

RSD2 / RSDG2

Rod Type Actuator (150–600 N Max.)



Structural Components: Actuator, Controller, Cable Accessories

Accessories	Controller I/O Specifications		
	NPN / PNP	CC-Link	DeviceNet
	Instruction Manual on CD-ROM, Power Connector, Dummy Connector, 6 Mounting Nuts		
	CC-Link Connector		DeviceNet Connector

Robot Material / Surface Treatment

Type	Components	Body	Rods	Cover	Shaft	Ball Bushing
RSD2	Material	Aluminum	Steel	ABS Resin	—	—
	Surface Treatment	Acrylic Paint	—	—	—	—
RSDG2	Material	Aluminum	Steel	ABS Resin	Steel	Steel
	Surface Treatment	Acrylic Paint	—	—	—	—

General Specifications

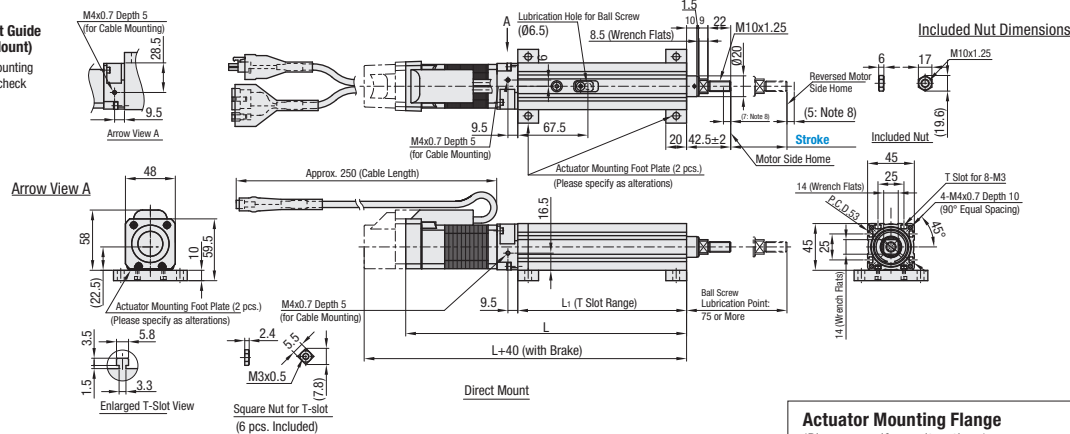
Type	Ball Screws	Motor	Position Detector	Operating Ambient Temperature / Humidity
RSD2	Ø8	Stepping	Resolver (Incremental)	0–40°C, 35–85% RH (No Condensation)
RSDG2	(C10 Rolled)			

Standard Specifications Terminology P.513

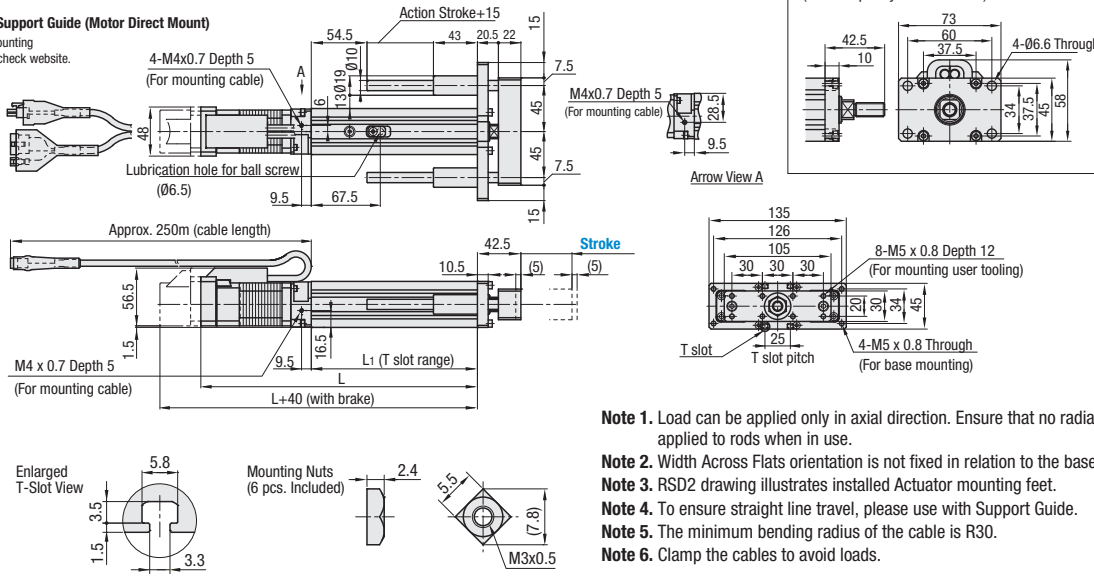
Type	Lead (mm)	Positioning Repeatability (mm)	Maximum Load Capacity (kg)			Maximum Push Force (N)	Rated Running Life ①	Lost Motion (mm)	Rod Non-Rotational Accuracy (degrees)		Stroke (mm)	Maximum Velocity ② (mm/sec)	Controller Input Power Supply	Maximum Positioning Points
			Horizontal	Vertical RSD2	Vertical RSDG2				RSD2	RSDG2				
RSD2	02	±0.02	~45	~25	~24	600	5,000 km or More	0.1 or Less	±1.0	±0.05	50–300 (50 Pitch)	~80 ~250 ~500	DC24V ±10%	255 Points
RSDG2	06		~40	~12	~11	300								
	12		~25	~5	~4	150								

① 1. Vertical travel service life varies depending on load capacity. Please check Service Life Table. ② 2. Maximum Velocity varies depending on load capacity. Please refer to Velocity — Maximum Load Capacity Table.

RSD2 Without Support Guide (Motor Direct Mount)
For other motor mounting directions, please check website.



RSDG2 With Support Guide (Motor Direct Mount)
For other motor mounting directions, please check website.



- Note 1.** Load can be applied only in axial direction. Ensure that no radial load is applied to rods when in use.
Note 2. Width Across Flats orientation is not fixed in relation to the base surface.
Note 3. RSD2 drawing illustrates installed Actuator mounting feet.
Note 4. To ensure straight line travel, please use with Support Guide.
Note 5. The minimum bending radius of the cable is R30.
Note 6. Clamp the cables to avoid loads.

Dimensions

Type	Dimensions	Stroke (mm)					
		50	100	150	200	250	300
RSD2	L ₁ (mm)	162.5	212.5	262.5	312.5	362.5	412.5
RSDG2	L (mm)	270.5	320.5	370.5	420.5	470.5	520.5

Mass (kg)

Type	Stroke (mm)					
	50	100	150	200	250	300
RSD2	1.4	1.7	1.9	2.2	2.4	2.7
RSDG2	2.0	2.4	2.7	3.0	3.3	3.7

① The mass of "With Brake" Type is 0.2 kg heavier.

RSD2 / RSDG2

Rod Type Actuator (150–600 N Max.), *continued*



CE Compliant

① See notes on CE Marking P.513

Part Number			Selection				
Type	Lead (mm)	With or w/o Brake ①	Motor Mounting Position	Controller ②	I/O Module	Cable Length (m)	Stroke (mm)
RSD2 RSDG2	02	None: Leave blank Included: B	Direct Mount: Leave blank Right Side Mount: R Left Side Mount: L	Point Control: C1 Pulse Control: P1 (DC24V ±10%)	NPN: N PNP: P CC-Link: C DeviceNet: D	1 3 5 10 (Flexible Cable)	50–300 (50mm Increment)
	06						
	12						

① Choose "with brake" type for use in vertical applications.

② When the pulse train type controller is selected, the I/O type selection is not required.

Motor mounting position R and L are not available for RSDG2. Motor mounting position U is not available for RSD2.



Part Number Example

Part Number	Motor Mounting Direction	Controller	I/O Module	Cable Length	Stroke
RSD206B	L	C1	N	3	200
RSD206B		C1	N	3	200
RSD206B	L	P1		3	200

(Motor Mounting Position: L)

(Motor Mounting Position: Direct)

(Motor Mounting Position: L, Controller: P1)

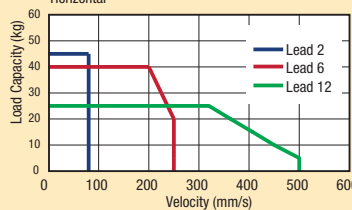


Note

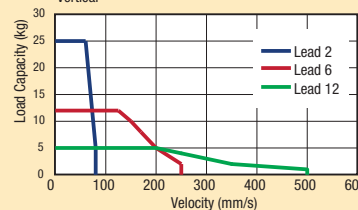
Power interruption circuit is not installed in this controller. Please be sure to provide an external power interruption circuit and form an emergency stop circuit. Circuit Examples P.511.

Velocity Maximum Load Capacity Table

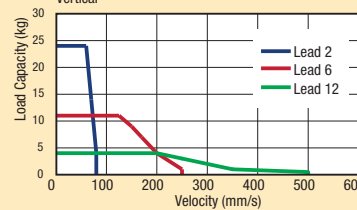
Horizontal RSD2 / RSDG2



Vertical RSD2

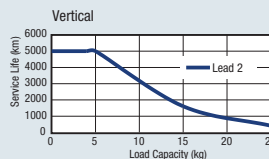


Vertical RSDG2

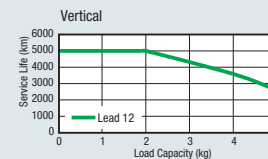


Service Life Table ① Rated Running Life is 5,000km or more. For the following types, however, service life varies depending on its maximum load capacity, and how it is applied.

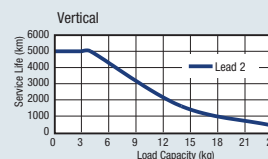
Vertical RSD2



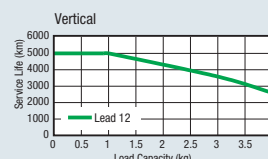
Vertical RSD2



Vertical RSDG2



Vertical RSDG2



Part Number Alterations

Part Number	Controller Type	I/O Types	Cable Length	Stroke	(E, H, etc.)
RSD206B	C1	N	3	200	S-MJ

Alterations	Handy Terminal Standard Specification	Handy Terminal with Deadman's Switch	Support Software with USB Communication Cable	Support Software with D-Sub Communication Cable	I/O Cable	Robot Instruction Manual	Controller Instruction Manual	Main Body Plastic Color Alterations	Actuator Mounting Foot Plate	Actuator Mounting Flange
Code	H	D	S	R	T	MJ / ME	KJ / KE	BC	HP	VP
Spec.	Handy Terminal is included. Specifications P.512	Handy Terminal with Deadman's Switch is included. Specifications P.512	Support Software with USB Communication Cable is included. Specifications P.512	Support Software with D-Sub Communication Cable is included. Specifications P.512	I/O Cable is included. Required for NPN / PNP configurations. Specifications P.512	Instruction Manual for robot main structures is included. MJ: Japanese Language ME: English Language	Instruction Manual for Controllers is included. KJ: Japanese Language KE: English Language	Change the actuator plastic parts color to black.	Two plates are included for horizontal mount. Specifications P.512	One plate is included for vertical mount. Specifications P.512

① For optional items, see P.512. ② Optional items can be purchased more economically as Alterations than as single items.

③ Point data requires Handy Terminal or Support Software.

④ Parallel Communication I/O Control requires I/O Cable.