

# RCP2W-SA16C

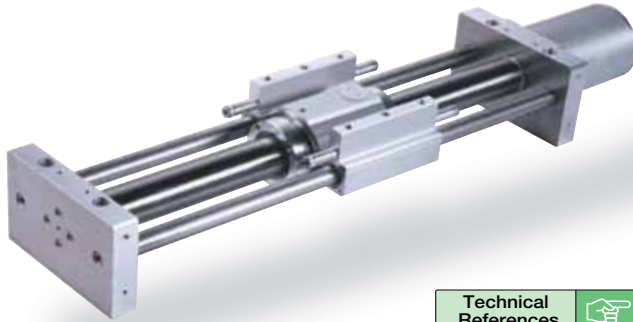
ROBO Cylinder Water-proof Slider Type 158mm Width Pulse Motor Coupled

■ Configuration: **RCP2W** — **SA16C** — **I** — **86P** —  —  — **P2** —  —

Series — Type — Encoder — Motor — Lead — Stroke — Compatible Controllers — Cable Length — Option

I: Incremental Type    86P: Pulse motor    8 : 8mm    50 : 50mm    P2: PCON-CF    N : None    CO : With Cover  
 56  High Output    4 : 4mm    600 : 600mm    S : 3m    NM : Reversed-home  
 (50mm pitch increments)    M : 5m    X   : Custom Length  
 R   : Robot Cable

\* See page Pre-35 for explanation of each code that makes up the configuration name.

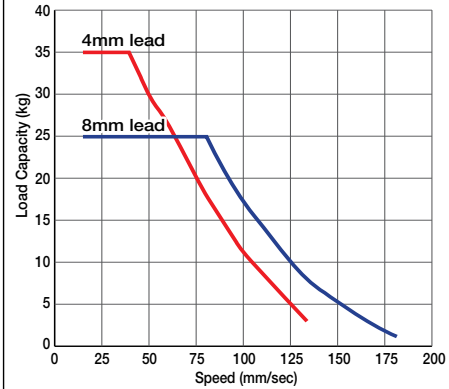


Technical References P. A-5

- POINT** (Notes on Selection)
- The actuator is limited to being installed horizontally. Please note that it can't be used when installed in a wrong direction (transverse, vertical or reverse). (The same goes for storage.)
  - When the stroke increases, the maximum speed will drop to prevent the ball screw from reaching the critical rotational speed. Use the actuator specification table below to check the maximum speed at the stroke you desire.
  - Since the RCP2 series use a pulse motor, the load capacity decreases at high speeds. Check in the Speed vs. Load Capacity graph to see if your desired speed and load capacity are supported.
  - The load capacity is based on operation at an acceleration of 0.2G. 0.2G is the upper limit for the acceleration.
  - The cable joint connector is not splash-proof; secure it in a place that is not prone to water spills.

### Speed vs. Load Capacity

Due to the characteristics of the Pulse motor, the RCP2 series' load capacity decreases at high speeds. In the table below, check if your desired speed and load capacity are supported.



Actuator Specifications				
<b>Lead and Load Capacity</b>		(Note 1) Please note that the maximum load capacity decreases as the speed increases.		
Model	Lead (mm)	Max. Load Capacity (Note 1)	Stroke (mm)	
RCP2W-SA16C-I-86P-8-①-P2-②-③	8	~25	Horizontal (kg)	Vertical (kg)
RCP2W-SA16C-I-86P-4-①-P2-②-③	4	~35	Not Allowed	
			50-600 (50mm increments)	

Legend ① Stroke ② Cable length ③ Options (Unit: mm/s)

① Stroke List

Stroke (mm)	Standard Price	
	Without cover	With cover
50	-	-
100	-	-
150	-	-
200	-	-
250	-	-
300	-	-
350	-	-
400	-	-
450	-	-
500	-	-
550	-	-
600	-	-

② Cable List

Type	Cable Symbol	Standard Price
Standard	P(1m)	-
	S(3m)	-
	M(5m)	-
Special Lengths	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-39 for cables for maintenance.

③ Option List

Name	Option Code	See Page	Standard Price
With cover	CO	→ 444	-
Reversed-home	NM	→ A-33	-

Actuator Specifications

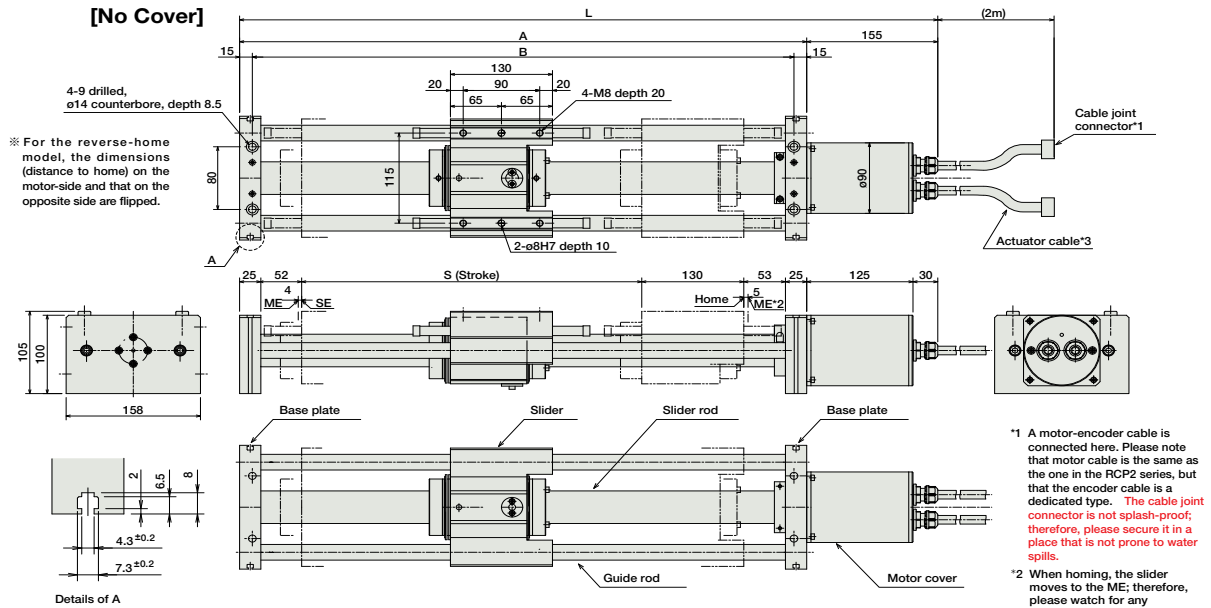
Item	Description
Drive System	Ball screw ø12mm C10 grade
Positioning Repeatability	±0.08mm
Lost Motion	0.1 mm or less
Guide	ø20 Non-lubricated Linear Sliding Guide
Allowable Static Load Moment	20.0N·m
Overhang Load Length	Ma direction 200mm or less
Protection Structure	IP67
Ambient Operating Temp./Humidity	0~40°C, 85%RH or less (Non-condensing)

**Note**  
 A dynamic moment isn't applicable for the SA16C for structural reasons. When an object is to be mounted on the slider, please fix it in a manner so that no moment load is applied in the direction Mb or Mc, and so that the load is distributed evenly.

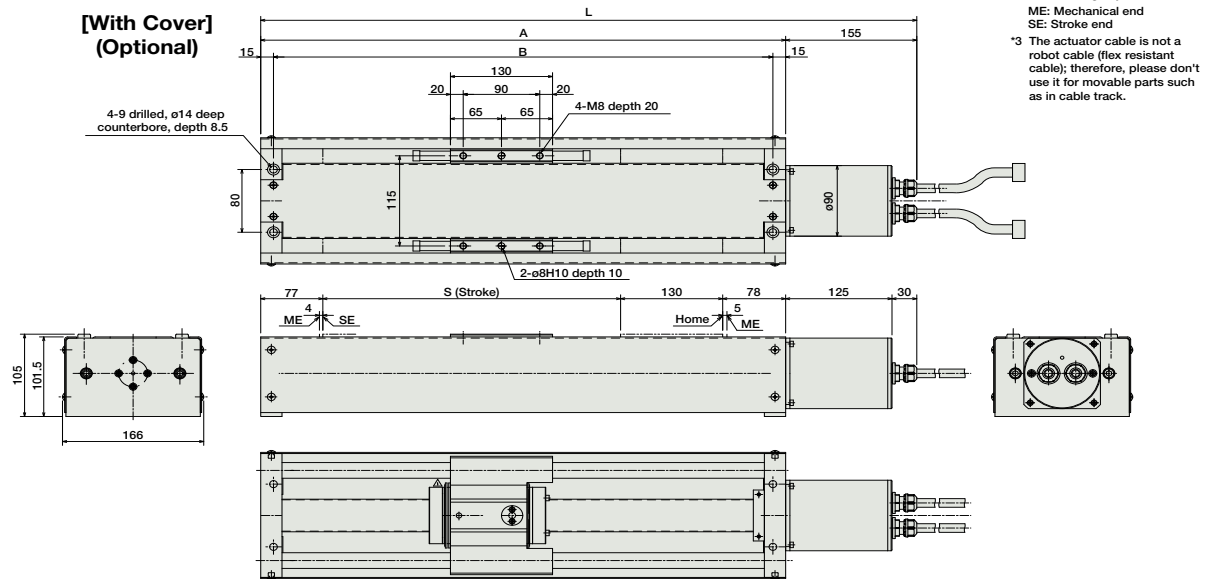
**443** RCP2W-SA16C

Dimensions

For Special Orders P. A-9



[With Cover] (Optional)



- \*1 A motor-encoder cable is connected here. Please note that motor cable is the same as the one in the RCP2 series, but that the encoder cable is a dedicated type. The cable joint connector is not splash-proof; therefore, please secure it in a place that is not prone to water spills.
- \*2 When homing, the slider moves to the ME; therefore, please watch for any interference with the surrounding objects.  
ME: Mechanical end  
SE: Stroke end
- \*3 The actuator cable is not a robot cable (flex resistant cable); therefore, please don't use it for movable parts such as in cable track.

■ Dimensions/Weight by Stroke

Stroke	50	100	150	200	250	300	350	400	450	500	550	600
L	490	540	590	640	690	740	790	840	890	940	990	1040
A	335	385	435	485	535	585	635	685	735	785	835	885
B	305	355	405	455	505	555	605	655	705	755	805	855
S	50	100	150	200	250	300	350	400	450	500	550	600
Weight without cover (kg)	9	9.4	9.9	10.4	10.9	11.3	11.8	12.3	12.7	13.2	13.7	15.1
Weight with cover (kg)	10.5	11.1	11.8	12.5	13.2	13.8	14.6	15.3	15.9	16.6	17.3	18.9

Compatible Controllers

The controller for the RCP2W-SA16C type is a dedicated controller.

Name	External View	Model	Description	Max. Positioning Points	Input Voltage	Power Supply Capacity	Standard Price	See Page
Positioner Type		PCON-CF-86PI-NP-2-0	Positioning possible for up to 512 points	512 points	DC24V	6A max.	-	→ P525

Note: Please note that the encoder cable is a dedicated CF-type cable that is different from the PCON-C/CG/CY/PL/PO/SE controllers.



RCP2W-SA16C

444

- Slider Type
- Mini
- Standard
- Controllers Integrated
- Rod Type
- Mini
- Standard
- Controllers Integrated
- Table/Arm /Flat Type
- Mini
- Standard
- Gripper/ Rotary Type
- Linear Servo Type
- Cleanroom Type
- Splash-Proof
- Controllers
- PMEC /AMEC
- PSEP /ASEP
- ROBO NET
- ERC2
- PCON
- ACON
- SCON
- PSEL
- ASEL
- SSEL
- XSEL
- Pulse Motor
- Servo Motor (24V)
- Servo Motor (200V)
- Linear Servo Motor