

When placing order, select part numbers and values by proceeding through Selection Steps 1~7

C1

C1

Ordering Example Part Number (Type, 1) Lead, 2) With or w/o Brake) -

RSDG106B

Single Axis Robots RSDG1 - Rod Type with Support Guide

6 I/O Module

6 Cable Length -

Accessory

Stroke

Components: Actuator, Controller, Cable

200 (Motor Mounting Direction: U)

Controller I/O Specifications

NPN,PNP CC-Link DeviceNet

200 (Motor Mounting Direction: Straight)

200 (Motor Mounting Direction: U, Controller: P1)



CAD Data Folder Name: 07_Actuator

	Part Num	ber		Selection							
Type	1 Lead (mm)	2 With or w/o Brake (1)	Motor Mounting Direction	4 Controller (2)	6 I/O Module	6 Cable Length (m)	7 Stroke (mm)				
RSDG1	06	W/o Brake: Leave blank	Straight: Leave Blank	Point Control: C1	NPN: N PNP: P	1 3	50~200				
RSDGT	12	With Brake: B	Top Mounting: U	Pulse Control: P1 (DC24V ±10%)	CC-Link: C DeviceNet: D	10 (Flexible Cable)	(50mm Increment)				

(🕥 1) Choose the "With Brake" option for use in vertical applications. (🐑 2) When the pulse train type controller is selected, the I/O type selection is not required.

		l N	lotor Mounting I	Direction: Straig	ht		Motor Mountin	ng Direction: U			
Тур	e Dimensions / Mass		Stroke	e (mm)		Stroke (mm)					
		50	100	150	200	50	100	150	200		
	L1(mm)	161	211	261	311	161	211 261 311 254 304 354				
	L(mm)	249	299	349	399	204	254	304	354		
RSD	G1 H	2	3	4	5	2	3	4	5		
	К	6	8	10	12	6	8	10	12		
	Mass (kg)(Note 5)	1.5	1.7	1.9	2.1	1.7	1.9	2.1	2.3		

The brake adds 0.2 kg to the total mass.



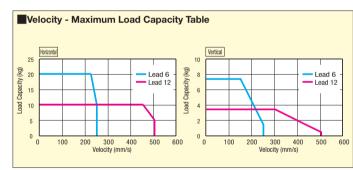
Power interruption circuit is not provided in this

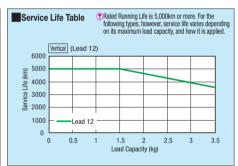
FAQ

controller in order to provide maximum flexibility fo customer specific safety scheme. Please be sure to provide an external power interruption

circuit and form an emergency stop circuit. For Circuit examples See EX P.109.

- Q1. The actuator does not move.
- A1. When activating an actuator using Support Software or Handset Terminal, invalidate Option Parameter (No. 80). (Option Valid = I/O Terminal Valid, Option Invalid = I/O Terminal Invalid). Then turn the servo status "ON" and operate the homing procedure. After the completion of homing, start the operation by turning on "Operation". Q2. LED light is on. Is there a controller defect?
- A2. Blue: PWR (OFF: Control Power Shutoff, Blink: Servo OFF, ON: Servo ON), Red: ERR (OFF: Control Power Shutoff / No Error Alarm, Blink: Error Alarm On (External Factor), ON: Error Alarm On (Internal Factor)
- Q3. Teaching cannot be conducted by via I/O.
- A3. To conduct teaching via I/O, the status needs to be ON for MANUAL Input and OFF for Interlock Input. Note that it does not function in the state of "Homing Incomplete".
- Q4. Is low-speed operation possible?
- A4. Possible, however, 10 to 20% of max. velocity is the limit depending on the lead.







Motor Mounting Direction; Straight

•Motor Mounting Direction: U 10



3	Part Number	-	Motor Mounting Direction	-	Controller Type	-	I/O Type	-	Cable Length	-
	RSDG106B	-	U	-	C1	-	N	-	3	-

Alterations		Handset Terminal w/ Deadman's Switch		W / D-Sub	I/O Cable T: Controller C1 TP: Controller P1	chain connection		Main Body Plastic Color Alterations		Shaft Nozzle for Greasing
Code	H	D	S	R	T/TP	С	ME5/KE3/KE4	BC	HP	N
Spec.	Handset Terminal is included. Specifications ear P.109, 113	Handset Terminal w/ Deadman's Switch is included. Specifications ************************************	Support Software w / USB Communication Cable is included. Specifications PRTP.109, 113	Communication Cable is included.	VO Cable is included. Required for NPN/PN/P configurations. Specifications #87 P.109 , 113	maximum 16 controllers.	Operation Manual is included.	Change the actuator plastic parts color to black.	2 plates are included for horizontal mounting. Specifications war P.113	Use this nazzle to apply grease to the ball screw of top motor mounted type. Specifications BAT P.113

Stroke -

(G, E···etc.)

- The positional items, see
 113
 It is more economical to order the optional items as alterations than purchasing them individually.

 Entering point data requires the handy terminal or the support software.
 An I/O Cable is required for Parallel Communication I/O Control.

 For details on daisy-chain, see
 P111, 113
 Please select the correct I/O cable type for the appropriate controller type.

Controller	iti				X		Cable		mponents Material Surface Treatment	Body Aluminun Acrylic Pai	nt -	Cover	Shaft Ball Bushi Steel Steel
ontroller Spec	ifications 🗷	P.103~112	. 0	0			Instruction Manual	Ва	Ø8 C10 Rolled)	T .	Position Detect	or Temp	erating Ambient perature, Humidi 10°C, 35~85%RH o Condensation)
Standard Sp	1		P.110	anacity (kg)	lay Duch Force	Rated Running Life	Lost Mation	Dad Non Date	otional	Stroke	May Valasity	O Innut Day	Maximum
Туре	Lead (mm)	Positioning Repeatability (mm	Horizontal 20	Vertical	(N) 100	 1	Lost Motion (mm)	Rod Non-Rota Accuracy (de	grees)	(mm)	Max. Velocity (mm/sec)	Supply	/ Positioning Poi
RSDG1	06 12	±0.02	10	7.5 3.5	75	5,000 km or More	0.1 or Less	±0.05		50~200 (50 Pitch)	~500	DC24V ±10%	255 points
)1. The Service li	fe in the vertical	use may vary depend	ling on the load ca	pacity. Please refer	to the "Service	Life Table." 💎 2. Th				ıd capacity. Plea	ise refer to the "Vel	ocity - Maximum	Load Capacity Table.
							Eff	fective Stroke +	<u>-5</u>				
					M4x0.7 E	epth 5 A	88	35.5 19.5 18	17.				
				1	(for Cable	Mounting)			32	M4x0.7 Depth 5	10		
							/		8	(for Cable Mounting)	Arrow View A	<u>.</u>	
			E20-			Lubrication Hole for I	68.5 / E				105		
		. 48	3	Approx. 250	Im (Cable Length)	(Ø6.5)		37.5+2	Str Str	oke	97	-	
		1			\\		2	10=	(7: Note 6)	(5: Note 6)	23 23 23	4-M4x0.7 Ti (for Base Mod	
		29.5) #		Ţ-;T-					2.88		8 2 2	88
		18 (M4x0.7 Depth 5 (for Cable Mounting	,	10	L ₁		/	1	35	8-M4x0.7 I	Depth 10 ng User Tooling)
	3.5	5.8	11 -2.4 s 5x	Į		L+40 (with	Brake)		Motor Side Ho	me Reversed Motor Sig	ie nome	(or mount	ng ossi roomig/
		3	∰ M3x0.5 ©			_			.	_		- (*/**	
	Enlarged		Gquare Nut for T-slo	<u> </u> <u>ot</u>		55				- 🗏	H	-1=	
		(6 pcs. Included)		K-M3x	0.5 Depth 4	50		-			_ =	64
						.	Hx50	41_		.1			
						Straigl	<u>nt</u>		53				
	111.5	L	37.5±2	_(7: Note 8)						2-05.5	15 Ho	Socket Head Cap Screw M:	3x0.5 Shank length 10
	Lubrication Hole (Ø6.5)	for Ball Screw								*	See tap position		sary for one plate.
											Actuator Mounti (Please speci	ng Foot Plate fy as alteration	ns)
				ļ									
//		88	015										
		-	35.5 10 18 tive Stroke +78	-		56.5							
	128 (wit	n Brake)				48 21	_						
					læ:	# #							
11				1	23		<u>!</u>						
х0.7 Depth 5				 	21		30 27 22 39 30 30						
x0.7 Depth 5 Cable Mounting)		ī	8-M4x0		Through Hounting)	23 23 23	'	to avoid	d application	of radial loads	on the rods.		unted guides togethe
			(for Mou	.7 Depth 10 inting User Tooling)	/	97					out excessive strai n be utilized to fas		ffective screw depth
			Motor Top M	<u>lount</u>		105	-	is 5mm	1).		e cable is 30mm.		
							'			kg to the mass			