

RCP5CR-SA4C Cleanroom Type, ROBO Cylinder, Slider Type, Motor Unit Coupled, Actuator Width 40mm, 24V Pulse Motor

Model	RCP5CR	SA4C	WA	35P			P3		
Specification	Series	Type	Encoder type	Motor type	Lead	Stroke	Applicable controllers	Cable length	Options
Items			WA: Battery-less absolute specification	35P: Pulse motor, size 35□	16: 16mm 10: 10mm 5: 5mm 2.5: 2.5mm	50: 50mm 500: 500mm (Every 50mm)	P3: PCON-CA MSEP MSEL	N: No cable P: 1m S: 3m M: 5m X□: Specified length R□: Robot cable	Please refer to the options table below.

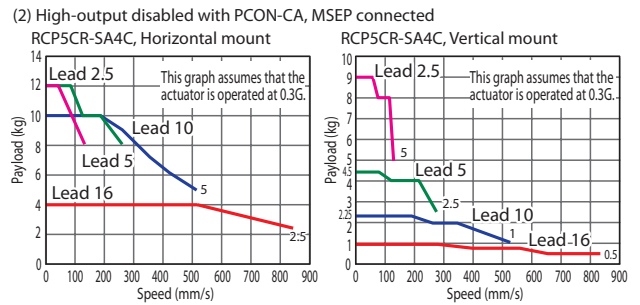
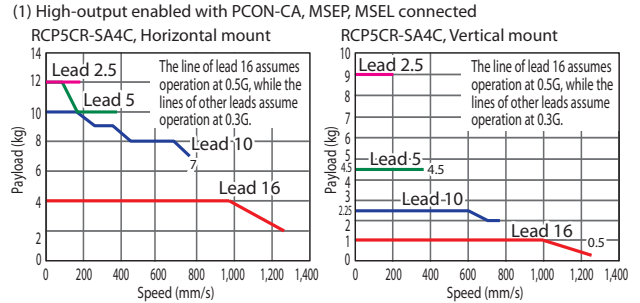
*Controller is not included.



* Depending on the model, there may be some limitations to using the vertical, side, and ceiling mount positions. Please refer to P.59 for details.



- (1) The actuator specification displays the payload's maximum value, but it will vary depending on the acceleration. Please refer to the "Selection Guidelines" (RCP5 Payload by Speed/Acceleration Table) on P. 61.
- (2) Please refer to P. 59 for push-motion operation.



Actuator Specifications

Lead and Payload

Model number	Lead (mm)	Connected controller	Maximum payload		Stroke (mm)
			Horizontal (kg)	Vertical (kg)	
RCP5CR-SA4C-WA-35P-16-①-P3-②-③	16	High-output enabled	4	1	50~500 (Every 50mm)
		High-output disabled			
RCP5CR-SA4C-WA-35P-10-①-P3-②-③	10	High-output enabled	10	2.25	
		High-output disabled			
RCP5CR-SA4C-WA-35P-5-①-P3-②-③	5	High-output enabled	12	4.5	
		High-output disabled			
RCP5CR-SA4C-WA-35P-2.5-①-P3-②-③	2.5	High-output enabled	12	9	
		High-output disabled			

Legend: ① Stroke ② Cable length ③ Options *Please refer to P. 59 for push-motion operation.

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

Lead (mm)	Connected controller	Max. Speed			Suction amount (Nl/min)
		50~400 (Every 50mm)	450 (mm)	500 (mm)	
16	High-output enabled	1,260	1,060	875	60
	High-output disabled	840			
10	High-output enabled	785	675	555	40
	High-output disabled	525			
5	High-output enabled	390	330	275	20
	High-output disabled	260			
2.5	High-output enabled	195	165	135	10
	High-output disabled	130			

① Stroke

Stroke (mm)	Standard price	Stroke (mm)	Standard price
50	-	300	-
100	-	350	-
150	-	400	-
200	-	450	-
250	-	500	-

② Cable Length

Type	Cable code	Standard price
Standard type	P (1m)	-
	S (3m)	-
	M (5m)	-
Special length	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)	-

*Please refer to P. 89 for maintenance cables.

③ Options

Name	Option code	Reference page	Standard price
Brake	B	→P. 11	-
Cable exit direction (Top)	CJT	→P. 11	-
Cable exit direction (Right)	CJR	→P. 11	-
Cable exit direction (Left)	CJL	→P. 11	-
Cable exit direction (Bottom)	CJB	→P. 11	-
Non-motor end specification	NM	→P. 11	-
Vacuum joint on opposite side	VR	→P. 11	-

Actuator Specifications

Item	Description
Drive system	Ball screw Ø8mm, rolled C10
Positioning repeatability	±0.02mm
Lost motion	0.1mm or less
Base	Material: Aluminum with white alumite treatment
Dynamic allowable moment (*1)	Ma: 4.98N·m, Mb: 7.11N·m, Mc: 9.68N·m
Static allowable moment	Ma: 8.6N·m, Mb: 12.2N·m, Mc: 16.7N·m
Cleanliness	Class 10 (0.1µm)
Ambient operating temperature, humidity	0 to 40°C, 85% RH or less (Non-condensing)

*Reference for overhang load length/Ma: 120mm or less, Mb, Mc: 120mm or less

(*1) Assumes a standard rated life of 5,000km.

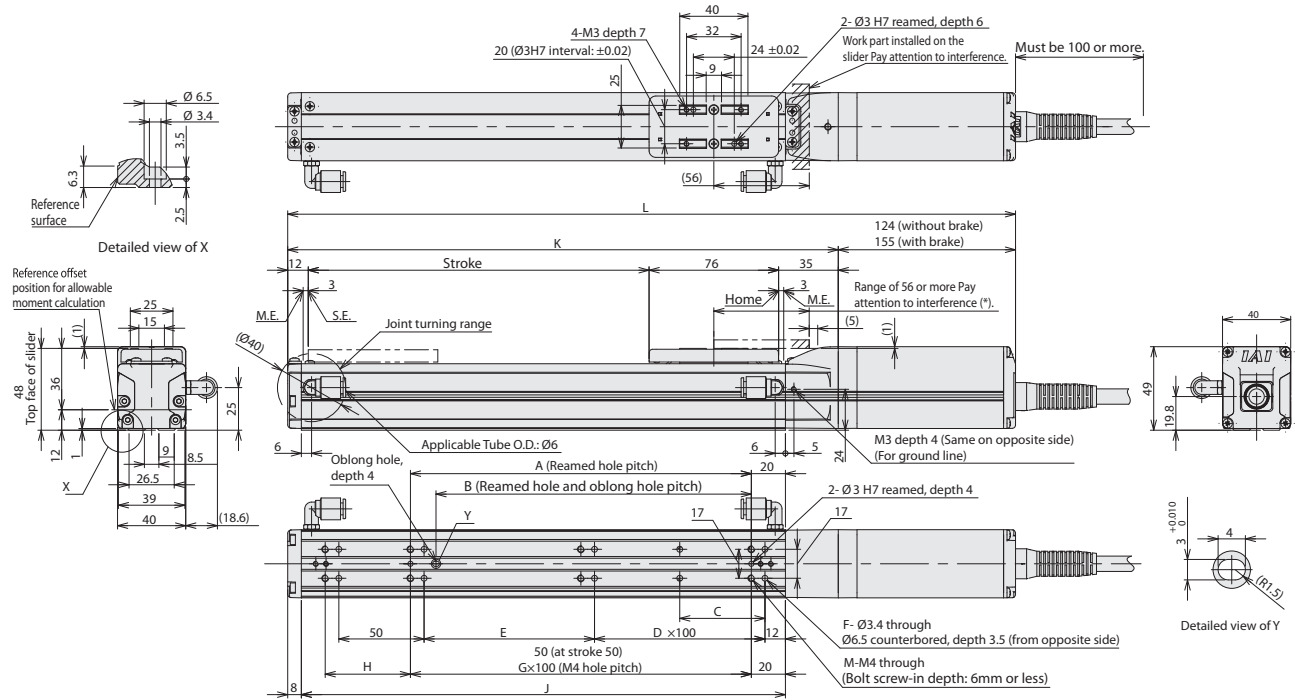
(*2) The operational life will vary depending on operation and installation conditions. Please refer to the general catalog for details on operational life, allowable moment direction, and overhang load length.

Dimensions

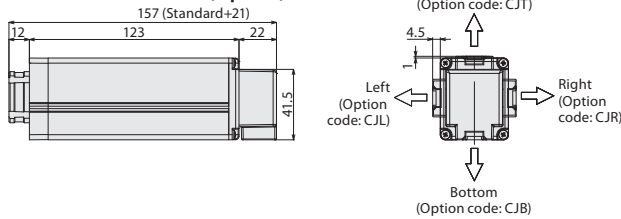
CAD drawings can be downloaded from our website. www.intelligentactuator.com



- *1 When the slider 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
- *2 There is no pipe joint for RCP5-SA4C Slider Roller Type (SR).



■ Cable Exit Direction (Option)



■ Dimensions and Mass by Stroke

Stroke	50	100	150	200	250	300	350	400	450	500
L	Without brake	297	347	397	447	497	547	597	647	747
	With brake	328	378	428	478	528	578	628	678	778
A	50	100	100	200	200	300	300	400	400	500
B	35	85	85	185	185	285	285	385	385	485
C	25	50	50	50	50	50	50	50	50	50
D	0	0	1	1	2	2	3	3	4	4
E	50	100	50	100	50	100	50	100	50	100
F	8	8	10	10	12	12	14	14	16	16
G	0	1	1	2	2	3	3	4	4	5
H	50	50	100	50	100	50	100	50	100	50
J	134	184	234	284	334	384	434	484	534	584
K	173	223	273	323	373	423	473	523	573	623
M	6	6	6	8	8	10	10	12	12	14
Mass (kg)	Without brake	1.0	1.1	1.2	1.3	1.3	1.4	1.5	1.6	1.7
	With brake	1.2	1.3	1.4	1.5	1.5	1.6	1.7	1.8	1.9

Applicable Controllers

The RCP5CR series actuators can be operated by the controllers indicated below. Please select the type depending on 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-35PWAI-①-2-0	1	512 points	DC24V	-	→P. 69
Pulse train type (High-output specification)		PCON-CA-35PWAI-PL②-2-0				-	
Network type (High-output specification)		PCON-CA-35PWAI-③-0-0				-	
Solenoid valve multi-axis type (PIO specification)		MSEP-④-⑤-⑥-⑦-⑧-2-0	C: 8 (4 when high-output enabled) LC: 6 (3 when high-output enabled)	3 points		-	→P. 77
Solenoid valve multi-axis type (Network specification)		MSEP-④-⑤-⑥-⑦-⑧-0-0				256 points	
Program control multi-axis type		MSEL-PC-1-35PWAI-①-2-4	4	30,000 points	Single-phase AC 100V~230V	-	→P. 87
Program control multi-axis type (w/network board)		MSEL-PC-1-35PWAI-②-0-4				-	
Program control multi-axis type (Safety category compliant spec.)		MSEL-PG-1-35PWAI-③-2-4				-	
Program control multi-axis type (Safety category compliant spec. w/network board)		MSEL-PG-1-35PWAI-④-0-4				-	

*Above MSEL models are for single-axis specification *① I/O type (NP/PN) *② Number of axes
 *③ Field network specification code *④ C or LC *⑤ N (NPN specification) or P (PNP specification) code
 *The high output enabled operation is only available when the "High-output setting specs" is selected in the MSEP-C/LC.