RCA-RA3C ROBO Cylinder Rod Type ø32mm Diameter 24V Servo Motor Coupled RA3C RCA -20 Configuration: Encoder Motor Type Lead Compatible Controlle Cable Length Option 20 : 20W Servo A1 : ACON I: Incremental * The Simple 10: 10mm 5: 5mm N: None 50:50mm See Options below P:1m S:3m RACON Motor absolute encoder 2.5 : 2.5mm 200 : 200mm ASEL M:5m
X : Custom
R : Robot cable is also considered A3: AMEC (50mm pitch increments) ASEP * See page Pre-35 for an explanation of the naming convention. For High Acceleration/Deceleration Power-saving (Except the 2.5mm-lead model)

Technical References **曾** P. A-**5** 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. 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.)

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 ■ Stroke and Maximum Speed Motor Max. Load Capacity Rated 50 ~ 200 Lead Stroke RCA-RA3C-I-20-10-10-20-30-4 36.2 500 10 4.0 1.5 10 50~200 RCA-RA3C-I-20-5-1 - 2 - 3 - 4 20 5 9.0 3.0 72.4 (50mm 5 250 RCA-RA3C-I-20-2.5-1 -2 -3 -4 2.5 18.0 6.5 144.8 2.5 125 (Unit: mm/s) Legend ① Stroke ② Compatible controllers ③ Cable length ④ Options

① Stroke List				
Stroke (mm)	Standard Price			
50	-			
100	-			
150	-			
200	-			

© Cable List						
Cable Symbol	Standard Price					
P (1m)	-					
S (3m)	-					
M (5m)	-					
X06 (6m) ~ X10 (10m)	-					
X11 (11m) ~ X15 (15m)	_					
X16 (16m) ~ X20 (20m)	-					
R01 (1m) ~ R03 (3m)	-					
R04 (4m) ~ R05 (5m)	-					
R06 (6m) ~ R10 (10m)	_					
R11 (11m) ~ R15 (15m)	-					
R16 (16m) ~ R20 (20m)	_					
	N (5m) N					

Description Ball screw ø8mm C10 grade

Material: Aluminum (white alumite treated)

±0.02mm

ø16mm

±1.0 deg Ambient Operating Temp./Humidity 0~40°C, 85% RH or less (non-condensing)

0.1mm or less

3 Cable List

Actuator Specifications Item

Non-rotating accuracy of rod

Drive System Positioning Repeatability

Lost Motion

Base Rod Diameter

Option List						
Name	Option Code	See Page	Standard Price			
Brake	В	→ 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.

^{*} See page A-39 for cables for maintenance.

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

Dimensions



For Special Order







- *1. A motor-encoder cable is connected here. See page A-39 for details on cables.
 - When homing, the rod moves to the ME; therefore, please watch for any interference with

*3. The orientation of the bolt will vary depending on the product.

the surrounding objects. SE: Stroke end [No Brake] M35×1.5 (effective screw thread range 17.5) M26×1.5 (effective screw thread range 15.5) M8×1.25 (effective screw thread range 16) _18_ 20 85.5 Nut A Nut C 14 (width across flats) *3 Secure at least 100 32 (width across flats) *3 Cable joint [Brake-Equipped] 124.5 Nut A 43 Nut C 14 (width across flats), 40 (width across flats) Nut B

Dimensions of Nut A	Dimensions of Nut B	Dimensions of Nut C
M26x1.5	M35x1.5	M8x1.25 5 5 13

■ Dimensions/Weight by Stroke

RCA-RA3C (without brake)

	Stroke	50	100	150	200
	L	283.5	333.5	383.5	433.5
	l	132	182	232	282
	Weight (kg)	0.7	0.8	0.9	1.0
L 283.5 333.5 383.5 43					

 50
 100
 150
 200

 322.5
 372.5
 422.5
 472.5
 132 182 232 282 0.9 1.0

② Compatible Controllers

The RCA series actuators can operate with the controllers below. Select the controller according to your usage.

Name	External View	Model	Description	Max. Positioning Points	Input Voltage	Power Supply Capacity	Standard Price	See Page
Solenoid Valve Type	(48)	AMEC-C-20SI ① -NP-2-1	Easy-to-use controller, even for beginners		AC100V	2.4A rated	-	→ P477
	Soleriold valve Type	8	ASEP-C-20SI ① -NP-2-0	Operable with same signal as solenoid valve.	3 points			-
Splash-Proof Solenoid Valve Type		ASEP-CW-20SI ① -NP-2-0	Supports both single and double solenoid types. No homing necessary with simple absolute type.				-	→ P487
Positioner Type		ACON-C-20SI ① -NP-2-0	Positioning is possible for up to 512 points	512 points			-	
Safety-Compliant Positioner Type		ACON-CG-20SI ① -NP-2-0	T distributing to possible for up to 012 points	312 points			-	
Pulse Train Input Type (Differential Line Driver)		ACON-PL-20SI ① -NP-2-0	Pulse train input type with differential line driver support	(-)	DC24V	1.7A rated 5.1A peak	-	→ P535
Pulse Train Input Type (Open Collector)		ACON-PO-20SI ① -NP-2-0	Pulse train input type with open collector support	(-)			-	
Serial Communication Type		ACON-SE-20SI ① -N-0-0	Dedicated to serial communication	64 points			-	
Field Network Type		RACON-20S①	Dedicated to field network	768 points			_	→ P503
Program Control Type		ASEL-C-1-20SI ① -NP-2-0	Programmed operation is possible Operation is possible on up to 2 axes	1500 points			-	→ P567

IAI

* This is for the single-axis ASEL.

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^{*} ① is a placeholder for the code "HA" or "LA" if the high acceleration/deceleration option or the power-saving option is specified.