

RCS4-SA7C



Model Specification Items	RCS4	SA7C	WA	200				T2		
	Series	Type	Encoder Type	Motor Type	Lead	Stroke		Applicable Controllers	Cable Length	Options
			WA: Battery-less Absolute	200: Servo motor 200W	36:36mm 24:24mm 16:16mm 8: 8mm 4: 4mm	50:50mm 800:800mm (50mm increments)		T2:SCON MSCON SSEL XSEL-P/Q XSEL-RA/SA	N: None P: 1m S: 3m M: 5m X□□: Specified Length R□□: Robot Cable	Refer to Options table below.



* Depending on the model, there may be some limitations to using the vertical, side, and ceiling mount positions. Please refer to the Selection Notes on P.138 for more information.



- (1) Longer strokes may cause the maximum speed to decrease due to resonance of the ball screw. Be sure to check the maximum speed of the desired stroke in the Actuator Specifications table, which can be found below.
- (2) Both the horizontal and vertical payloads assume operation at an acceleration of 0.3G.
- (3) When the acceleration is increased, the payload will be reduced. Please refer to "Table of Payload by Acceleration" on P.139 for more details.
- (4) Estimated allowable duty varies depending on operating conditions (payload, acceleration/deceleration, etc.). Please refer to P. 149 for more information.

Actuator Specifications

Lead and Payload

Model Number	Motor wattage (W)	Lead (mm)	Max. payload Horizontal (kg) Vertical (kg)	Rated thrust (N)	Stroke (mm)
RCS4-SA7C-WA-200-36-①-T2-②-③	200	36	7 4	95	50~800 (50mm increments)
RCS4-SA7C-WA-200-24-①-T2-②-③		24	30 7	142	
RCS4-SA7C-WA-200-16-①-T2-②-③		16	40 12	214	
RCS4-SA7C-WA-200-8-①-T2-②-③		8	45 20	427	
RCS4-SA7C-WA-200-4-①-T2-②-③		4	50 25	855	

Legend: ① Stroke ② Cable Length ③ Option

Stroke and Max Speed

(Unit: mm/s)

Stroke Lead	50~500 (50mm increments)	550 (mm)	600 (mm)	650 (mm)	700 (mm)	750 (mm)	800 (mm)
36	1800			1620	1420	1260	1120
24	1500	1440	1240	1095	965	850	760
16	1000	965	830	720	635	560	500
8	500	475	410	355	315	275	245
4	240	235	205	175	155	135	120

Cable Length

Type	Cable Code
Standard	P (1m)
	S (3m)
	M (5m)
Specified length (Standard cable)	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)

Options

Name	Option Code	Reference Page
Brake	B	See P.131
Cable exit direction (Top)	CJT	See P.131
Cable exit direction (Right)	CJR	See P.131
Cable exit direction (Left)	CJL	See P.131
Cable exit direction (Bottom)	CJB	See P.131
High-Precision specification (*1)	HPR	See P.134
Non-motor end specification	NM	See P.136
Slider roller specification	SR	See P.137
Double slider (*2)	W	See P.137

(*1) When the lead is 24/36, it cannot be selected. Double slider cannot be selected. (*2) Some leads cannot be selected. (Please see P. 150)

(*3) EU option will be available soon.

Actuator Specifications

Item	Description
Drive system	Ball screw ø12mm, rolled C10
Positioning repeatability (*1)	±0.01mm [±0.005mm]
Lost motion	0.1mm or less
Base	Material: Aluminum with white alumite treatment
Allowable static moment	Ma direction 115N·m, Mb direction 115N·m, Mc direction 229N·m
Allowable dynamic moment (*2)	Ma direction 44.7N·m, Mb direction 44.7N·m, Mc direction 89.1N·m
Ambient operating temp. & humidity	0~40°C, 85% RH or less (Non-condensing)

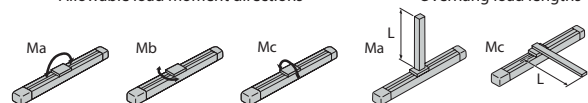
(*1) Values in [] are for high-precision (for lead 4/8/16) specification.

(*2) Assumes a standard rated life of 5000km. The service life will vary depending on operation and installation conditions. Please contact IAI for details of the running life.

• Reference for overhang load length: Ma: 300mm or less, Mb, Mc: 300mm or less

Allowable load moment directions

Overhang load lengths



If the load moments in Ma/Mb/Mc direction are within the allowable ranges, there is no overhang load length limit.

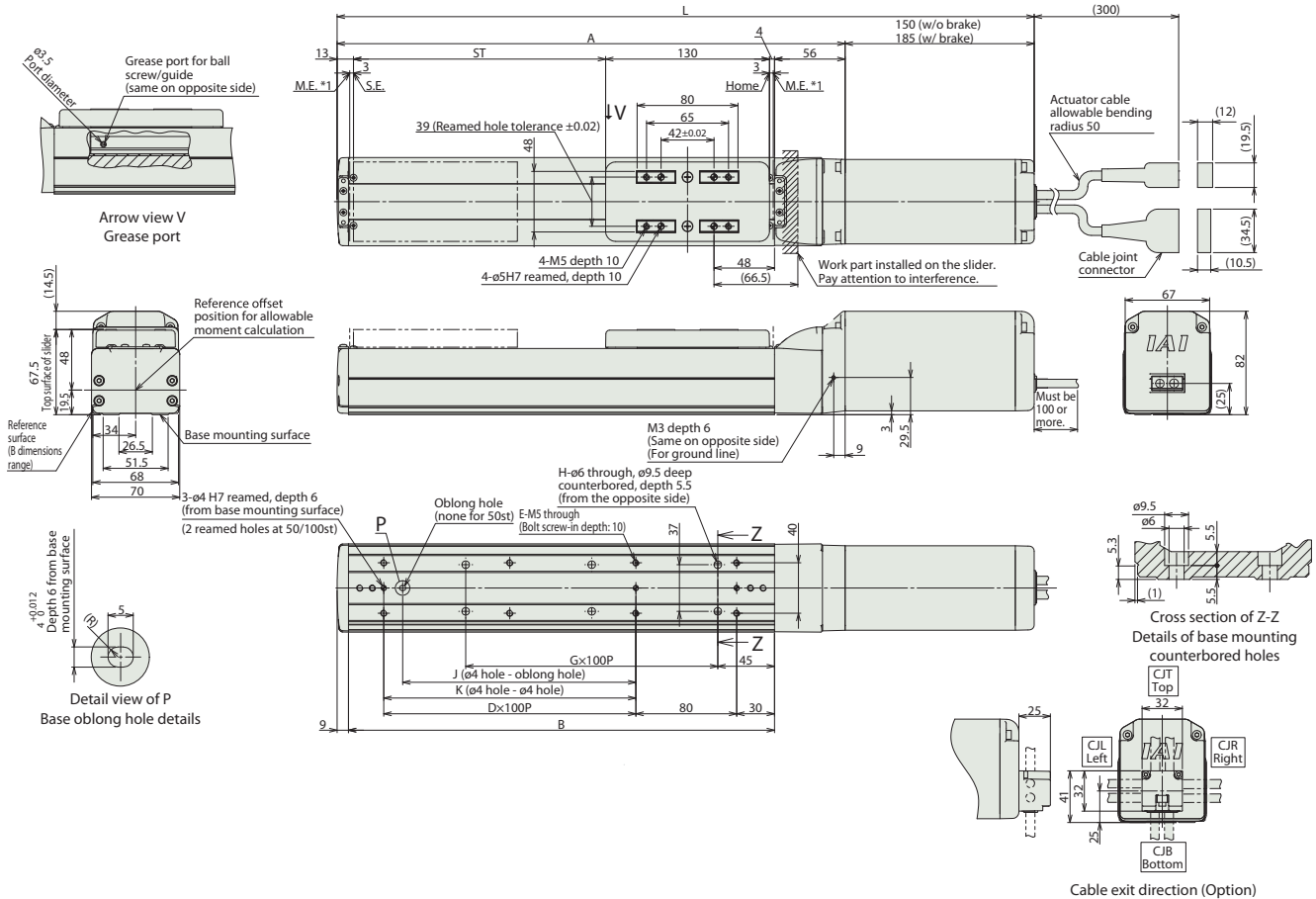
Round cable joint connector with screw locking (*3)	EU	See P.131
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Dimensions

CAD drawings can be downloaded from our website.
www.robocylinder.de



*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 M.E.
M.E: Mechanical end S.E: Stroke end













■ Dimensions and Mass by Stroke

Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L																
W/o brake	403	453	503	553	603	653	703	753	803	853	903	953	1003	1053	1103	1153
W/ brake	438	488	538	588	638	688	738	788	838	888	938	988	1038	1088	1138	1188
A	253	303	353	403	453	503	553	603	653	703	753	803	853	903	953	1003
B	188	238	288	338	388	438	488	538	588	638	688	738	788	838	888	938
D	0	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8
E	4	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20
G	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8
H	4	4	6	6	8	8	10	10	12	12	14	14	16	16	18	18
J	0	85	85	185	185	285	285	385	385	485	485	585	585	685	685	785
K	0	0	100	200	200	300	300	400	400	500	500	600	600	700	700	800
Mass (kg)																
W/o brake	3.5	3.8	4.0	4.3	4.5	4.7	5.0	5.2	5.4	5.7	5.9	6.1	6.4	6.6	6.8	7.1
W/ brake	4.0	4.3	4.5	4.8	5.0	5.2	5.5	5.7	5.9	6.2	6.4	6.6	6.9	7.1	7.3	7.6

Applicable Controllers

The RCS4 series actuators can be operated by the controllers indicated below. Please select the type depending on your intended use.

* Please refer to the dedicated controller catalog or manual.										
Name	External view	Max. number of connectable axes	Input power	Control method				Maximum number of positioning points	Reference page	
				Positioner	Pulse train	Program	Network * Option			
SCON-CB/CGB		1	Single phase 115V/230VAC	●	●	—	   EtherCAT EtherNet/IP 	512 (768 for network spec.)	Please see the dedicated controller catalog or manual.	
SCON-LC/LCG (*)		1		—	—	●		512 (768 for network spec.)		
SCON-CAL/CGAL		1		●	—	—		512 (768 for network spec.)		
MSCON-C		6		This model is network-compatible only.				256		
SSEL-CS		2		●	—	●		Note: The type of compatible networks will vary depending on the controller. Please refer to the reference page for more information.		20000
XSEL-P/Q or XSEL-RA/SA (*)		6 or 8 (Depending on the type)	Single phase 230VAC Three-phase 230VAC	—	—	●		20000 or 55000 (Depending on the type)		

(*) Coming soon