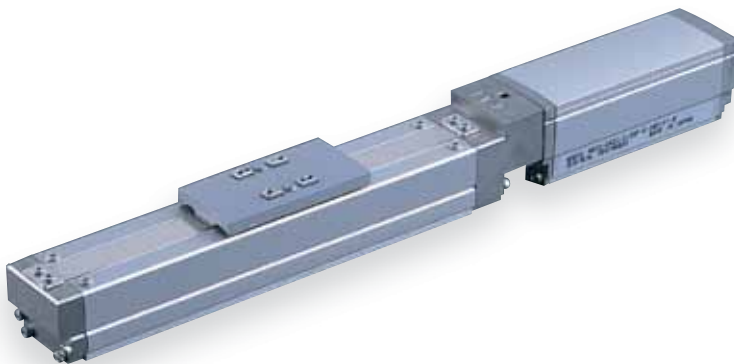


RCP3-SA3C

ROBO Cylinder Slider Type 32mm Width Pulse Motor Coupled

■ Configuration:	RCP3	SA3C	I	28P					
	Series	Type	Encoder	Motor	Lead	Stroke	Compatible Controllers	Cable Length	Option
			I: Incremental * The Simple absolute encoder models are labeled as "I".	28P: Pulse motor 28 □ size	6S: 6mm lead screw 4S: 4mm lead screw 2S: 2mm lead screw	50: 50mm 300: 300mm (50mm pitch increments)	P1: PCON RPCON PSEL P3: PMEC PSEP	N: None P: 1m S: 3m M: 5m X □ □: Custom Length	See Options below

* See page Pre-35 for explanation of each code that make up the configuration name.

Technical
References

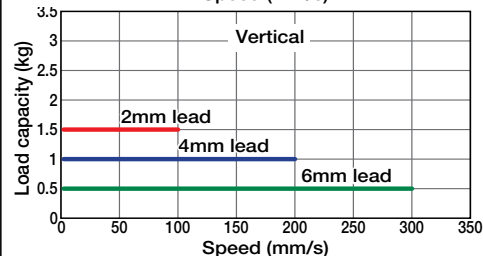
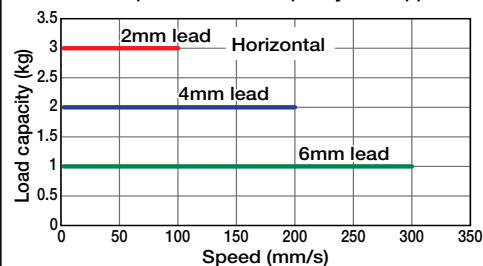
A-5



- (1) Since the RCP3 series use a pulse motor, the load capacity decreases at high speeds. Check in the Speed vs. Load Capacity graph to see if your desired speed and load capacity are supported.
- (2) The load capacity is based on operation at an acceleration of 0.3G (0.2G for 2mm-lead model, or when used vertically). These values are the upper limits for the acceleration.

■ Speed vs. Load Capacity

Due to the characteristics of the pulse motor, the RCP3 series' load capacity decreases at high speeds. In the table below, check if your desired speed and load capacity are supported.



Actuator Specifications

■ Lead and Load Capacity

Model	Lead (mm)	Max. Load Capacity Horizontal (kg)	Max. Load Capacity Vertical (kg)	Maximum Push Force (N)	Stroke (mm)
RCP3-SA3C-I-28P-6-①-②-③-④	6	1	0.5	15	50~300 (50mm increments)
RCP3-SA3C-I-28P-4-①-②-③-④	4	2	1	22	
RCP3-SA3C-I-28P-2-①-②-③-④	2	3	1.5	44	

Legend ① Stroke ② Compatible controller ③ Cable length ④ Options

■ Stroke and Maximum Speed

Stroke Lead	50 ~ 300 (50mm increments)
6	300
4	200
2	100

(Unit: mm/s)

① Stroke List

Stroke (mm)	Standard Price	
	With cover (standard)	No cover (Option)
50	-	-
100	-	-
150	-	-
200	-	-
250	-	-
300	-	-

③ Cable List

Type	Cable Symbol	Standard Price
Standard (Robot Cables)	P (1m)	-
	S (3m)	-
	M (5m)	-
Special Lengths	X06 (6m) ~ X10 (10m)	-
	X11 (11m) ~ X15 (15m)	-
	X16 (16m) ~ X20 (20m)	-

* The standard cable is the motor-encoder integrated robot cable.

* See page A-39 for cables for maintenance.

④ Option List

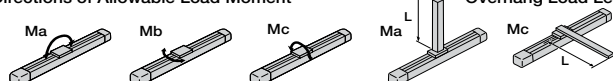
Name	Option Code	See Page	Standard Price
Brake-Equipped	B	→ A-25	-
Cable Exit Direction (Top)	CJT	→ A-25	-
Cable Exit Direction (Right)	CJR	→ A-25	-
Cable Exit Direction (Left)	CJL	→ A-25	-
Cable Exit Direction (Bottom)	CJB	→ A-25	-
No Cover	NCO	→ A-33	-
Reversed-home	NM	→ A-33	-

Actuator Specifications

Item	Description
Drive System	Ball screw Ø6mm C10 grade
Positioning Repeatability	±0.02mm
Lost Motion	0.1mm or less
Base	Material: Aluminum (special alumite treated)
Allowable Static Moment	Ma: 5.0N·m Mb: 7.1N·m Mc: 7.9 N·m
Allowable Dynamic Moment(*)	Ma: 1.96N·m Mb: 2.84N·m Mc: 3.14N·m
Overhang Load Length	100mm or less
Ambient Operating Temp./Humidity	0~40°C, 85% RH or less (non-condensing)

(*) Based on 5,000km travel life.

Directions of Allowable Load Moment

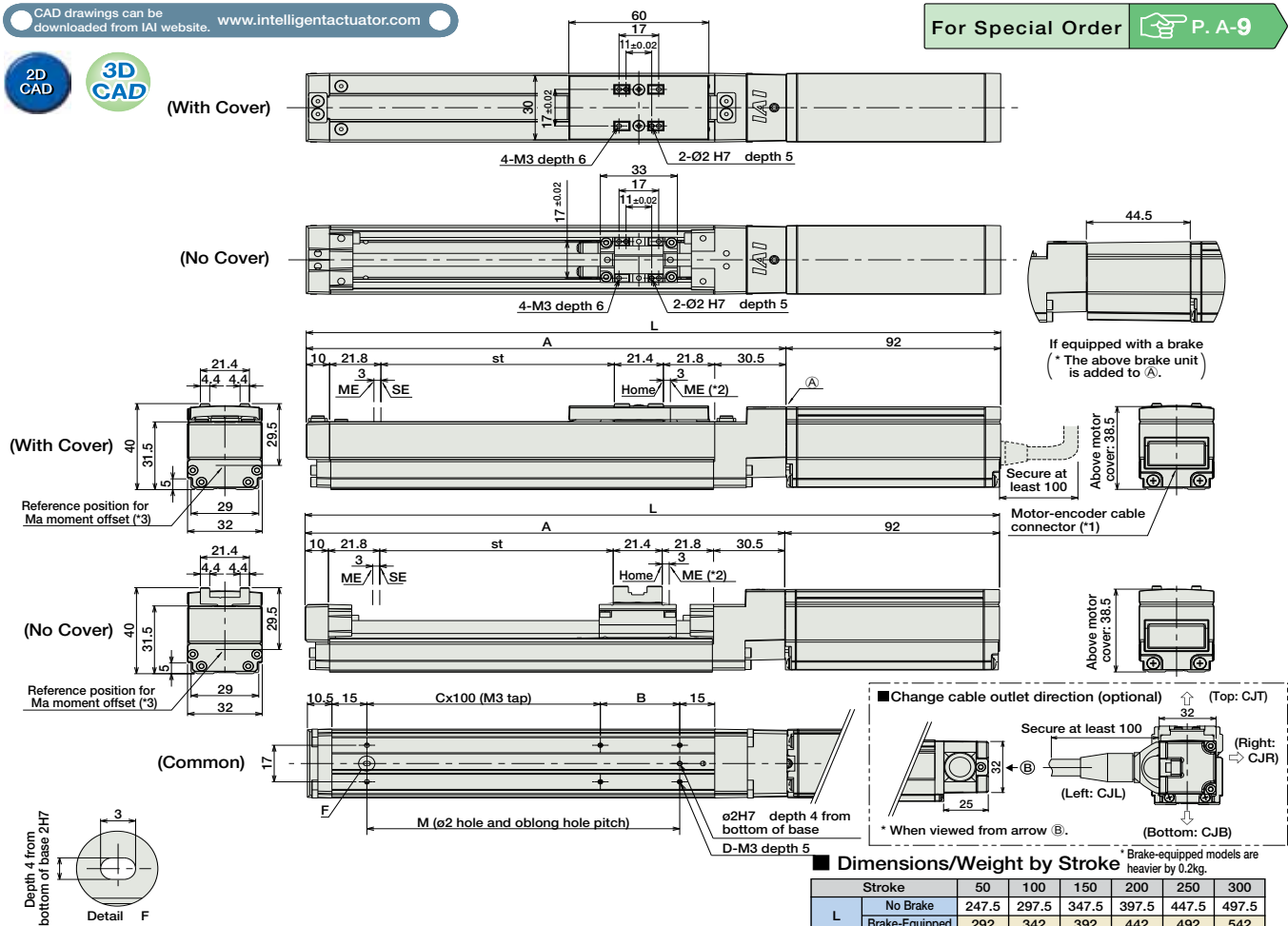


Dimensions

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

2D CAD

3D CAD

For Special Order  P. A-9

(*1) A Motor-encoder cable (integrated) is connected here. (See page A-39 for details on cables.)

(*2) After homing, the slider moves to the ME, therefore, please watch for any interference with surrounding objects.

ME : Mechanical end

SE : Stroke end

(*3) Reference position for calculating the moment Ma

② Compatible Controllers

The RCP3 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		PMEC-C-28PI-NP-2-①	Easy-to-use controller, even for beginners	3 points	AC100V AC200V	See P481	—	→ P477
Splash-Proof Solenoid Valve Type		PSEP-C-28PI-NP-2-0	Operable with same signal as solenoid valve. Supports both single and double solenoid types. No homing necessary with simple absolute type.		DC24V		2A Max.	—
Positioner Type		PCON-C-28PI-NP-2-0		Positioning is possible for up to 512 points		512 points		—
Safety-Compliant Positioner Type		PCON-CG-28PI-NP-2-0	—					
Pulse Train Input Type (Differential Line Driver)		PCON-PL-28PI-NP-2-0	Pulse train input type with differential line driver support	(—)	—			
Pulse Train Input Type (Open Collector)		PCON-PO-28PI-NP-2-0	Pulse train input type with open collector support		—			
Serial Communication Type		PCON-SE-28PI-N-0-0	Dedicated to serial communication	64 points	—	→ P503		
Field Network Type		RPCON-28P	Dedicated to field network	768 points	—			
Program Control Type		PSEL-C-1-28PI-NP-2-0	Programmed operation is possible. Can operate up to 2 axes	1500 points	—	→ P557		

* This is for the single-axis PSEL.

* ① is a placeholder for the power supply voltage (1: 100V / 2: 100~240V).