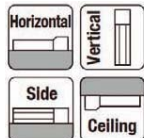


RCP4-SA3R

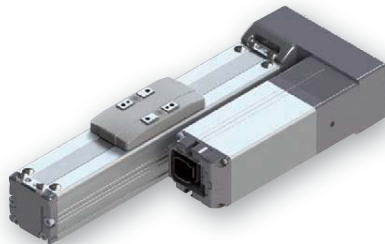
ROBO Cylinder, Slider Type, Side-mounted Motor Unit,
Actuator Width 32mm, Pulse Motor 24V

Model Specification Items	Series	Type	Encoder type	Motor type	Lead	Stroke	Applicable controllers	Cable length	Options
	RCP4	SA3R	I	28P			P3		
			I: Incremental specification	28P: Pulse motor Size 28□	6: 6mm 4: 4mm 2: 2mm	25: 25mm 300: 300mm (Every 25mm)	P3: PCON-CA MSEP MSEL	N: None P: 1m S: 3m M: 5m X□□: Specified length R□□: Robot cable	Refer to the option list below.

*Controller is not included.
*Please refer to our ROBO Cylinder General Catalog for the contents of the model specification items.
* The Simple absolute encoder is also considered type "I".



* Depending on the model, there may be some limitations to using the vertical, side, and ceiling mount positions. Please contact us for more information.

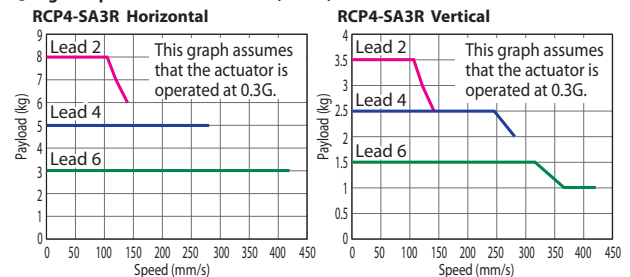


The figure above is the side-mounted motor specification (ML).

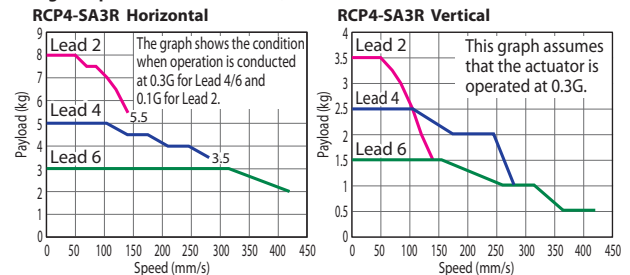
POINT Note on selection	(1) The actuator specifications displays the payload's maximum value, but it will vary depending on the acceleration. Please refer to "The Tables for Payload by Speed and Acceleration" on P. 13.
	(2) Please refer to "Correlation Diagrams Between Push Force and Current Limit" on P. 14 for push-motion operation.

Correlation Diagrams of Speed and Payload

① High output enabled PCON-CA, MSEP, MSEL connected



② High output disabled PCON-CA, MSEP connected



Actuator Specifications

Lead and Payload

Model Number	Lead (mm)	Maximum Payload Horizontal (kg) Vertical (kg)	Stroke (mm)
RCP4-SA3R-I-28P-6-①-P3-②-③	6	3 1.5	25 ~ 300 (Every 25mm)
RCP4-SA3R-I-28P-4-①-P3-②-③	4	5 2.5	
RCP4-SA3R-I-28P-2-①-P3-②-③	2	8 3.5	

Legend: ① Stroke ② Cable length ③ Options

Stroke and Max. Speed (Unit: mm/s)

Lead (mm)	High-output Setting	25 ~ 300 (Every 25mm)
6	Enabled	420
	Disabled	
4	Enabled	280
	Disabled	
2	Enabled	140
	Disabled	

① Stroke

Stroke (mm)	Standard Price	Stroke (mm)	Standard Price
25	—	175	—
50	—	200	—
75	—	225	—
100	—	250	—
125	—	275	—
150	—	300	—

② Cable Length

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

* For a maintenance cable, please see the back cover.

③ Options

Name	Option Code	Reference Page	Standard Price
Brake	B	Please refer to our ROBO Cylinder General Catalog.	—
Motor Side-mounted to the Left	ML		—
Motor Side-mounted to the Right	MR		—
Home-position Check Sensor (On Left)(*1)	HSL		—
Home-position Check Sensor (On Right)(*1)	HSR		—
Non-motor End Specification	NM		—
Slider Roller Specification	SR		—
Back Attachment Plate	RP	→P. 8	—

(*1) Select "HSR" when the motor mounted direction is ML and "HSL" when the motor mounted direction is MR.

Actuator Specifications

Item	Description
Drive System	Ballscrew Ø6mm rolled C10
Positioning Repeatability	±0.02mm
Lost Motion	0.1mm or less
Base	Material: Aluminum with white alumite treatment
Dynamic Allowable Moment (*1)	Ma: 3.82N·m, Mb: 5.45N·m, Mc: 6.10N·m
Static Allowable Moment	Ma: 6.30N·m, Mb: 8.90N·m, Mc: 10.0N·m
Ambient Operating Temperature, Humidity	0 ~ 40°C, 85% RH or less (Non-condensing)

Reference for overhang load length of all 3 directions (Ma, Mb, and Mc): 100mm or less

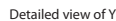
(*1) This assumes a standard life of 5,000km. The operational life will vary depending on operation and installation conditions.

* Please refer to our ROBO Cylinder General Catalog for details on operational life, allowable moment direction, and overhang load length.

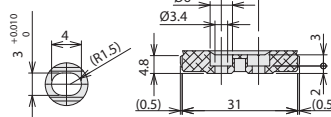
CAD drawings can be downloaded from our website. www.intelligentactuator.com



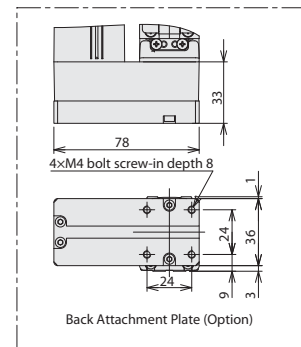
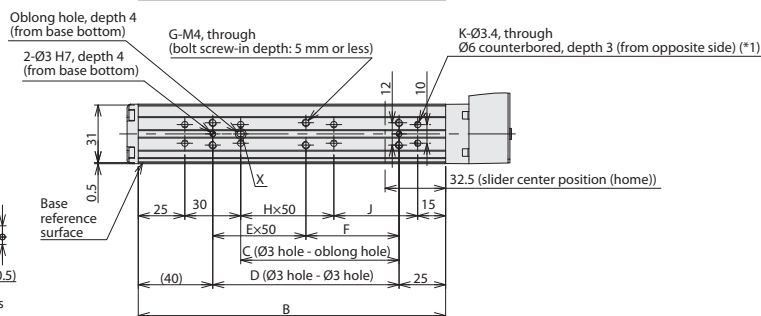
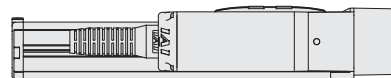
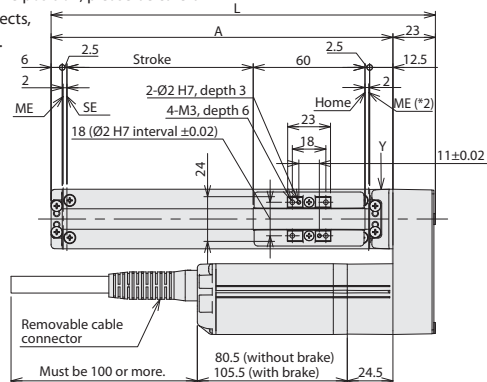
- SE : Stroke end



Technical drawing of a mechanical component with dimensions in mm. The drawing shows a side view of a component with a total width of 40 mm and a total height of 39 mm. Key dimensions include a top flange width of 29.5 mm, a central hole diameter of 17.5 mm, and a mounting hole diameter of 4.5 mm. The component is shown with a cross-section of the mounting hole.



Detailed view of X Detailed of base mounting holes






Dimensions for sensor rail

Back attachment option

*Reference for overhang distance for cable tie band

L	Stroke	25	50	75	100	125	150	175	200	225	250	275	300
	Standard	131.5	156.5	181.5	206.5	231.5	256.5	281.5	306.5	331.5	356.5	381.5	406.5
	Back Attachment Option	141.5	166.5	191.5	216.5	241.5	266.5	291.5	316.5	341.5	366.5	391.5	416.5
A		108.5	133.5	158.5	183.5	208.5	233.5	258.5	283.5	308.5	333.5	358.5	383.5
B		90	115	140	165	190	215	240	265	290	315	340	365
C		10	35	60	85	110	135	160	185	210	235	260	285
D		25	50	75	100	125	150	175	200	225	250	275	300
E		0	0	0	1	1	2	2	3	3	4	4	5
F		25	50	75	50	75	50	75	50	75	50	75	50
G		4	4	4	6	6	8	8	10	10	12	12	14
H		0	0	0	1	1	2	2	3	3	4	4	5
J		(20)	45	70	45	70	45	70	45	70	45	70	45
K		(6)	6	6	8	8	10	10	12	12	14	14	16
Mass (kg)	Without Brake	0.64	0.68	0.71	0.74	0.78	0.81	0.84	0.88	0.91	0.94	0.98	1.01
	With Brake	0.73	0.77	0.80	0.83	0.87	0.90	0.93	0.97	1.00	1.03	1.07	1.10

The RCP4 series actuators can be operated by the controllers indicated below. Please select the type depending to your intended use.

Name	External View	Model Number	Max. Number of Controlled Axes	Maximum Number of Positioning Points	Input Power	Standard Price	Reference Page
Positioner Type High-output Specification		PCON-CA-28PⅣ-①-2-0	1	512 point	DC24V	—	Please see individual product catalogs for details
Pulse Train Type High-output Specification		PCON-CA-28PWAI-PLⅤ-2-0		—		—	
Network Type High-output Specification		PCON-CA-28PⅣ-Ⅲ-0-0		768 point		—	
Solenoid Valve Multi-axis Type (PIO Specification)		MSEP-V-②-①-1-2-0	C: 8 (4 when high-output enabled)	3 point	—		
Solenoid Valve Multi-axis Type (Network Specification)		MSEP-V-②-③-0-0	LC: 6 (3 when high-output enabled)	256 point			
Program Control Multi-axis Type		MSEL-PC-1-28PⅣ-①-2-4	4	30,000 point	Single-phase AC 100V ~230V	—	
Program Control Multi-axis Type w/Network Board		MSEL-PC-1-28PⅣ-Ⅲ-0-4					
Program Control Multi-axis Type Safety Category Compliant Specification		MSEL-PG-1-28PⅣ-①-2-4					
Program Control Multi-axis Type Safety Category Compliant Spec. w/Network Board		MSEL-PG-1-28PⅣ-Ⅲ-0-4					

*The high-output enabled operation is only available when the "High-output setting specification" is selected as an option for the MSEP-C/LC.