Gripper/ Rotary Type
- Linear Servo Type
- Clean-room Type
- Splash-Proof Type
- Pulse Motor
- Servo Motor (24V)
- Servo Motor (200V)
- Linear Servo Motor