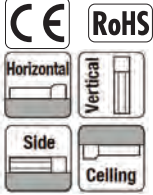


RCP5CR-SA7C

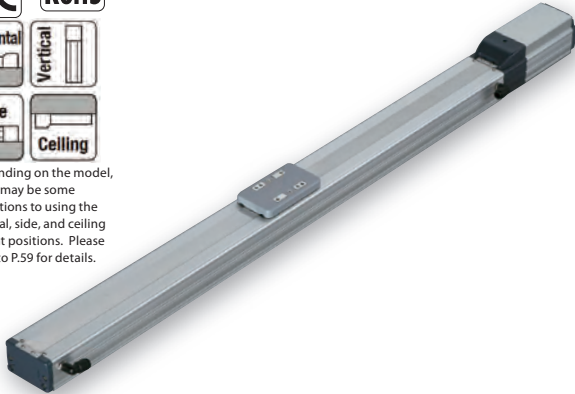
Cleanroom Type, ROBO Cylinder, Slider Type, Motor Unit Coupled, Actuator Width 73mm, 24V Pulse Motor

Model	RCP5CR	SA7C	WA	56P			P3		
Specification Items	Series	Type	Encoder type	Motor type	Lead	Stroke	Applicable controllers	Cable length	Options
			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-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.



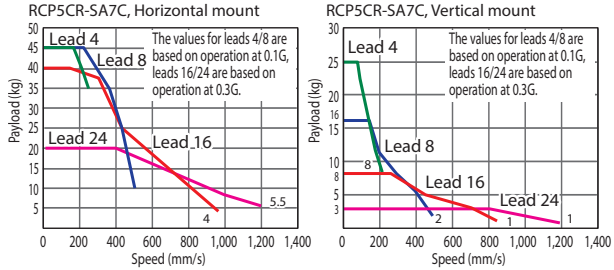
* Depending on the model, there may be some limitations to using the vertical, side, and ceiling mount positions. Please refer to P.59 for details.



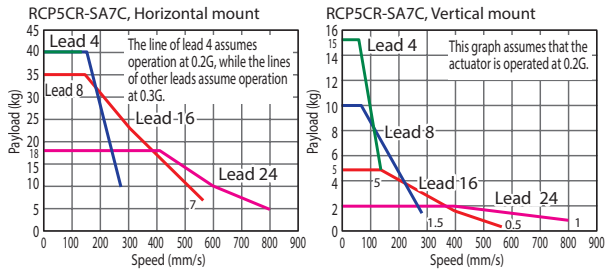
- (1) The actuator specification displays the payload's maximum value, but it will vary depending on the acceleration. Please refer to the "Selection Guidelines" (RCP5 Payload by Speed/Acceleration Table) on P. 61.
- (2) Please refer to P. 59 for push-motion operation.

Correlation Diagrams of Speed and Payload

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



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



Actuator Specifications

Lead and Payload

Model number	Lead (mm)	Connected controller	Maximum payload		Stroke (mm)
			Horizontal (kg)	Vertical (kg)	
RCP5CR-SA7C-WA-56P-24-①-P3-②-③	24	High-output enabled	20	3	50~800 (Every 50mm)
		High-output disabled	18	2	
RCP5CR-SA7C-WA-56P-16-①-P3-②-③	16	High-output enabled	40	8	
		High-output disabled	35	5	
RCP5CR-SA7C-WA-56P-8-①-P3-②-③	8	High-output enabled	45	16	
		High-output disabled	40	10	
RCP5CR-SA7C-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, Max. Speed and Suction Amount

(Unit: mm/s)

Lead (mm)	Connected controller	Stroke (mm)						Suction amount (N2/mm)
		50~550 (Every 50mm)	600 (mm)	650 (mm)	700 (mm)	750 (mm)	800 (mm)	
24	High-output enabled		1,200	1,145	1,000	885	785	90
	High-output disabled		800				785	
16	High-output enabled	980 (<840>)	875 (<840>)	755	660	585	520	70
	High-output disabled		560				520	
8	High-output enabled	490	430	375	325	290	255	40
	High-output disabled		280				255	
4	High-output enabled	245 (<210>)	215 (<210>)	185	160	140	125	30
	High-output disabled		140				125	

Values in brackets <> are for vertical use.

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 (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 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
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: 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.

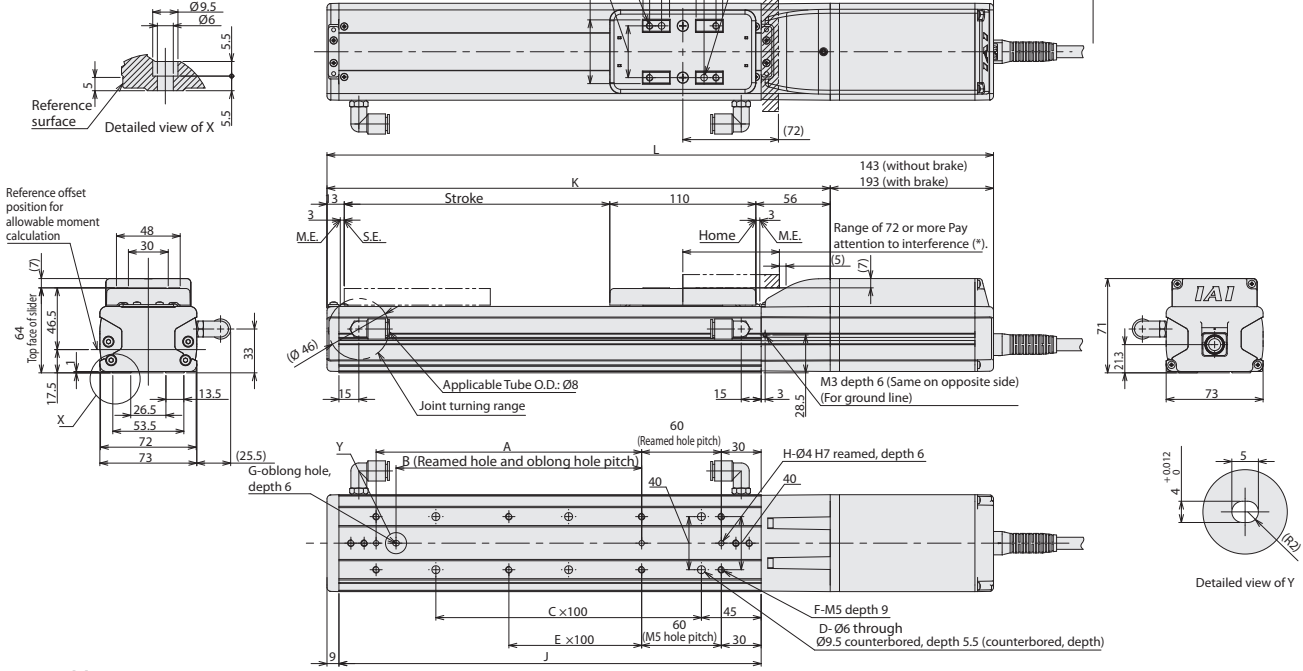
(*) The operational life will vary depending on operation and installation conditions. Please refer to the general catalog for details on operational life, allowable moment direction, and overhang load length.

Dimensions

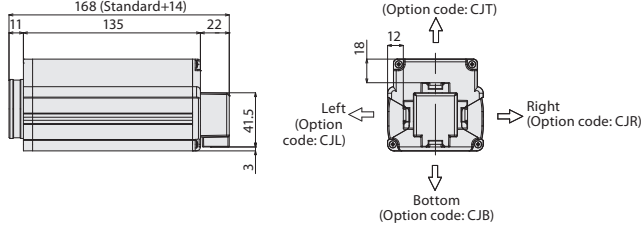
CAD drawings can be downloaded from our website. www.intelligentactuator.com



- *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 There is no pipe joint for RCP5-SA7C Slider Roller Type (SR).



■ Cable Exit Direction (Option)



■ Dimensions and Mass by Stroke

L	Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
	Without brake	372	422	472	522	572	622	672	722	772	822	872	922	972	1,022	1,072	1,122
With brake	422	472	522	572	622	672	722	772	822	872	922	972	1,022	1,072	1,122	1,172	1,222
A	0	100	100	200	200	300	300	400	400	500	500	600	600	700	700	800	800
B	0	85	85	185	185	285	285	385	385	485	485	585	585	685	685	785	785
C	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	8
D	4	4	6	6	8	8	10	10	12	12	14	14	16	16	18	18	18
E	0	0	0	1	1	2	2	3	3	4	4	5	5	6	6	7	7
F	4	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20
G	0	1	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	3
J	168	218	268	318	368	418	468	518	568	618	668	718	768	818	868	918	918
K	229	279	329	379	429	479	529	579	629	679	729	779	829	879	929	979	979
Mass (kg)	Without brake	3.0	3.2	3.5	3.7	3.9	4.1	4.4	4.6	4.8	5.0	5.3	5.5	5.7	5.9	6.1	6.4
	With brake	3.5	3.7	4.0	4.2	4.4	4.6	4.9	5.1	5.3	5.5	5.8	6.0	6.2	6.4	6.6	6.9

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-56PWAI-①-2-0	1	512 points	DC24V	-	→P.69
Pulse train type (High-output specification)		PCON-CA-56PWAI-PL②-2-0				-	
Network type (High-output specification)		PCON-CA-56PWAI-③-0-0				-	
Solenoid valve multi-axis type (PIO specification)		MSEP-④-⑤-⑥-⑦-2-0	4 (4 when high-output enabled) LC: 6 (3 when high-output enabled)	3 points	Single-phase AC 100V~230V	-	→P.77
Solenoid valve multi-axis type (Network specification)		MSEP-④-⑤-⑥-⑦-0-0				256 points	
Program control multi-axis type		MSEL-PC-1-56PWAI-①-2-4	4	30,000 points	Single-phase AC 100V~230V	-	→P.87
Program control multi-axis type (w/network board)		MSEL-PC-1-56PWAI-②-0-4				-	
Program control multi-axis type (Safety category compliant spec.)		MSEL-PG-1-56PWAI-①-2-4				-	
Program control multi-axis type (Safety category compliant spec. w/network board)		MSEL-PG-1-56PWAI-②-0-4				-	

*Above MSEL models are for single-axis specification
 *① I/O type (NP/PN)
 *② Field network specification code
 *③ Number of axes
 *④ 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.