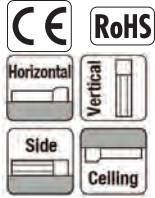


RCP5-SA7R

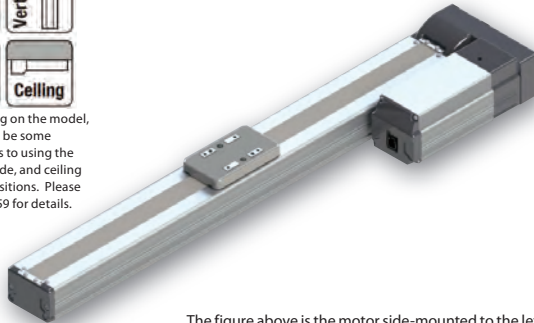
ROBO Cylinder, Slider Type, Side-mounted Motor Type, Actuator Width 73mm, 24V Pulse Motor

Model	RCP5	SA7R	WA	56P					
Specification	Series	Type	Encoder type	Motor type	Lead	Stroke	Applicable controllers	Cable length	Options
Items			WA: Battery-less absolute specification	56P: Pulse motor, size 56□	24: 24mm 16: 16mm 8: 8mm 4: 4mm	50: 50mm 800: 800mm (Every 50mm)	P3: PCON/MSEL P5: RCON/RSEL	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.



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

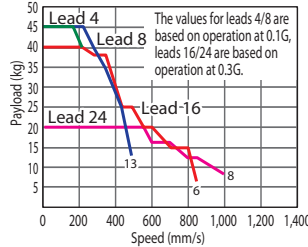


- (1) The actuator specification displays the payload's maximum value, but it will vary depending on the acceleration. Please refer to the "Selection Guidelines" (RCP5 Payload by Speed/Acceleration Table) on P. 61.
- (2) Please refer to P. 59 for push-motion operation.

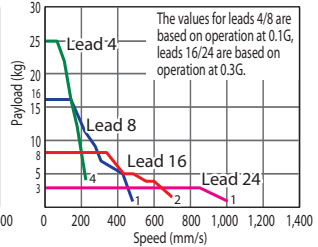
Correlation Diagrams of Speed and Payload

(1) High-output enabled with PCON-CA, MSEP, MSEL connected

RCP5-SA7R, Horizontal mount

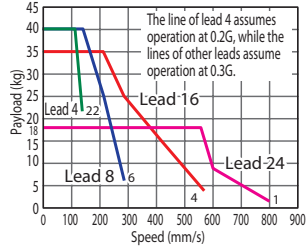


RCP5-SA7R, Vertical mount

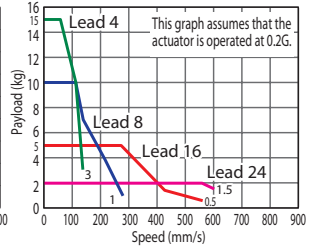


(2) High-output disabled with PCON-CA, MSEP connected

RCP5-SA7R, Horizontal mount



RCP5-SA7R, Vertical mount



* PCON-CA is a previous model. Current model is PCON-CB.

Actuator Specifications

Lead and Payload

Model number	Lead (mm)	Connected controller	Maximum payload Horizontal (kg) Vertical (kg)	Stroke (mm)
RCP5-SA7R-WA-56P-24-①-P3-②-③	24	High-output enabled	20 3	50~800 (Every 50mm)
		High-output disabled	18 2	
RCP5-SA7R-WA-56P-16-①-P3-②-③	16	High-output enabled	40 8	
		High-output disabled	35 5	
RCP5-SA7R-WA-56P-8-①-P3-②-③	8	High-output enabled	45 16	
		High-output disabled	40 10	
RCP5-SA7R-WA-56P-4-①-P3-②-③	4	High-output enabled	45 25	
		High-output disabled	40 15	

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

Stroke and Maximum Speed

Values in brackets < > are for vertical use. (Unit: mm/s)

Lead (mm)	Connected controller	50~550 (Every 50mm)	600 (mm)	650 (mm)	700 (mm)	750 (mm)	800 (mm)
24	High-output enabled	1,000				885	785
	High-output disabled	800 <600>				785 <600>	785 <600>
16	High-output enabled	840 <700>	755 <700>	660	585	520	
	High-output disabled	560				520	
8	High-output enabled	490	430	375	325	290	255
	High-output disabled	280				255	
4	High-output enabled	210	185	160	140	125	
	High-output disabled	140				125	

① Stroke

Stroke (mm)	Standard price	Stroke (mm)	Standard price
50	-	450	-
100	-	500	-
150	-	550	-
200	-	600	-
250	-	650	-
300	-	700	-
350	-	750	-
400	-	800	-

② Cable Length

Type	Cable code	Standard price	Type	Cable code	Standard price
Standard type	P (1m)	-	Robot cable	R01 (1m) ~R03 (3m)	-
	S (3m)	-		R04 (4m) ~R05 (5m)	-
	M (5m)	-		R06 (6m) ~R10 (10m)	-
Special length	X06 (6m) ~X10 (10m)	-		R11 (11m) ~R15 (15m)	-
	X11 (11m) ~X15 (15m)	-		R16 (16m) ~R20 (20m)	-
	X16 (16m) ~X20 (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 (Outside)	CJO	→ P. 11	-
Cable exit direction (Bottom)	CJB	→ P. 11	-
Motor side-mounted to the left (Standard)	ML	→ P. 11	-
Motor side-mounted to the right	MR	→ P. 11	-
Non-motor end specification	NM	→ P. 11	-
Slider roller specification	SR	→ P. 11	-
Slider spacer	SS	→ P. 11	-

* Please contact IAI for current available options.

Actuator Specifications

Item	Description
Drive system	Ball screw Ø12mm, rolled C10
Positioning repeatability (*1)	±0.02mm [±0.03mm]
Lost motion	0.1mm or less
Base	Material: Aluminum with white alumite treatment
Dynamic allowable moment (*2)	Ma: 11.6N·m, Mb: 16.6N·m, Mc: 33.7N·m
Static allowable moment	Ma: 51.2N·m, Mb: 73.1N·m, Mc: 148N·m
Ambient operating temperature, humidity	0 to 40°C, 85% RH or less (Non-condensing)

*Reference for overhang load length/Ma: 230mm or less, Mb, Mc: 230mm or less

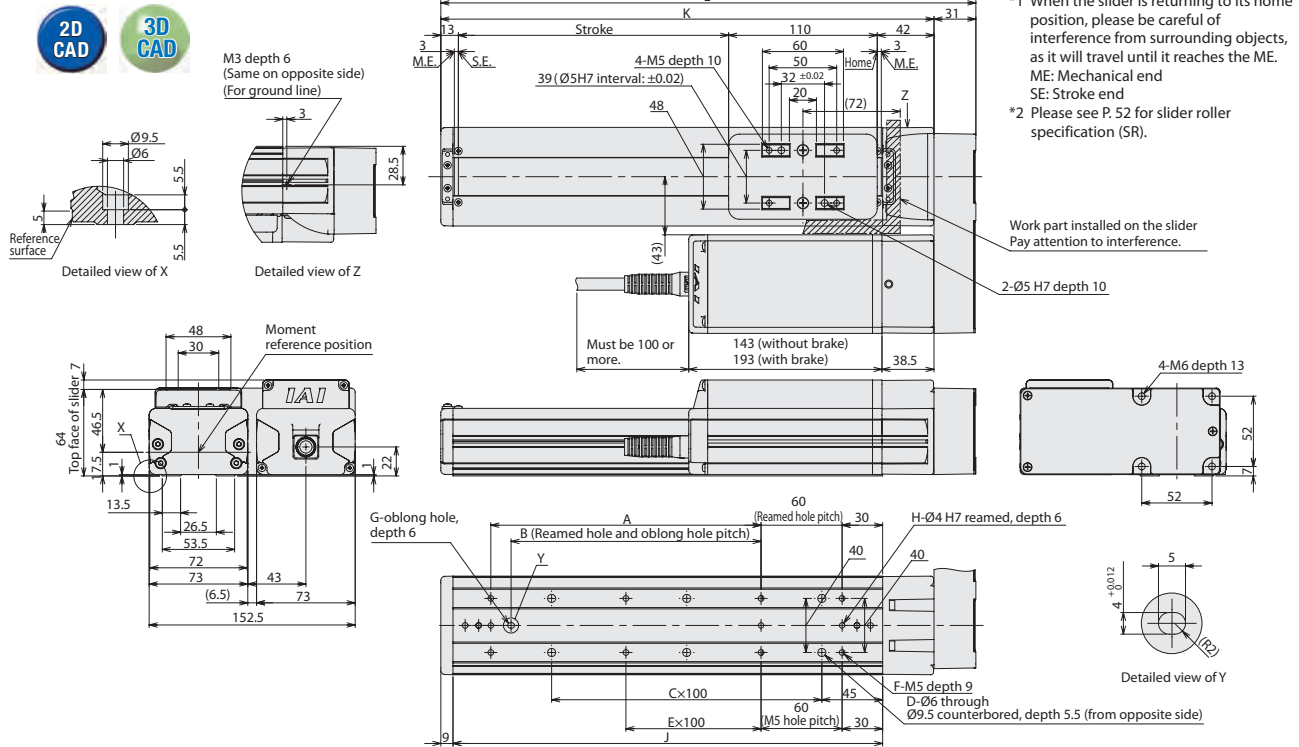
(*1) The values in brackets [] are for Lead 24.

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

(*) 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

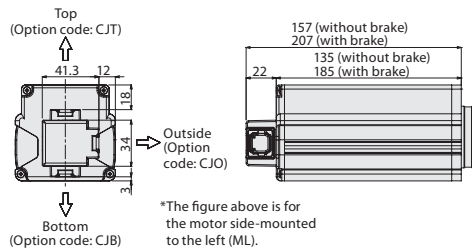
CAD drawings can be downloaded from our website. www.intelligentactuator.com



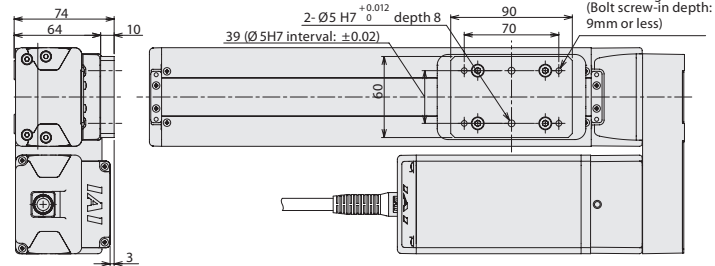
*1 When the slider is returning to its home position, please be careful of interference from surrounding objects, as it will travel until it reaches the ME.
ME: Mechanical end
SE: Stroke end

*2 Please see P.52 for slider roller specification (SR).

■ Cable Exit Direction (Option)



■ Slider Spacer (Option)



■ Dimensions and Mass by Stroke

Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	246	296	346	396	446	496	546	596	646	696	746	796	846	896	946	996
A	0	100	100	200	200	300	300	400	400	500	500	600	600	700	700	800
B	0	85	85	185	185	285	285	385	385	485	485	585	585	685	685	785
C	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8
D	4	4	6	6	8	8	10	10	12	12	14	14	16	16	18	18
E	0	0	0	1	1	2	2	3	3	4	4	5	5	6	6	7
F	4	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20
G	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
H	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
J	168	218	268	318	368	418	468	518	568	618	668	718	768	818	868	918
K	215	265	315	365	415	465	515	565	615	665	715	765	815	865	915	965
Mass (kg)	Without brake	3.7	3.9	4.2	4.4	4.6	4.8	5.1	5.3	5.5	5.7	6.0	6.2	6.4	6.6	7.1
	With brake	4.2	4.4	4.7	4.9	5.1	5.3	5.6	5.8	6.0	6.2	6.5	6.7	6.9	7.1	7.6

Applicable Controllers

* Controller for RCP6 series is PCON, MSEL, RCON or RSEL.
Please refer our Controller General Catalog and/or contact IAI.