ROBO Cylinder, Rod Type, Motor Unit Coupled, CP4-RA30 Actuator Width 32mm, Pulse Motor 24V 28P RCP4 - RA3C -Specification Items Encoder type — Motor type Stroke Applicable Cable length - Options controllers 28P: Pulse motor 16: 16mm 25: 25mm N: None Refer to the option specification Size 28□ 10: 10mm P3: PCON / MSEL P: 1m list below. 300: 300mm S: 3m 5:5mm * The Simple absolute P5: RCON / RSEL *Controller is not included. M: 5m 2.5: 2.5mm (Every 25mm) encoder is also *Please refer to our ROBO Cylinder General Catalog for the contents of the model specification items. X□□: Specified length R□□: Robot cable considered type "I."

(Radial Load Applicable)







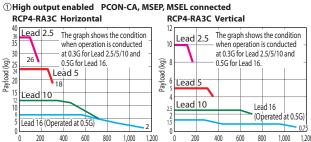
* Depending on the model, there may be some limitations to using the vertical mount position. Please contact us for more information.





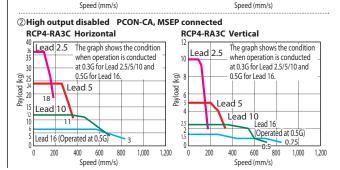
- (1) The actuator specifications displays the payload's maximum value, but it will vary depending on the acceleration. Please refer to "The Tables for Payload by Speed and Acceleration" on P. 13.
- (2) Please refer to "Correlation Diagrams Between Push Force and Current Limit" on P. 14 for push-motion operation.
- (3) The radial cylinder is equipped with a built-in guide. Please refer to the diagrams on back cover for allowable load mass.

■Correlation Diagrams of Speed and Payload



* PCON-CA is a previous model.

The current model is PCON-CB.



Actuator Specifications

■Lead and Payload

Model Number	Lead (mm)	Maximum Horizontal (kg)		Maximum Push Force (N)	Stroke (mm)		
RCP4-RA3C-I-28P-16- ① -P3- ② - ③	16	6	1.5	36			
RCP4-RA3C-I-28P-10- ① -P3- ② - ③	10	12	2.5	57	25 ~ 300		
RCP4-RA3C-I-28P-5- ① -P3- ② - ③		24	5	114	(Every 25mm)		
RCP4-RA3C-I-28P-2.5- ① -P3- ② - ③	2.5	36	10	229			

Legend:	1 Stroke	2 Cable len	gth ③ Options	*Refer to P. 14 for the push-motion operation
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■Stroke and Max. Speed (Unit: mm/s)

Lead (mm)	High-output Setting	25 ~ 300 (Every 25mm)
16	Enabled	1,120
10	Disabled	840
10	Enabled	700
10	Disabled	700
5	Enabled	350
)	Disabled	350
2.5	Enabled	175
2.5	Disabled	1/5

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

Туре	Cable Code	Standard Price
	P (1m)	_
Standard Type	S (3m)	_
	M (5m)	_
	X06 (6m) ~ X10 (10m)	_
Specified Length	X11 (11m) ~ X15 (15m)	_
	X16 (16m) ~ X20 (20m)	_
	R01 (1m) ~ R03 (3m)	_
	R04 (4m) ~ R05 (5m)	_
Robot Cable	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	В	Please refer to	_
Home-position Check Sensor (Top)	HS	our ROBO Cylinder General	_
Non-motor End Specification	NM	Catalog.	_

Actuator Specifications	
ltem	Description
Drive System	Ballscrew Ø8mm rolled C10
Positioning Repeatability	±0.02mm
Lost Motion	0.1mm or less
Rod	Ø16mm Aluminum
Rod Non-rotation Precision(*1)	0 deg.
Allowable Load and Torque on	Refer to the table in the right page and the
Rod Tip	graph at the back cover of this catalog.
Rod Tip Overhang Distance	100mm or less
Ambient Operating Temperature, Humidity	0 ~ 40°C, 85% RH or less (Non-condensing)

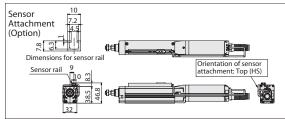
^(*1) Accuracy of rod displacement in rotating direction when no load is received.

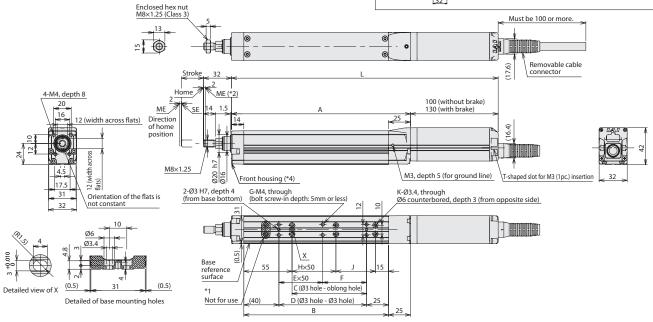
CAD drawings can be downloaded from our website. www.intelligentactuator.com



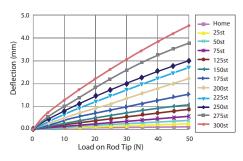


- *1 The two counterbored mounting holes (K) on the bottom of the base near the rod end are not available to use.
- *2 When the rod is returning to its home position, please be careful of interference from surrounding objects, as it will travel until it reaches the ME. ME: Mechanical end
- SE: Stroke end
 *3 The orientation of the bolt varies depending on the product.
- *4 If the actuator is installed using the front housing, make sure that the actuator will not receive any external force.





■RCP4-RA3C Rod Deflection (Reference)



■Dimensions and Mass by Stroke

	Stroke	25	50	75	100	125	150	175	200	225	250	275	300
	Without Brake	229	254	279	304	329	354	379	404	429	454	479	504
_	With Brake	259	284	309	334	359	384	409	434	459	484	509	534
	A	129	154	179	204	229	254	279	304	329	354	379	404
	В	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
	Н	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	4	4	4	6	6	8	8	10	10	12	12	14
Allowable Stat	ic Load on Rod Tip (N)	38.8	33.5	29.5	26.3	23.7	21.6	19.8	18.2	16.9	15.7	14.7	13.8
Allowable Dynamic	Load Offset 0mm	19.4	16.6	14.2	12.2	10.7	9.5	8.5	7.7	7.0	6.4	5.8	5.4
Load on Rod Tip (N)	Load Offset 100mm	9.1	9.4	8.9	8.3	7.7	7.1	6.6	6.1	5.6	5.2	4.9	4.5
Allowable Static Torque on Rod Tip (N•m)		3.9	3.4	3.0	2.7	2.4	2.2	2.0	1.9	1.7	1.6	1.5	1.4
Allowable Dynamic Torque on Rod Tip (N•m)		0.9	0.9	0.9	0.8	0.8	0.7	0.7	0.6	0.6	0.5	0.5	0.5
Mass	Without Brake	0.59	0.64	0.69	0.73	0.78	0.83	0.88	0.93	0.98	1.02	1.07	1.12
(kg)	With Brake	0.68	0.73	0.78	0.82	0.87	0.92	0.97	1.02	1.07	1.11	1.16	1.21

Applicable Controllers

* Controller for RCP4 series is PCON, MSEL, RCON or RSEL. Please refer our Controller General Catalog and/or contact IAI.