

RCA-RA3C

ROBO Cylinder Rod Type ø32mm Diameter 24V Servo Motor Coupled

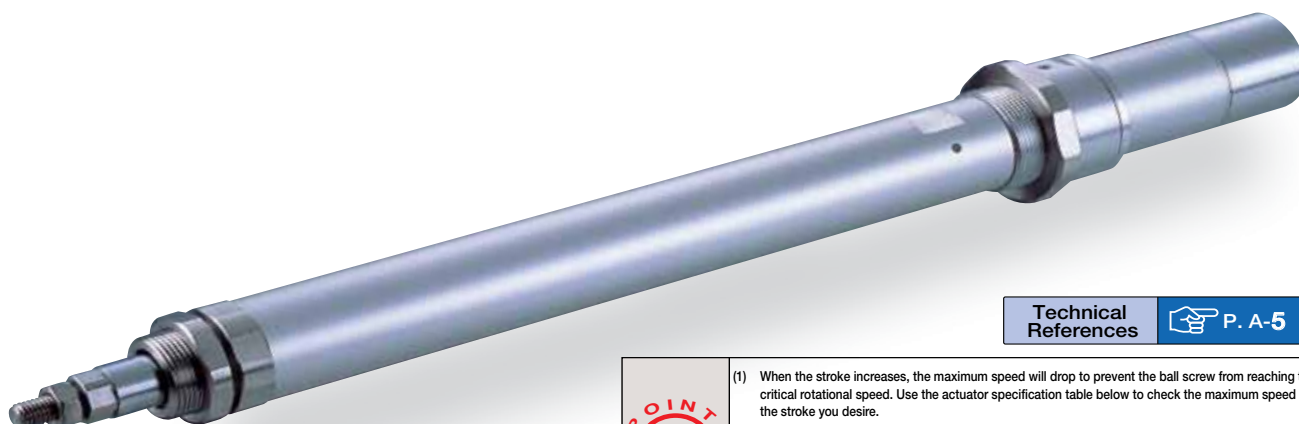
■ Configuration:	RCA	RA3C	I	20					
	Series	Type	Encoder	Motor	Lead	Stroke	Compatible Controllers	Cable Length	Option
			I: Incremental * The Simple absolute encoder is also considered type "I".	20 : 20W Servo Motor	10 : 10mm 5 : 5mm 2.5 : 2.5mm	50 : 50mm 200 : 200mm (50mm pitch increments)	A1 : ACON RACON ASEL A3 : AMEC ASEP	N : None P : 1m S : 3m M : 5m X □ : Custom R □ : Robot cable	See Options below

* See page Pre-35 for an explanation of the naming convention.

For High Acceleration/Deceleration

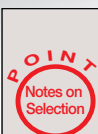
(Except the 2.5mm-lead model)

Power-saving



Technical References

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- (1) When the stroke increases, the maximum speed will drop to prevent the ball screw from reaching the critical rotational speed. Use the actuator specification table below to check the maximum speed at the stroke you desire.
- (2) The load capacity values are based on 0.3G acceleration for the standard and power-saving models (0.2G for 2.5mm-lead), and 1G acceleration for the high-acceleration models (2.5mm-lead model excluded). (The values in the table below are the upper limits, even if the acceleration/deceleration is decreased.)
- (3) The values for the horizontal load capacity assume the use of an external guide, so that there is no external force from any direction other than the forward/backward direction of the rod.

Actuator Specifications

Lead and Load Capacity

Model	Motor Output (W)	Lead (mm)	Max. Load Capacity	Rated Thrust (N)	Stroke (mm)
			Horizontal (kg)	Vertical (kg)	
RCA-RA3C-I-20-10-①-②-③-④	20	10	4.0	1.5	36.2
RCA-RA3C-I-20-5-①-②-③-④		5	9.0	3.0	72.4
RCA-RA3C-I-20-2.5-①-②-③-④		2.5	18.0	6.5	144.8

Legend ① Stroke ② Compatible controllers ③ Cable length ④ Options

Stroke and Maximum Speed

Stroke Lead	50 ~ 200 (50mm increments)
10	500
5	250
2.5	125

(Unit: mm/s)

① Stroke List

Stroke (mm)	Standard Price
50	—
100	—
150	—
200	—

③ Cable List

Type	Cable Symbol	Standard Price
Standard	P (1m)	—
	S (3m)	—
	M (5m)	—
Special Lengths	X06 (6m) ~ X10 (10m)	—
	X11 (11m) ~ X15 (15m)	—
	X16 (16m) ~ X20 (20m)	—
Robot Cable	R01 (1m) ~ R03 (3m)	—
	R04 (4m) ~ R05 (5m)	—
	R06 (6m) ~ R10 (10m)	—
	R11 (11m) ~ R15 (15m)	—
	R16 (16m) ~ R20 (20m)	—

* See page A-39 for cables for maintenance.

④ Option List

Name	Option Code	See Page	Standard Price
Brake	B	→ A-25	—
Foot bracket	FT	→ A-29	—
Flange bracket (front)	FL	→ A-27	—
Flange bracket (back)	FLR	→ A-28	—
High-acceleration/deceleration (*1)	HA	→ A-32	—
Home sensor (*2)	HS	→ A-32	—
Power-saving (*3)	LA	→ A-32	—
Knuckle joint	NJ	→ A-34	—
Reversed-home	NM	→ A-33	—
Trunnion bracket (front)	TRF	→ A-38	—
Trunnion bracket (back)	TRR	→ A-38	—

(*1) The high-acceleration/deceleration option is not available for 2.5mm-lead model.

(*2) The home sensor (HS) cannot be used on the reversed-home models.

(*3) The high acceleration/deceleration option and the power-saving option cannot be used simultaneously.

Actuator Specifications

Item	Description
Drive System	Ball screw ø8mm C10 grade
Positioning Repeatability	±0.02mm
Lost Motion	0.1mm or less
Base	Material: Aluminum (white alumite treated)
Rod Diameter	ø16mm
Non-rotating accuracy of rod	±1.0 deg
Ambient Operating Temp./Humidity	0~40°C, 85% RH or less (non-condensing)

