

Dust-proof/Splash-proof Type

RCP2W RCAW RCS2W









RCP2W-RA6C







441



Dust-proof/Splash-proof Type

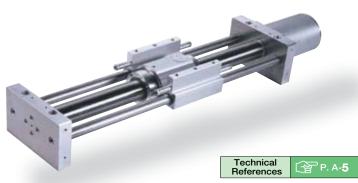
| | Slider Type | Coupled | 158mm width | RCP2W-SA16C | 443 |
|---------------------|--------------|--------------------|-------------|-------------|-----|
| RCP2W | Rod Type | Coupled | 45mm width | RCP2W-RA4C | 445 |
| series | | | 64mm width | RCP2W-RA6C | 447 |
| Pulse Motor | | High-thrust Type | 100mm width | RCP2W-RA10C | 449 |
| Type | Gripper Type | Mini Slider Type | 42mm width | RCP2W-GRSS | 451 |
| | | Mini Lever type | 42mm width | RCP2W-GRLS | 453 |
| | | | | | |
| | Rod Type | Coupled | ø32mm | RCAW-RA3C | |
| RCAW | | Built-in | ø32mm | RCAW-RA3D | 455 |
| series | | Motor Side-mounted | ø32mm | RCAW-RA3R | _ |
| 24V | Rod Type | Coupled | ø37mm | RCAW-RA4C | |
| Servo Motor Type | | Built-in | ø37mm | RCAW-RA4D | 457 |
| Турс | | Motor Side-mounted | ø37mm | RCAW-RA4R | - |
| | | | | | |
| RCS2W | Rod Type | Coupled | ø37mm | RCS2W-RA4C | |
| series | | Built-in | ø37mm | RCS2W-RA4D | 459 |
| 200V | | Motor Side-mounted | ø37mm | RCS2W-RA4R | - |
| Servo Motor Type | | | | | |

_{/pe} 442



ntrollers ntegrated Rod Type Mini

ROBO Cylinder Water-proof Slider Type 158mm Width Pulse Motor Coupled ■ Configuration: RCP2W — SA16C 86P **P2** Encoder Motor Option Type N: None P:1m S:3m M:5m 8 : 8mm I: Incre Type 86P: Pulse motor 50 : 50mm P2: PCON-CF CO: With Cover 56 High Output 4:4mm NM : Reversed-home 600 : 600mm (50mm pitch X : Custom Length R : Robot Cable * See page Pre-35 for explanation of each code that makes up the configuration name.



(1) The actuator is limited to being installed horizontally. Please note that it can't be used when installed in a wrong direction (transverse, vertical or reverse). (The same goes for storage.)

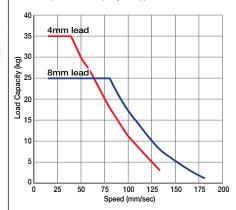
(2) When the stroke increases, the maximum speed will drop to prevent the ball screw from reaching the critical rotational speed.

Use the actuator specification table below to check the maximum speed at the stroke you desire.

Since the RCP2 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.

The load capacity is based on operation at an acceleration of 0.2G. 0.2G is the upper limit for the acceleration. (5) The cable joint connector is not splash-proof; secure it in a place that is not prone to water Speed vs. Load Capacity

Due to the characteristics of the Pulse motor, the RCP2 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 (Note 1) Please note that the maximum load capacity decreases as the speed increases.

| — | | | | | | | | |
|---|--|------|-----------------|---------------|----------------------|--|--|--|
| | Model | Lead | Max. Load Ca | Stroke | | | | |
| | Model | (mm) | Horizontal (kg) | Vertical (kg) | (mm) | | | |
| | RCP2W-SA16C-I-86P-8-①-P2-②-③ | 8 | ~25 | Not Allowed | 50~600 | | | |
| | RCP2W-SA16C-I-86P-4-①-P2-②-③ | 4 | ~35 | Not Allowed | (50mm increments) | | | |
| | Legend ① Stroke ② Cable length ③ Options | | | | | | | |

| • | Stroke and Maximum Speed | | | | | | | | | |
|---|--------------------------|-------------------|--|--|--|--|--|--|--|--|
| 1 | Stroke | 50~600 | | | | | | | | |
| | Lead | (50mm increments) | | | | | | | | |
| | 8 | 180 | | | | | | | | |
| | 4 | 133 | | | | | | | | |
| | | (Unit: mm/s) | | | | | | | | |

Price

① Stroke List

| Stroke (mm) | Standard Price | | | | | |
|-------------|----------------|------------|--|--|--|--|
| | Without cover | With cover | | | | |
| 50 | _ | _ | | | | |
| 100 | = | _ | | | | |
| 150 | _ | _ | | | | |
| 200 | _ | _ | | | | |
| 250 | - | - | | | | |
| 300 | - | - | | | | |
| 350 | _ | _ | | | | |
| 400 | _ | _ | | | | |
| 450 | - | - | | | | |
| 500 | - | _ | | | | |
| 550 | - | - | | | | |
| 600 | _ | _ | | | | |

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

Ball screw ø12mm C10 grade

Ma direction 200mm or less

Description

ø20 Non-lubricated Linear Sliding Guide

0~40°C, 85%RH or less (Non-condensing)

±0.08mm

20.0N·m

IP67

0.1 mm or less

② Cable List

| (3) | Ontion | ie |
|-----|--------|----|

| Name | Option Code | See Page | Standard Price |
|---------------|-------------|--------------|----------------|
| With cover | co | → 444 | - |
| Reversed-home | NM | → A-33 | - |

Drive System Positioning Repeatability

Lost Motion

Guide

Actuator Specifications Item

Allowable Static Load Moment

Ambient Operating Temp./Humidity

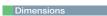
Overhang Load Length

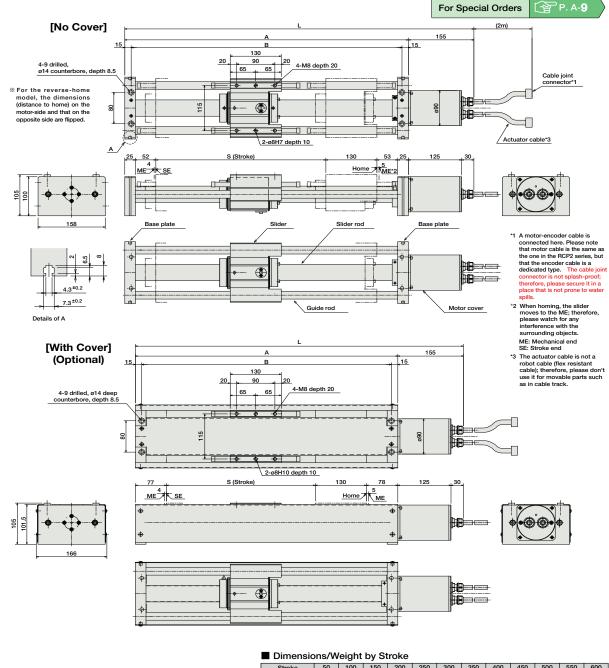
Protection Structure

A dynamic moment isn't applicable for the SA16C for structural reasons When an object is to be mounted on the slider, please fix it in a manner so that no moment load is applied in the direction Mb or Mc, and so that the load is distributed evenly.



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





| | | 0.9 | ~, ~. | | | | | | | | | |
|---------------------------|------|------|-------|------|------|------|------|------|------|------|------|------|
| Stroke | 50 | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 |
| L | 490 | 540 | 590 | 640 | 690 | 740 | 790 | 840 | 890 | 940 | 990 | 1040 |
| Α | 335 | 385 | 435 | 485 | 535 | 585 | 635 | 685 | 735 | 785 | 835 | 885 |
| В | 305 | 355 | 405 | 455 | 505 | 555 | 605 | 655 | 705 | 755 | 805 | 855 |
| S | 50 | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 |
| Weight without cover (kg) | 9 | 9.4 | 9.9 | 10.4 | 10.9 | 11.3 | 11.8 | 12.3 | 12.7 | 13.2 | 13.7 | 15.1 |
| Weight with cover (kg) | 10.5 | 11.1 | 11.8 | 12.5 | 13.2 | 13.8 | 14.6 | 15.3 | 15.9 | 16.6 | 17.3 | 18.9 |

| Compatible Controllers | | | | | | | | |
|--|---------------|---------------------|---|-------------------------|---------------|-----------------------|----------------|----------|
| The controller for the RCP2W-SA16C type is a dedicated controller. | | | | | | | | |
| Name | External View | Model | Description | Max. Positioning Points | Input Voltage | Power Supply Capacity | Standard Price | See Page |
| Positioner Type | | PCON-CF-86PI-NP-2-0 | Positioning possible for up to 512 points | 512 points | DC24V | 6A max. | - | → P525 |

Please note that the encoder cable is a dedicated CF-type cable that is different from the PCON-C/CG/CY/PL/PO/SE controllers.



RCP2W-SA16C



Note:

PMEC / AMEC PSEP / ASEP PCON ACON PSEL ASEL SSEL

ROBO Cylinder Splash-proof Rod Type 45mm Width Pulse Motor Coupled ■ Configuration: RCP2W — RA4C **42P** Compatible Contro Encoder Motor Туре I: Incremental Type 42P: Pulse motor *The simple absolute encoder is also considered type "1". * See page Pre-35 for explanation of each code that makes up the configuration name. N : None P : 1m S : 3m M : 5m B : FL : FT : NM : : Brake-Equipped : With Flange : With Foot bracke 10:10mm 50: 50mm P1:PCON 5:5mm **RPCON** 2.5 : 2.5mm 300: 300mm P3:PMEC (50mm pitch X .: Custom R .: Robot Cable



Technical 晉 P. A-**5** References

the critical rotational speed. Use the actuator specification table below to check the maximum speed at the stroke you desire.

(2) Since the RCP2 series use a pulse motor, the load capacity decreases at high speeds. Check in the Speed vs. Load Capacity graph on the above right to see if your desired speed and load capacity are supported.

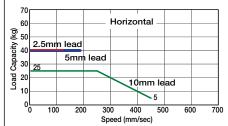
(3) The load capacity is based on operation at an acceleration of 0.2G.

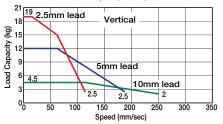
0.2G is the upper limit for the acceleration.

(4) The cable joint connector is not splash-proof; secure it in a place that is not prone to water spills.

■ Speed vs. Load Capacity

Due to the characteristics of the Pulse motor, the RCP2 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 (Note 1) Please note that the maximum load capacity decreases as the speed increases. Max. Load Capacity (Note 1) Horizontal (kg) Vertical (kg) Maximum Pusi Force (N) (Note 2) Lead Stroke RCP2W-RA4C-I-42P-10-1 - 2 - 3 - 4 10 ~25 ~4.5 150 50~300 RCP2W-RA4C-I-42P-5-1 - 2 - 3 - 4 5 40 ~12 284 (50mm RCP2W-RA4C-I-42P-2.5-1 - 2 - 3 - 4 40 ~19 358

| Stroke and Maximum Speed | | | | | | |
|--------------------------|-----------------------------|-----------------|--------------|--|--|--|
| Stroke | 50~200 (50mm increments) | 250 | 300 | | | |
| 10 | 450 | 450 | 350 | | | |
| 10 | ⟨250⟩ | ⟨250⟩ | ⟨250⟩ | | | |
| 5 | 190 | 190 | 175 | | | |
| 2.5 | 125 〈115〉 | 115 | 85 | | | |
| * The value inside < | > applies to v | ortical cotting | (Unit: mm/c) | | | |

① Stroke List

| Stroke (mm) | Standard Price |
|-------------|----------------|
| 50 | = |
| 100 | - |
| 150 | = |
| 200 | - |
| 250 | = |
| 300 | _ |

Legend ① Stroke ② Compatible controller ③ Cable length ④ Options

③ Cable List

(Note 2) See page A-69 for push force graph.

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

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

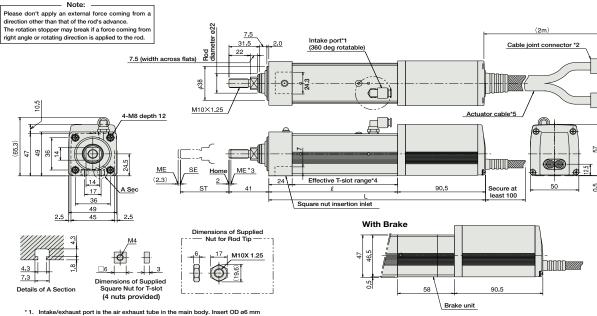
| 4 Option List | | | |
|-------------------|-------------|----------|----------------|
| Name | Option Code | See Page | Standard Price |
| Brake-Equipped | В | → A-25 | - |
| With Flange | FL | → A-27 | - |
| With Foot bracket | FT | → A-29 | - |
| Reversed-home | NM | → A-33 | _ |

| Actuator Specifications | | | | | |
|----------------------------------|--|--|--|--|--|
| Item | Description | | | | |
| Drive System | Ball screw ø8mm C10 grade | | | | |
| Positioning Repeatability | ±0.02mm | | | | |
| Lost Motion | 0.1 mm or less | | | | |
| Rod diameter | ø22mm | | | | |
| Rod non-rotational accuracy | ±1.5 degrees | | | | |
| Protection Structure IP65 | | | | | |
| Ambient Operating Temp./Humidity | 0~40°C, 85%RH or less (Non-condensing) | | | | |



For Special Orders





tube and use it extended to a place that is not prone to water spills or intake.

* 2. Connect motor encoder cable . See page A-39 for details on cables. The cable joint connector is not splast place that is not prone to water spills.

* 3. When homing, the rod moves to the ME; therefore, please watch for any interference with the surrounding objects.

ME : Mechanical End

SE : Stroke end

The dimensions enclosed in "()" are reference dimensions.

* 4. Please note that there is no T-slot in the bottom of brake unit. * 5. The actuator cable is not a robot cable (flex resistant cable); therefore, please don't use it for movable parts such as cable track.

■ Dimensions/Weight by Stroke

| Stroke | 50 | 100 150 | 200 | 250 | 300 | | | |
|-----------------|------------|---------|-------------|-----|-------|-------|--|--|
| ٤ | ا 132.5 18 | | 232.5 282.5 | | 332.5 | 382.5 | | |
| L | L 223 273 | 273 | 323 | 373 | 423 | 473 | | |
| Weight (kg) 1.9 | | 2.1 | 2.2 | 2.5 | 2.9 | 3.1 | | |

* Adding a brake increases overall length by 58mm and its weight by 0.4kg.

| The RCP2W ser | ries actuators ca | an operate with the controllers bel- | ow. Select the controller acco | ording to your u | usage. | | | | |
|---|-------------------|--------------------------------------|---|-------------------------------|------------------|-----------------------------|----------------|---------|--------|
| Name | External View | Model | Description | Max. Positioning Points | Input Voltage | Power Supply Capacity | Standard Price | See Pag | |
| Solenoid | 1 | PMEC-C-42PI-NP-2-① | Easy-to-use controller, even for beginners. | | AC100V AC200V | See P481 | - | → P477 | |
| Valve Type | | PSEP-C-42PI-NP-2-0 | Operable with same signal as solenoid valve. Supports both single and double solenoid | 3 points | | | - | → P487 | |
| Splash-Proof Solenoid Valve Type | | PSEP-CW-42PI-NP-2-0 | types. No homing necessary with simple absolute type. | | | | - | → F48/ | |
| Positioner Type | E | PCON-C-42PI-NP-2-0 Positioning possi | Positioning possible for | 512 points | | | - | | |
| Safety Category Compliant Positioner Type | | PCON-CG-42PI-NP-2-0 | up to 512 points | | orz points | | - | | |
| Pulse Train Input Type Differential Line Driver) | Ó | PCON-PL-42PI-NP-2-0 | Differential line driver support Pulse Train Input Type | | | DC24V | 2A max. | - | → P525 |
| Pulse Train Input Type (Open Collector) | | PCON-PO-42PI-NP-2-0 | Open Collector Pulse Train Input Type | | | (-) | | | |
| Serial Communication Type | Í | PCON-SE-42PI-N-0-0 | Dedicated to serial communication | 64 points | | | - | | |
| Field Network Type | | RPCON-42P | Dedicated to field network | 768 points | | | - | → P503 | |
| Program Control Type | 2 | PSEL-C-1-42PI-NP-2-0 | Programmed operation is possible Can operate up to 2 axes | 1500 points | | | - | → P557 | |

IAI

RCP2W-RA4C **446**



Splash-Proo
Controllers

PMEC
/AMEC
PSEP
/ASEP
ROBO
NET
ERC2
PCON
ACON
SCON
PSEL

Mini
Standard
ontrollers
integrated

Rod
Type
Mini
Standard
Controllers
Integrated

Controllers

PMEC
/AMEC
/AMEC
/AMEC
PSEP
ROBO
NET

ERC2
PCON
ACON
SCON
PSEL
ASEL
XSEL

■ Configuration: RCP2W — RA6C **56P** Compatible Cont Encoder Type I: Incremental Type 56P: Pulse motor

*The simple 56 □ size absolute encoder is also considered type "I".

* See page Pre-35 for explanation of each code that makes up the configuration name. B FL FT NM 50: 50mm N: Non P:1m S:3m M:5m : Brake-Equipped : With Flange : With Foot bracke P1 : PCON 16:16mm 8:8mm **RPCON** 300: 300mm (50mm pitch P3:PMEC X .: Custom Length R .: Robot Cable **PSEP**



Technical 晉 P. A-**5** References

(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.

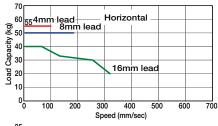
(2) Since the RCP2 series use the pulse motor, the load capacity decreases at high speeds. Check in the Speed vs. Load Capacity graph on the above right to see if your desired speed and load capacity are supported.

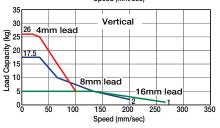
(3) The load capacity is based on operation at an acceleration of 0.2G. 0.2G is the upper limit for the acceleration.

(4) The cable joint connector is not splash-proof; secure it in a place that is not prone to water spills.

■ Speed vs. Load Capacity

Due to the characteristics of the Pulse motor, the RCP2 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 (Note 1) Please note that the maximum load capacity decreases as the speed increases. Lead

Max. Load Capacity (Note 1) Maximum Push Force (N) (Note 2) Stroke RCP2W-RA6C-I-56P-16-1-2-3-4 16 ~40 ~5 240 50~300 RCP2W-RA6C-I-56P-8-1 - 2 - 3 - 4 8 50 ~17.5 470 (50mm RCP2W-RA6C-I-56P-4-1 - 2 - 3 - 4 55 ~26 800

| l | Stroke | 50~300 (50mm increments) | | | | | |
|---|---|-----------------------------|--|--|--|--|--|
| 1 | 16 | 320〈265〉 | | | | | |
| | 8 | 200 | | | | | |
| | 4 | 100 | | | | | |
| | * The value inside < > applies to vertical setting. (Ui | | | | | | |

■ Stroke and Maximum Speed

① Stroke List

lotes or

| Stroke (mm) | Standard Price |
|-------------|----------------|
| 50 | - |
| 100 | - |
| 150 | = |
| 200 | - |
| 250 | - |
| 300 | = |

Legend Stroke Compatible controller Cable length Options

③ Cable List

(Note 2) See page A-69 for push force graph.

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

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

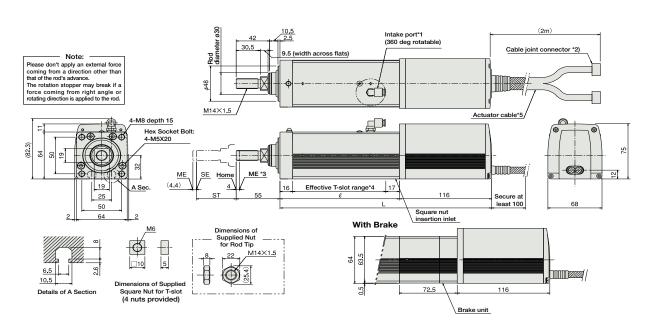
| ④ Option List | | | |
|-------------------|-------------|----------|----------------|
| Name | Option Code | See Page | Standard Price |
| Brake-Equipped | В | → A-25 | _ |
| With Flange | FL | → A-27 | - |
| With Foot bracket | FT | → A-29 | - |
| Reversed-home | NM | → A-33 | - |

| Actuator Specifications | | | | | |
|----------------------------------|--|--|--|--|--|
| Item | Description | | | | |
| Drive System | Ball screw ø12mm C10 grade | | | | |
| Positioning Repeatability | ±0.02mm | | | | |
| Lost Motion | 0.1 mm or less | | | | |
| Rod diameter | ø30mm | | | | |
| Rod non-rotational accuracy | ±1.0 degrees | | | | |
| Protection Structure | IP65 | | | | |
| Ambient Operating Temp./Humidity | 0~40°C, 85%RH or less (Non-condensing) | | | | |



For Special Orders





- *1. Intake/exhaust port is the air exhaust tube in the main body. Insert OD ø6 mm tube and use it extended to a place that is not prone to water spills or intake.
- *2. Connect motor encoder cable . See page A-39 for details on cables. The cable joint connector is not splash-proof; therefore, please secure it in a place that is not prone to water spills.
- *3. When homing, the rod moves to the ME; therefore, please watch for any interference with the surrounding objects.

ME: Mechanical End

SE: Stroke end

- The dimensions enclosed in "()" are reference dimensions.
- *4. Please note that there is no T-slot in the bottom of brake unit.
- *5. The actuator cable is not a robot cable (flex resistant cable); therefore, plead don't use it for movable parts such as cable track.

Adding a brake increases overall length by 72.5mm and its weight by 0.9kg.

■ Dimensions/Weight by Stroke

| Stroke | 50 | 100 | 150 | 200 | 250 | 300 |
|-------------|-----|-----|-----|-----|-----|-----|
| Ł | 150 | 200 | 250 | 300 | 350 | 400 |
| L | 266 | 316 | 366 | 416 | 466 | 516 |
| Weight (kg) | 3.5 | 4.0 | 4.5 | 5.0 | 5.5 | 6.0 |

| ② Compatible Contr | |
|--------------------|--|
| | |

The RCP2W 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 | F11 | PMEC-C-56PI-NP-2-① | Easy-to-use controller, even for beginners. | | AC100V AC200V | See P481 | - | → P477 | | | |
| Solenoid valve Type | | PSEP-C-56PI-NP-2-0 | Operable with same signal as solenoid valve. Supports both single and | 3 points | | | - | → P487 | | | |
| Splash-Proof Solenoid ValveType | | PSEP-CW-56PI-NP-2-0 | double solenoid types. No homing necessary with simple absolute type. | | | | - | → P407 | | | |
| Positioner Type | E) | PCON-C-56PI-NP-2-0 | Positioning possible for | 512 points | 512 points | 512 points | F12 points | | | - | |
| Safety Category Compliant Positioner Type | | PCON-CG-56PI-NP-2-0 | up to 512 points | | | | - | | | | |
| Pulse Train Input ype (Differential Line Driver) | Ó | PCON-PL-56PI-NP-2-0 | Differential line driver support Pulse Train Input Type | (-) | DC24V | 2A max. | - | → P525 | | | |
| Pulse Train Input Type (Open Collector) | | PCON-PO-56PI-NP-2-0 | Open Collector Pulse Train Input Type | (-) | | | - | | | | |
| Serial Communication Type | | PCON-SE-56PI-N-0-0 | Dedicated to serial communication | 64 points | | | - | | | | |
| Field Network Type | | RPCON-56P | Dedicated to field network | 768 points | | | - | → P503 | | | |
| Program Control Type | | PSEL-C-1-56PI-NP-2-0 | Programmed operation is possible Can operate up to 2 axes | 1500 points | | | - | → P557 | | | |

IAI

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



Controllers Integrated Roc Type Mini

ROBO Cylinder High-thrust Dust-proof Rod Type 100mm Width Pulse Motor ■ Configuration: RCP2W — RA10C 86P **P2** Motor Туре N : None A1 - A3 : Connector cable P : 1m Cable outlet S : 3m direction changes M : 5m B : Brake-Equipped X □ : Custom Length FL : With Flange FT : With Foot bracket FT : With Foot bracket 86P: Pulse motor 10: 10mm 50: 50mm P2 : PCON-CF 86 size 5 : 5mm 2.5 : 2.5mm 300: 300mm (50mm pitch * See page Pre-35 for explanation of each code that makes up the configuration name.



Technical (译 P. A-**5** References

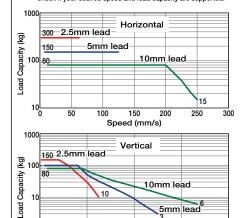
(1) Minimum speed is set for each lead. (Lead 10: 10mm/s, Lead 5: 5mm/s, Lead 2.5: 1mm/s) Please note that vibration etc. may occur when operated at minimum speed.

(2) Since the RCP2 series use a pulse motor, the load capacity decreases at high speeds. Check the Speed vs. Load Capacity on the right hand graph to see if your desired speed and load capacity are supported.
(3) The load capacity is based on operation at lead 10: 0.04G, lead 5: 0.02G and lead 2.5: 0.01G. These values are the upper limits for the acceleration. Also, this is when the load capacity is attached to the external guide. The rotation stopper may break if an external force coming from a direction other than that of rod's advance is applied.

(4) The cable joint connector is not splash-proof; secure it in a place that is not prone to

■ Speed vs. Load Capacity

Due to the characteristics of the Pulse motor, the RCP2 series' load capacity decreases at high speeds. In the table below, check if your desired speed and load capacity are supported.



| plied. water | 1, |) 5 | 0 1/ | 00 15 | 50 20 | J |
|--------------------------------|----------------|----------|------------|-------------------------|-------|---|
| water | ' |) 5 | | (mm/s) | 50 20 | U |
| | | | | | | |
| | | | | | | |
| s as the sp | eed increases. | ■ Stroke | e and Maxi | mum Spee | :d | |
| dmum Push Force (Note 2) | Stroke (mm) | Str | oke | 50~300 (50mm increme | ents) | |
| | | | | | | |

| Ecad and Load Capacity (Note 1/1 loads | ioto tilat tilo ii | idaminami iodd (| apaony acord | acco ac allo opi | ood morodooo. |
|---|--------------------|--------------------------------|-----------------|---------------------------------------|--------------------------------|
| Model | | Max. Load Ca Horizontal(kg) | pacity (Note 1) | Maximum Push Force (N) (Note 2) | Stroke (mm) |
| RCP2W-RA10C-I-86P-10-① -P2-② -③ | 10 | ~80 | ~80 | 1500 | 50,000 |
| RCP2W-RA10C-I-86P-5-1 -P2-2 -3 | 5 | 150 | ~100 | 3000 | 50~300 (50mm increments) |
| RCP2W-RA10C-I-86P-2.5-①-P2-②-③ | 2.5 | 300 | ~150 | 6000 | increments) |
| Legend Stroke Cable length Options (Note 2) See page A-70 for push force graph. | | | | | |

(Note 1) Please note that the maximum load capacity decreases

| l | 10 | 250 〈167〉 | |
|---|----------------------|-------------------------------|---------------|
| | 5 | 125 | |
| | 2.5 | 63 | |
| | * The value incide < | > applies to vertical setting | (Linit: mm/c) |

Actuator Specifications ■ Lead and Load Canacity

| Stroke (mm) | Standard Price |
|-------------|----------------|
| 50 | ı |
| 100 | - |
| 150 | = |
| 200 | - |
| 250 | ı |
| 300 | = |

② Cable List

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

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

| ③ Option List | | | |
|--|-------------|----------|----------------|
| Name | Option Code | See Page | Standard Price |
| Connector cable outlet direction changed | A1~A3 | → A-25 | - |
| Brake | В | → A-25 | - |
| Flange | FL | → A-27 | - |
| Foot bracket | FT | → A-29 | _ |

| Actuator Specifications | | | | |
|----------------------------------|--|--|--|--|
| Item | Description | | | |
| Drive System | Ball screw C10 grade | | | |
| Positioning Repeatability | ±0.02mm | | | |
| Lost Motion | 0.1 mm or less | | | |
| Rod diameter | ø40mm | | | |
| Rod non-rotational accuracy | ±1.0 degrees | | | |
| Protection Structure | IP54 | | | |
| Ambient Operating Temp./Humidity | 0~40°C, 85%RH or less (Non-condensing) | | | |

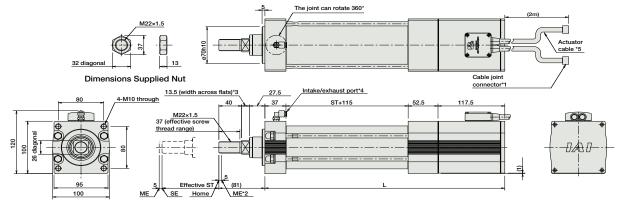
RCP2W-RA10C



For Special Orders



for the RA10C type for structural reasons.



*1. A motor-encoder cable is connected here. Please note that motor cable is the same as the one in the RCP2 series, but that the encoder cable is a dedicated type. See page A-39 for details on cables.

The cable joint connector is not splash-proof; therefore, please secure it in a place that is not prone to water spills.

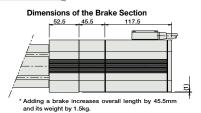
*2. When homing, the rod moves to the ME; therefore, please watch for any interference with the surrounding objects.
ME: Mechanical end
SE: Stroke end
The dimensions enclosed in "()" are reference

- dimensions.
 *3. The direction of across-flats will vary depending on the
- The direction of across-nats will vary depending on the product.

 Intake/exhaust port is the air exhaust tube in the main body.

 The actuator cable is not a robot cable (flex resistant cable); therefore, please don't use it for movable parts such as cable track.





■ Dimensions/Weight by Stroke

| Stroke | 50 | 100 | 150 | 200 | 250 | 300 |
|-------------|-----|-----|-----|------|-----|------|
| L | 372 | 422 | 472 | 522 | 572 | 622 |
| Weight (kg) | 9 | 9.5 | 10 | 10.5 | 11 | 11.5 |

Compatible Controllers

The controller for the RCP2W-RA10C type is a dedicated controller.

| Name | External View | Model | Description | Max. Positioning Points | Input Voltage | Power Supply Capacity | Standard Price | See Page |
|--------------------|---------------|---------------------|---|-------------------------|---------------|-----------------------|----------------|----------|
| Positioner Type | 1 | PCON-CF-86PI-NP-2-0 | Positioning possible for up to 512 points | 512 points | DC24V | 6A max. | - | → P525 |

Note: Please note that the encoder cable is a dedicated CF-type cable that is different from the PCON-C/CG/CY/PL/PO/SE controllers.

IAI

RCP2W-RA10C 450

Controllers Integrated

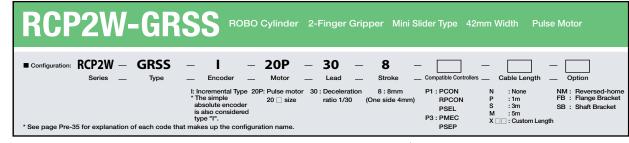
Rod Type

Mini

Standard

Controllers Integrated

PMEC AMEC PSEP ASEP ASEP ASEL SSEL SSEL

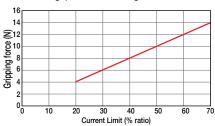




■ Grip Force Arrangement

Through push operation the grip force (push force) can be arranged freely within the range of 20%-70% of current limit value of the controller.

* Grip force noted in the figure below is the sum of the grip force of two fingers.



* Please note when gripping (pushing) is performed the speed will be fixed at 5 mm/s.

Notes on Selection

Mini
Standard
Controllers
Integrated

Rod
Type

Mini
Standard
Controllers
Integrated

- (1) The max. open/close speed represents one side operating speed.
- (2) The max. grip force will be the sum of the two fingers grip force when the distance for grip point and over hang is 0. The actual work part weight which can be transported depends on the friction constant between finger and work material, and the form; typically it is 1/10–1/20 or less than gripping force. (See page A-74 for details.)
- (3) The rated acceleration at transportation is 0.3G.
- (4) Please note that the product has no splash-proof function

Actuator Specifications

Lead and Load Capacity

| = 1000 and 1000 capaon, | | | |
|---|--------------------|-----------------|-------------------|
| Model | Deceleration ratio | Max. Grip Force | Stroke (mm) |
| RCP2W-GRSS-I-20P-30-8-①-②-③ | 30 | 14 | 8 (One side 4) |
| Legend ① Compatible controller ② Cable length ③ Options | | | |

Stroke and Maximum Open/Close Speed

Stroke 8 (mm)

and 78

(Unit: mm/s)

Stroke List

| Stroke List | |
|-------------|----------------|
| Stroke (mm) | Standard Price |
| 8 | - |
| | |

② Cable List

| Туре | Cable Symbol | Standard Price |
|----------------------------|-----------------------|----------------|
| Standard (Robot Cables) | P (1m) | - |
| | S (3m) | - |
| | M (5m) | - |
| | X06 (6m) ~ X10 (10m) | - |
| Special Lengths | 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.

Pulse Motor

Servo Motor (24V)

Servo Motor (200V)

Linear Servo Motor

| Option Code | See Page | Standard Price |
|-------------|----------|----------------------|
| NM | → A-33 | - |
| FB | → 26 | - |
| SB | → 36 | _ |
| | NM FB | NM → A-33 FB → 26 |

| Actuator Specifications | | | | | |
|----------------------------------|---|--|--|--|--|
| Item | Description | | | | |
| Drive System | Worm gear + Helical gear + Helical rack | | | | |
| Positioning Repeatability | ±0.01mm | | | | |
| Backlash | 0.2 mm or less for one side (stressed by spring on the side which is opened always) | | | | |
| Lost Motion | 0.05mm or less one side | | | | |
| Guide | Linear Guide | | | | |
| Statically Allowable Load Moment | Ma:0.5N·m Mb:0.5N·m Mc:1.5N·m | | | | |
| Weight | 0.2kg | | | | |
| Ambient Operating Temp./Humidity | 0~40°C, 85%RH or less (Non-condensing) | | | | |

451 RCP2W-GRSS

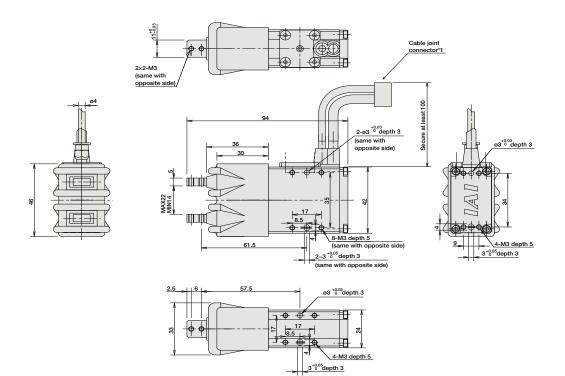


For Special Order

P. A-9

Open side of slider will be home position.

A motor-encoder cable is connected here. See page A-39 for details on cables.



Weight (kg) 0.2

| Name | External View | Model | Description | Max. Positioning Points | Input Voltage | Power Supply Capacity | Standard Price | See Pag | |
|---|---------------|---|---|-------------------------------|------------------|-----------------------------|----------------|---------|-------|
| Solenoid ValveType | | PMEC-C-20PI-NP-2-① | Easy-to-use controller, even for beginners. | AC100V AC200V | | See P481 | - | → P47 | |
| Solenoid valve type | | PSEP-C-20PI-NP-2-0 | Operable with same signal as solenoid valve. Supports both single and | 3 points | | | - | → P48 | |
| Splash-Proof Solenoid Type | | PSEP-CW-20PI-NP-2-0 | double solenoid types. No homing necessary with simple absolute type. | | | | | | - |
| Positioner Type | T . | PCON-C-20PI-NP-2-0 Positioning possible for 5 | 512 points | | | - | | | |
| Safety Category Compliant Positioner Type | | PCON-CG-20PI-NP-2-0 | up to 512 points | oport DC2 | | | - | | |
| Pulse Train Input Type (Differential Line Driver) | ei e | PCON-PL-20PI-NP-2-0 | Differential line driver support Pulse Train Input Type | | DC24V | DC24V | 2A max. | - | → P52 |
| Pulse Train Input Type (Open Collector) | | PCON-PO-20PI-NP-2-0 | Open Collector Pulse Train Input Type | (-) | | | | | - |
| Serial Communication Type | | PCON-SE-20PI-N-0-0 | Dedicated to serial communication | 64 points | | | - | | |
| Field NetworkType | | RPCON-20P | Dedicated to field network | 768 points | | | _ | → P50 | |
| Program Control Type | | PSEL-C-1-20PI-NP-2-0 | Programmed operation is possible Can operate up to 2 axes | 1500 points | | | - | → P55 | |

IAI

452 RCP2W-GRSS



ROBO Cylinder 2-Finger Gripper Mini Lever Type 42mm Width Pulse Motor

■ Configuration: RCP2W— Controllers
Integrated

Roo
Type

Mini

Standard

Controllers
Integrated

Туре

20P 30 180 Motor Lead Stroke

RPCON

N : None
P : 1m
S : 3m
M : 5m
X \cup : Custom Length

NM : Reversed-home FB : Flange Bracket SB : Shaft Bracket

l: Incremental Type
* The simple
absolute encoder
is also considered
type "!".
*See page Pre-35 for explanation of each code that makes up the configuration name.

l: Incremental Type
* 20 P; Pulse motor 30 : Deceleration 180 : 180 Degress P1 : PCON
RPCON
PSEL
*See page Pre-35 for explanation of each code that makes up the configuration name.

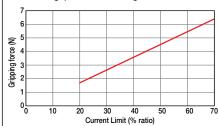
GRLS



■ Grip Force Arrangement

Through push operation the grip force (push force) can be arranged freely within the range of 20%~70% of current limit value of the controller.

Grip force noted in the figure below is the sum of the grip force of two fingers.



* Please note when gripping (pushing) is performed the speed will be fixed at 5 degrees/sec.

PMEC /AMEC PSEP /ASEP ROBO NET ERC2 PCON ACON SCON PSEL SSEL

(1) The max. open/close speed represents one side operating speed.

(2) The max. grip force will be the sum of the two fingers grip force when the distance for grip point and over hang is 0. The actual work part weight which can be transported depends on the friction constant between finger and work part material, and the form; typically it is $1/10\sim 1/20$ or less than gripping force. (See page A-77 for details.)

(3) The rated acceleration at transportation is 0.3G.

(4) Please note that the product has no splash-proof function

Actuator Specifications

| Lead and Load Capacity | | | |
|--------------------------------|--------------------|-----------------|----------------------|
| Model | Deceleration ratio | Max. Grip Force | Stroke degrees) |
| RCP2W-GRLS-I-20P-30-180-① -②-③ | 30 | 6.4 | 180 (One side 90) |
| | | | |

Stroke and Maximum Open/Close Speed

| | _ 000 | maximum openi enece opeca |
|---|--------------------|---------------------------|
| I | Stroke | 180 |
| ı | Deceleration ratio | (degrees) |
| | 30 | 600 |

Legend ① Compatible controller ② Cable length ③ Options

(Unit: degrees/s)

Stroke List

| Stroke (degrees) | Standard Price |
|---------------------|----------------|
| 180 | - |

② Cable List

| Тур | е | Cable Symbol | Standard Price |
|-----------------|-----------------------|-----------------------|----------------|
| Stand | lard | P (1m) | - |
| | S (3m) | - | |
| (HODOT C | (Robot Cables) | M (5m) | - |
| | | X06 (6m) ~ X10 (10m) | - |
| Special Lengths | 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.

| ③ Option List | | | | | |
|----------------|-------------|----------|----------------|--|--|
| Name | Option Code | See Page | Standard Price | | |
| Reversed-home | NM | A-33 | - | | |
| Flange Bracket | FB | 26 | - | | |
| Shaft Bracket | SB | 36 | _ | | |

Actuator Specifications

| riotaator opoomoationo | | | | |
|----------------------------------|---|--|--|--|
| Item | Description | | | |
| Drive System | Worm gear + Helical gear | | | |
| Positioning Repeatability | ±0.01mm | | | |
| Backlash | 1 degree or less for one side (stressed by spring on the side which is opened always) | | | |
| Lost Motion | 0.1 mm or less one side | | | |
| Guide | - | | | |
| Statically Allowable Load Moment | - | | | |
| Weight | 0.2kg | | | |
| Ambient Operating Temp./Humidity | 0~40°C, 85%RH or less (Non-condensing) | | | |

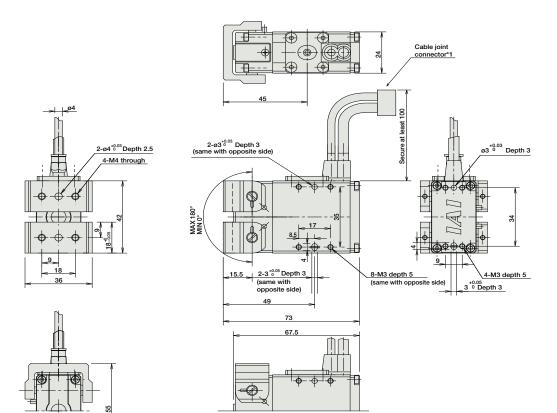


For Special Order



- Open side of slider will be home position.

 A motor-encoder cable is connected here. See page A-39 for details on cables.



① Compatible Controllers The RCP2W series actuators can operate with the controllers below. Select the controller according to your usage AC100V PMEC-C-20PI-NP-2-① Easy-to-use controller, even for beginners. → P477 See P481 AC200V Operable with same signal as solenoid valve. Supports both single and double solenoid types. No homing necessary with simple absolute type. ì PSEP-C-20PI-NP-2-0 3 points → P487 Splash-Proof Solenoid Valve Type 1 PSEP-CW-20PI-NP-2-0 PCON-C-20PI-NP-2-0 Positioner Type Positioning possible for up to 512 points 512 points Safety Category Compliant Positioner Type PCON-CG-20PI-NP-2-0 Pulse Train Input Type (Differential Line Driver) Differential line driver upport Pulse Train Input Type PCON-PL-20PI-NP-2-0 DC24V 2A max _ → P525 (-) Pulse Train Input Open Collector Pulse Train Input Type Type (Open Collector) PCON-PO-20PI-NP-2-0

IAI

Dedicated to serial communication

Dedicated to field network

Programmed operation is possible Can operate up to 2 axes

64 points

768 points

1500 points

* This is for the single-axis PSEL.

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

PCON-SE-20PI-N-0-0

PSEL-C-1-20PI-NP-2-0

RPCON-20P

454 RCP2W-GRLS

→ P503

→ P557



Serial

Communication Type

Field NetworkType

Program Control

Weight (kg) 0.2

RCAW-RA3C/RA3D/RA3R

ROBO Cylinder Splash-proof Rod Type ø32mm Diameter 24V Servo Motor Coupled/Built-in/Side-Mounted Motor Specification

■ Configuration: RCAW — 20 Туре Motor Stroke Compatible Contro Cable Length RA3C:
Coupled type
Coupled type
RA3D:
RA3B:
RA3R:
Side-Mounted Motor
Type "I":
* See page Pre-35 for explanation of each code that makes up the configuration name. RA3C: Coupled type RA3D: Built-in RA3R: N: None P:1m S:3m M:5m 20 : 20W servo 10:10mm 50:50mm A1 : ACON RACON ASEL 5:5mm 200:200mm (50mm pitch increments) A3: AMEC

Power-saving

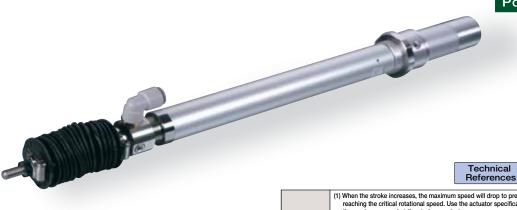
P. A-5

(Unit: mm/s)

X .: Custom Length R .: Robot Cable

Option

See Options below



- (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 is based on operation at an acceleration of 0.3G (0.2G for the 2.5mm-lead model).

 These values are the upper limits for the acceleration.
- (3) Please use external guide combination for horizontal load capacity; the value is for when no
- external force coming from a direction other than that of rod's advance is applied. (4) The cable joint connector is not splash-proof; secure it in a place that is not prone to water

Actuator Specifications

■ Lead and Load Capacity

| Model | Motor Output (w) | Lead (mm) | Max. load Horizontal(kg) | l capacity Vertical(kg) | Rated thrust (N) | Stroke (mm) |
|---|---------------------|--------------|-----------------------------|----------------------------|---------------------|-----------------|
| RCAW-①-I-20-10-②-③-④-⑤ | | 10 | 4 | 1.5 | 36.2 | F0 000 |
| RCAW-①-I-20-5-②-③-④-⑤ | 20 | 5 | 9 | 3 | 72.4 | 50~200 (50mm |
| RCAW-①-I-20-2.5-②-③-④-⑤ | | 2.5 | 18 | 6.5 | 144.8 | increments) |
| Legend ① Type ② Stroke ③ Compatible controller ④ Cable length ⑤ Options | | | | | | |

Stroke and Maximum Speed

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

Encoder & Stroke List

| @ 0 : 1 / \ | Standard Price | | | | |
|--------------------|----------------|------|------|--|--|
| ② Stroke (mm) | RA3C | RA3D | RA3R | | |
| 50 | - | - | - | | |
| 100 | _ | - | _ | | |
| 150 | = | = | _ | | |
| 200 | _ | _ | _ | | |

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

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

ontrollers ntegrated

Rod Type

Mini

Standard

Controllers Integrated

| (5) Option List | | | |
|-------------------------------|-------------|----------|----------------|
| Name | Option Code | See Page | Standard Price |
| Brake (*1) | В | → A-25 | - |
| Flange bracket | FL | → A-27 | _ |
| Foot bracket | FT | → A-29 | _ |
| Home confirmation sensor (*2) | HS | → A-32 | - |
| Power-saving | LA | → A-32 | _ |
| Knuckle Joint | NJ | → A-34 | - |
| Reversed-home (*2) | NM | → A-33 | - |
| Clevis Bracket (*3) | QR | → A-34 | - |
| Rear mounting plate (*3) | RP | → A-33 | - |
| Trunnion Bracket (Front) (*4) | TRF | → A-38 | _ |
| Trunnion Bracket (Back) (*4) | TRR | → A-38 | _ |

- (*1) No brake option for RA3D.
 (*2) Home sensor (HS) can't be used with reversed-home (NM).
 (*3) Clevis bracket and rear mounting plate only available for RA3R.
 (*4) Trunnion bracket (rear) only available for RA3C/RA3D.

RCAW-RA3C/RA3D/RA3R

Actuator Specifications

| Item | Description |
|----------------------------------|--|
| Drive System | Ball screw ø8mm C10 grade |
| Positioning Repeatability | ±0.02mm |
| Lost Motion | 0.1 mm or less |
| Base | Material: Aluminum (white alumite treated) |
| Rod diameter | ø16mm |
| Rod non-rotational accuracy | ±1.0 degrees |
| Protection Structure | IP54 |
| Ambient Operating Temp./Humidity | 0~40°C, 85%RH or less (Non-condensing) |

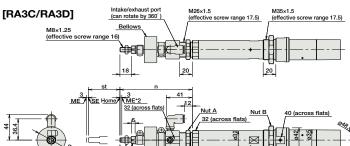




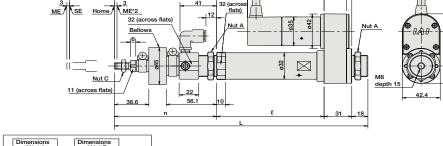


RA3D type.

- 11 A motor-encoder cable is connected here. See page A-39 for details on cables.
 2 When homing, the slider moves to the ME; therefore, please watch for any interference with the surrounding objects. ME: Mechanical end SE: Stroke end



Nut C 11 (across flats [RA3R] The actuator cable is the same as RA3C/RA3D. 3 ME*2 3<u>.</u> ME./



| Dimensions of Nut A | Dimensions of Nut B | |
|---------------------|---------------------|---------------------|
| M26x1.5 | M35x1.5 | Dimensions of Nut C |
| 7 32 | 8 46 | 5 13 |

■ Dimensions/Weight by Stroke

RCAW-RA3C/RA3D/RA3R (without brake)

| S | Stroke | | 100 | 150 | 200 | | |
|----------------|--------|-------|-------|-------|-------|--|--|
| | RA3C | 348.9 | 408.9 | 468.9 | 528.9 | | |
| L | RA3D | 329.9 | 389.9 | 449.9 | 509.9 | | |
| | RA3R | 283.4 | 343.4 | 403.4 | 463.4 | | |
| | RA3C | 132 | 182 | 232 | 282 | | |
| Ł | RA3D | 132 | 182 | 232 | 282 | | |
| | RA3R | 120 | 170 | 220 | 270 | | |
| | RA3C | | 85.5 | | | | |
| m | RA3D | | 5.5 | | | | |
| | RA3R | | 85 | .5 | | | |
| | RA3C | 114.4 | 124.4 | 134.4 | 144.4 | | |
| n | RA3D | 114.4 | 124.4 | 134.4 | 144.4 | | |
| | RA3R | 114.4 | 124.4 | 134.4 | 144.4 | | |
| M/oight | RA3C | 1.0 | 1.1 | 1.2 | 1.3 | | |
| Weight (kg) | RA3D | 1.0 | 1.1 | 1.2 | 1.3 | | |
| (49) | RA3R | 1.1 | 1.2 | 1.3 | 1.4 | | |

RCAW-RA3C/RA3D/RA3R(with brake)

| S | troke | 50 | 100 | 150 | 200 | |
|--------|-------|--------------------------|---------|---------|--------|--|
| | RA3C | 387.9 | 447.9 | 507.9 | 567.9 | |
| L | RA3D | No brake-equipped model. | | | | |
| | RA3R | 283.4 | 343.4 | 403.4 | 463.4 | |
| | RA3C | 132 | 182 | 232 | 282 | |
| Ł | RA3D | No br | ake-equ | ipped n | nodel. | |
| | RA3R | 120 | 170 | 220 | 270 | |
| | RA3C | 124.5 | | | | |
| m | RA3D | No brake-equipped model. | | | | |
| | RA3R | | 12 | 4.5 | | |
| | RA3C | 114.4 | 124.4 | 134.4 | 144.4 | |
| n | RA3D | No br | ake-equ | ipped n | nodel. | |
| | RA3R | 114.4 | 124.4 | 134.4 | 144.4 | |
| Weight | RA3C | 1.2 | 1.3 | 1.4 | 1.5 | |
| (kg) | RA3D | 1.2 | 1.3 | 1.4 | 1.5 | |
| (1-9) | RA3R | 1.3 | 1.4 | 1.5 | 1.6 | |

3 Compatible Controllers

The RCAW 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 ValveType | EI | AMEC-C-20SI ①-NP-2-1 | Easy-to-use controller, even for beginners. | | AC100V | 2.4A rated | - | → P477 | | |
| Soleriola valve rype | | ASEP-C-20SI ①-NP-2-0 | Operable with same signal as solenoid valve. Supports both single and | 3 points | | | - | → P487 | | |
| Splash-Proof Solenoid ValveType | | ASEP-CW-20SI ①-NP-2-0 | double solenoid types. No homing necessary with simple absolute type. | | | | - | → P407 | | |
| Positioner Type | | ACON-C-20SI ①-NP-2-0 | Positioning possible for | 512 points | | | - | | | |
| Safety Category Compliant Positioner Type | | ACON-CG-20SI ①-NP-2-0 | up to 512 points | 312 points | | | - | | | |
| Pulse Train Input Type (Differential Line Driver) | | ACON-PL-20SI ①-NP-2-0 | Differential line driver support Pulse Train Input Type | (-) | DC24V | 1.7A rated 5.1A peak | - | → P535 | | |
| Pulse Train Input Type (Open Collector) | c | ACON-PO-20SI ①-NP-2-0 | Open Collector Pulse Train Input Type | (-) | | | - | | | |
| Serial Communication Type | | ACON-SE-20SI ①-N-0-0 | Dedicated to serial communication | 64 points | | | • | | - | |
| Field NetworkType | | RACON-20S ① | Dedicated to field network | 768 points | | | - | → P503 | | |
| Program Control Type | | ASEL-C-1-20SI ①-NP-2-0 | Programmed operation is possible Can operate up to 2 axes | 1500 points | | | _ | → P567 | | |

*This is for the single-axis ASEL.
*① is a placeholder for the code "LA", when the the energy-saving option is selected.

IAI

RCAW-RA3C/RA3D/RA3R











































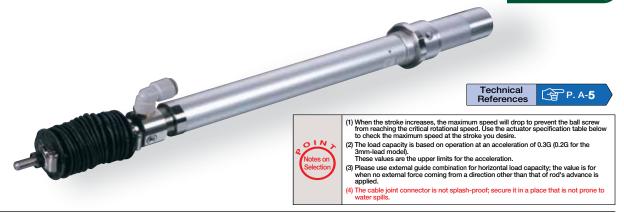
Mini
Standard
Controllers
Integrated

Rod
Type
Mini
Standard
Table/Arr
//Flat Typ
Mini
Standard

ROBO Cylinder Splash-proof Rod Type RCAW-RA4C/RA4D/RA4R ø37mm Diameter 24V Servo Motor Coupled/Built-in/Side-Mounted Motor Specification ■ Configuration: RCAW — Туре Encoder RA4C: I : Incremental Type 20 : Coupled type A : Absolute Type Built-in 30 : RA4R: RA4R: Sale-Mounted Motor * See page Pre-35 for explanation of each code that makes up the configuration name. N: None P:1m S:3m M:5m 20 : 20W servo 12:12mm 50:50mm A1 : ACON See Options below RACON ASEL 6:6mm 30:30W servo 300:300mm (50mm pitch increments) A3: AMEC X .: Custom Length R .: Robot Cable

The absolute model can only use ASEL.
The simple absolute type is considered are incremental model.

Power-saving



Actuator Specifications ■ Lead and Load Capacity

| Model | Motor Output (W) | | Max. Ioac Horizontal (kg) | | Rated thrust (N) | Stroke (mm) |
|--|---------------------|---------|------------------------------|-----|---------------------|----------------------|
| RCAW-①-②-20-12-③-④-⑤-⑥ | | 12 | 3.0 | 1.0 | 18.9 | |
| RCAW-①-②-20-6-③-④-⑤-⑥ | 20 | 6 | 6.0 | 2.0 | 37.7 | |
| RCAW-①-②-20-3-③-④-⑤-⑥ | | 3 | 12.0 | 4.0 | 75.4 | 50~300 |
| RCAW-①-②-30-12-③-④-⑤-⑥ | | 12 | 4.0 | 1.5 | 28.3 | (50mm increments) |
| RCAW-①-②-30-6-③-④-⑤-⑥ | 30 | 6 | 9.0 | 3.0 | 56.6 | |
| RCAW-①-②-30-3-③-④-⑤-⑥ | | 3 | 18.0 | 6.5 | 113.1 | |
| Legend 1 Type 2 Encoder 3 Stroke 4 Compatible controle | r 5 Cable | lengh 6 | Options | | | |

| Stroke and Maximum Speed | | | | | | | |
|--------------------------|----------------|------------------------------|--|--|--|--|--|
| | Stroke Lead | 50~ 300 (50mm increments) | | | | | |
| | 12 | 600 | | | | | |
| | 6 | 300 | | | | | |
| | 3 | 150 | | | | | |

(Unit: mm/s)

| Encoder 8 | Stroke List |
|-----------|-------------|
|-----------|-------------|

| | | Standard Price | | | | | | | | |
|---------------|-----------|----------------|--------------------|-------|--------------------------|--------|--------------------|-------|--------------------|--|
| | | RA4C | /RA4D | | | RA | 4R | | | |
| @ O4 () | | 2 Enco | der Type | | | 2 Enco | der Type | | | |
| ③ Stroke (mm) | Incren | nental | Abs | olute | Increr | nental | Abso | olute | | |
| | Motor pov | ver output | Motor power output | | output Motor power out | | Motor power output | | Motor power output | |
| | 20W | 30W | 20W | 30W | 20W | 30W | 20W | 30W | | |
| 50 | _ | - | _ | _ | _ | - | - | - | | |
| 100 | - | - | - | - | _ | - | - | - | | |
| 150 | _ | - | _ | _ | _ | _ | _ | _ | | |
| 200 | - | - | - | - | - | - | - | - | | |
| 250 | _ | _ | _ | _ | _ | _ | _ | _ | | |
| 300 | _ | _ | _ | _ | _ | _ | _ | _ | | |

| _ | Cable Symbol | o |
|-------------------|----------------------------|---|
| Туре | Standard Price | |
| | P (1m) | - |
| Standard | S (3m) | - |
| | M (5m) | - |
| | X06 (6m) ~ X10 (10m) | - |
| Special Lengths | X11 (11m)~ X15 (15m) | - |
| | X16 (16m)~ X20 (20m) | - |
| | R01 (1m) ~ R03 (3m) | - |
| | R04 (4m) ~ R05 (5m) | - |
| Robot Cable | R06 (6m) ~ R10 (10m) | _ |
| | R11 (11m)~ R15 (15m) | - |
| | R16 (16m)~ R20 (20m) | - |
| * See page A-39 f | or cables for maintenance. | |

6 Option List

| Name | Option Code | See Page | Standard Price |
|--------------------------------|-------------|----------|----------------|
| Brake (*1) | В | → A-25 | _ |
| Flange bracket | FL | → A-27 | - |
| Foot bracket | FT | → A-29 | _ |
| Home confirmation sensor (*2) | HS | → A-32 | - |
| Power-saving | LA | → A-32 | - |
| Knuckle Joint | NJ | → A-34 | _ |
| Reversed-home (*2) | NM | → A-33 | _ |
| Clevis Bracket (*3) | QR | → A-34 | - |
| Rear mounting plate (*3) | RP | → A-33 | - |
| Trunnion Bracket (Front) (* 4) | TRF | → A-38 | - |
| Trunnion Bracket (Back) (* 4) | TRR | → A-38 | - |

(*1) No brake setting for RA4D.

(*2) Home sensor (HS) can't be used under reversed-home (NM).

(*3) Clevis bracket and rear mounting plate only available for RA4R.

(*4) Trunnion bracket only available for RA4C/RA4D.

(5) Cable List

Actuator Specifications Item Description Ball screw ø10mm C10 grade Positioning Repeatability ±0.02mm Lost Motion 0.1 mm or less Material: Aluminum (white alumite treated) Base Rod diameter ø20mm ±1.0 degrees Rod non-rotational accuracy Protection Structure IP54 Ambient Operating Temp./Humidity 0~40°C, 85%RH or less (Non-condensing)

RCAW-RA4C/RA4D/RA4R



Compatible Controller



Note: No 3D CAD data for RA4D type.

- * 1 A motor-encoder cable is connected here. See page A-39 for details on cables.
 * 2 When homing, the slider moves to the ME; therefore, please watch for any interference with the surrounding objects. ME: Mechanical end SE: Stroke end

■ Dimensions/Weight by Stroke

RCAW-RA4C/RA4D/RA4R (without brake)

| | Stroke | | | 50 | 100 | 150 | 200 | 250 | 300 | |
|-------------|--------|--------------------|-------------------------|-------|-------|-------|-------|-------|-------|--|
| | | 20W | Incremental | 345.4 | 405.4 | 465.4 | 525.4 | 586.4 | 647.4 | |
| | DA4C | 2000 | Absolute | 358.4 | 418.4 | 478.4 | 538.4 | 599.4 | 660.4 | |
| | RA4C | 0014/ | Incremental | 360.4 | 420.4 | 480.4 | 540.4 | 601.4 | 662.4 | |
| | | 30W | Absolute | 373.4 | 433.4 | 493.4 | 553.4 | 614.4 | 675.4 | |
| | | | Incremental | 323.4 | 383.4 | 443.4 | 503.4 | 564.4 | 625. | |
| L | DA 4D | 20W | Absolute | 336.4 | 396.4 | 456.4 | 516.4 | 577.4 | 638.4 | |
| _ | RA4D | 0014/ | Incremental | 338.4 | 398.4 | 458.4 | 518.4 | 579.4 | 640. | |
| | | 30W | Absolute | 351.4 | 411.4 | 471.4 | 531.4 | 592.4 | 653. | |
| | | 0014/ | Incremental | 299.9 | 359.9 | 419.9 | 479.9 | 540.9 | 601. | |
| | DA 4D | 20W | Absolute | 299.9 | 359.9 | 419.9 | 479.9 | 540.9 | 601. | |
| | RA4R | 0014/ | Incremental | 299.9 | 359.9 | 419.9 | 479.9 | 540.9 | 601. | |
| | | 30W | Absolute | 299.9 | 359.9 | 419.9 | 479.9 | 540.9 | 601. | |
| | DA4C | 20W | | 137 | 187 | 237 | 287 | 337 | 387 | |
| | RA4C | 30W | | 137 | 187 | 237 | 287 | 337 | 387 | |
| ę | RA4D | 20W | Incremental Absolute | 137 | 187 | 237 | 287 | 337 | 387 | |
| Ł | HA4D | 30W | | 137 | 187 | 237 | 287 | 337 | 387 | |
| | 20 | 20W | Common | 125 | 175 | 225 | 275 | 325 | 375 | |
| RA4 | RA4R | 30W | | 125 | 175 | 225 | 275 | 325 | 375 | |
| | | RA4C 20W | Incremental | | | 67 | .5 | | | |
| | DA4C | | Absolute | | | 80 |).5 | | | |
| | HA4C | | Incremental | 82.5 | | | | | | |
| | | 3000 | Absolute | | | 95 | i.5 | | | |
| | | 20W | Incremental | | | 45 | i.5 | | | |
| m | RA4D | 2000 | Absolute | | | 58 | 3.5 | | | |
| | NA4D | 30W | Incremental | 60.5 | | | | | | |
| | | 3044 | Absolute | 73.5 | | | | | | |
| | | 20W | Incremental | | 67.5 | | | | | |
| | RA4R | 2017 | Absolute | | | 80 |).5 | | | |
| | IIAHN | 30W | Incremental | | | 82 | 2.5 | | | |
| | | 5500 | Absolute | | | 95 | i.5 | | | |
| | RA4C | 20W | | 121.9 | 131.9 | 141.9 | 151.9 | 162.9 | 173. | |
| | 11/440 | 30W | Incremental | 121.9 | 131.9 | 141.9 | 151.9 | 162.9 | 173. | |
| n | RA4D | 20W | Absolute | 121.9 | 131.9 | 141.9 | 151.9 | 162.9 | 173. | |
| | נירוו | 30W | Common | 121.9 | 131.9 | 141.9 | 151.9 | 162.9 | 173. | |
| | RA4R | 20W | Continui | 121.9 | 131.9 | 141.9 | 151.9 | 162.9 | 173. | |
| | IIAHN | 30W | | 121.9 | 131.9 | 141.9 | 151.9 | 162.9 | 173. | |
| | RA4C | 20W | /30W | 1.4 | 1.5 | 1.7 | 1.8 | 2.0 | 2.1 | |
| Weight RA4D | | 20W | /30W | 1.3 | 1.5 | 1.6 | 1.8 | 1.9 | 2.1 | |
| (kg) | | 20W/30W 20W/30W | | | | | | | | |

* Adding a brake increases the RA4C type's overall length by 43mm. Adding a brake also increases the RA4R type's motor portion length by 43mm. However, the overall length does not change because the type is a Side-Mounted type. No brake setting for the RA4D type. Also the weight increases by 0.2kg for all types.

[RA4C/RA4D] M30×1.5 (effective sc range 17.5) M40×1.5 (effective screw range 19.5) M10×1.25 (effective screw range 20) 22 47 (across flats) 042 048 44 ME / SE Nut B 36 (across flats) Q45 里 44.1 58.1 9.5_ [RA4R]

| | * The actuator cable is the same as RA3C/RA3D. |
|--|---|
| SE Home 38 (across flats) Nut C 19 (across flats) A44.1 58.1 19 (across flats) | 26 Nut A Och Day 33 20 depth 18 50.5 |
| Dimensions of Nut A of Nut B of Nut B | |

10x1.25 9

| | 4 Compatible Controllers The RCAW 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 ValveType | 110 | AMEC-C-20I ②-NP-2-1 AMEC-C-30I ②-NP-2-1 | Easy-to-use controller, even for beginners. | | AC100V | 2.4A rated | - | → P477 |
| Solenoid valve type | • | ASEP-C-20I ②-NP-2-0 ASEP-C-30I ②-NP-2-0 | Operable with same signal as solenoid valve. Supports both single and | 3 points | | | - | → P487 |
| Splash-Proof Solenoid ValveType | | ASEP-CW-20I ②-NP-2-0 ASEP-CW-30I ②-NP-2-0 | double solenoid types. No homing necessary with simple absolute type. | | | | - | 7 1407 |
| Positioner Type | Í | ACON-C-20I ②-NP-2-0 ACON-C-30I ②-NP-2-0 | Positioning possible for up to 512 points | 512 points | | | - | |
| Safety Category Compliant Positioner Type | | ACON-CG-200I ②-NP-2-0 ACON-CG-300I ②-NP-2-0 | | up to 512 points | 012 pointo | | 20W 1.3A rated | - |
| Pulse Train Input Type (Differential Line Driver) | Ů. | ACON-PL-20I ②-NP-2-0 ACON-PL-30I ②-NP-2-0 | Differential line driver support Pulse Train Input Type | (-) | DC24V | 5.1A peak 30W | - | → P53 |
| Pulse Train Input Type (Open Collector) | c. | ACON-PO-20I ②-NP-2-0 ACON-PO-30I ②-NP-2-0 | Open Collector Pulse Train Input Type | | | 1.3A rated 5.1A peak | - | |
| Serial Communication Type | | ACON-SE-20I ②-N-0-0 ACON-SE-30I ②-N-0-0 | Dedicated to serial communication | 64 points | | | - | |
| Field NetworkType | | RACON-20 ② RACON-30 ② | Dedicated to field network | 768 points | | | - | → P50 |
| Program Control Type | | ASEL-C-1-20 ① ②-NP-2-0 ASEL-C-1-30 ① ②-NP-2-0 | Programmed operation is possible Can operate up to 2 axes | 1500 points | | | - | → P56 |

*This is for the single-axis ASEL.

*① is a placeholder for the encoder type (I : incremental, A : absolute).

*② is a placeholder for the code"LA", when the energy-saving option is selected.

IAI

RCAW-RA4C/RA4D/RA4R



Mini
Standard
Controllers Integrated
Mini
Standard
Controllers Integrated
Table/Arm
(Flat Type

PMEC AMEC PSEP ASEP ROBO NET ERC2 PCON ACON SCON PSEL ASEL

Mini
Standard
controllers
integrated

Rood
Type

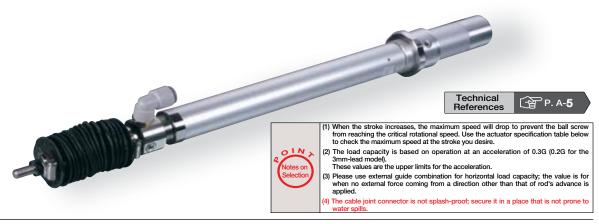
Mini
Standard
Controllers
integrated

Table/Arr
/Flat Typ

Mini
Standard

ROBO Cylinder Splash-proof Rod Type 2W-RA4C/RA4D/RA4R ø37mm Diameter 200V Servo Motor Coupled/Built-in/Side-Mounted Motor Specification ■ Configuration: RCS2W— Compatible Control Туре Encoder Motor Stroke RA4C: Coupled type RA4D Built-in RA4R: Side-Mounted N: None P:1m S:3m M:5m I : Incremental Type 20 : 20W servo motor A : Absolute Type 30 : 30W servo motor 50:50mm T1 : XSEL-J/K T2 : SCON 12:12mm See Options below 6:6mm 300:300mm SSEL (50mm pitch increments) XFI -P/O Side-Mounted Motor

* See page Pre-35 for explanation of each code that makes up the configuration name. X .: Custom Length R .: Robot Cable



Actuator Specifications ■ Lead and Load Capacity ■ Stroke and Maximum Speed Max. load capacity Rated thrust Motor Outp Lead Stroke (mm) RCS2W-10-20-12-33-4-5-6 12 18.9 RCS2W-1 - 2 -20-6-3 - 4 - 5 - 6 6 6 20 2.0 6.0 37.7 RCS2W-1 - 2 -20-3-3 - 4 - 5 - 6 50~300 (50mm RCS2W-10-2-30-12-3-4-5-6 12 4.0 1.5 28.3 RCS2W-10-20-6-30-40-50-6 30 9.0 RCS2W-1 - 2 -30-3-3 - 4 - 5 - 6 18.0 6.5 113.1 Legend 1 Type 2 Encoder 3 Stroke 4 Compatible controler 5 Cable lengh 6 Options

| Encoder & St | roke List | | | | |
|---------------|--------------------|--------------------|--------------------|--------------------|--|
| | | Standa | rd Price | | |
| | RA4C | /RA4D | RA4R | | |
| @ O4 () | 2 Enco | der Type | ② Enco | der Type | |
| ③ Stroke (mm) | Incremental | Absolute | Incremental | Absolute | |
| | Motor power output | Motor power output | Motor power output | Motor nower output | |

| | | | | Otariua | iu i nce | | | | |
|---------------|-----------|------------|-----------|------------|-----------|-------------|--------------------|----------|--|
| | | RA4C | /RA4D | | RA4R | | | | |
| @ O41 () | | 2 Enco | der Type | | | ② Enco | der Type | | |
| ③ Stroke (mm) | Incren | nental | Abso | olute | Increr | Incremental | | Absolute | |
| | Motor pov | wer output | Motor pov | ver output | Motor pov | ver output | Motor power output | | |
| | 20W | 30W | 20W | 30W | 20W | 30W | 20W | 30W | |
| 50 | - | - | - | - | - | - | - | - | |
| 100 | _ | _ | _ | _ | _ | _ | _ | - | |
| 150 | - | - | - | - | - | - | - | - | |
| 200 | - | _ | _ | _ | _ | _ | _ | - | |
| 250 | - | - | - | - | - | - | - | - | |
| 300 | _ | - | - | - | - | - | - | - | |

→ A-38

| | @ Ctualca (mana) | | 2 Enco | der Type | | | der Type | er Type | | |
|-------------|------------------|----------|------------|----------------|------------|-----------|------------|------------------|-----|--|
| | ③ Stroke (mm) | Increr | nental | ental Absolute | | Increr | nental | Absolute | | |
| | | Motor po | wer output | Motor po | wer output | Motor pov | ver output | Motor power outp | | |
| | | 20W | 30W | 20W | 30W | 20W | 30W | 20W | 30W | |
| | 50 | - | _ | - | _ | - | _ | - | - | |
| | 100 | - | _ | _ | _ | _ | _ | - | _ | |
| | 150 | - | - | - | - | - | - | - | - | |
| | 200 | - | - | - | - | _ | _ | - | - | |
| | 250 | _ | _ | _ | _ | _ | _ | - | _ | |
| | 300 | - | _ | - | _ | - | _ | - | - | |
| Option List | | | | | | | | | | |
| | Name | | Option C | ode | See Page | Stand | dard Price | | | |

| 200 | _ | _ | _ | _ | | - | _ |
|---------------------|-------------|----------|-----|----------|--|-------|------------|
| 250 | _ | _ | _ | _ | | _ | _ |
| 300 | - | - | - | - | | _ | - |
| 6 Option Lis | st | | | | | | |
| Name | | Option C | ode | See Page | | Stand | dard Price |
| Brake (*1) | | В | | → A-25 | | | - |
| Flange bracket | | FL | | → A-27 | | | _ |
| Foot bracket | | FT | | → A-29 | | | - |
| Home confirmation | sensor (*2) | HS | | → A-32 | | | _ |
| Knuckle Joint | | NJ | | → A-34 | | | _ |
| Reversed-home (*2 |) | NM | | → A-33 | | | - |
| Clevis Bracket (*3) | | QR | | → A-34 | | | - |
| Rear mounting plat | e (*3) | RP | | → A-33 | | - | |
| | | | | | | | |

| Trunnion Bracket (Front) (*4) | |
|-------------------------------|----|
| Trunnion Bracket (Back) (*4) | |
| (*1) No brake setting for BA | 4D |

(*1) No brace sensor (HS) can't be used under reversed-home (NM).

(*3) Clevis bracket and rear mounting plate only available for RA4R.

(*4) Trunnion bracket only available for RA4C/RA4D.

RCS2W-RA4C/RA4D/RA4R

TRF

TRR

⑤ Cable List

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

50~300

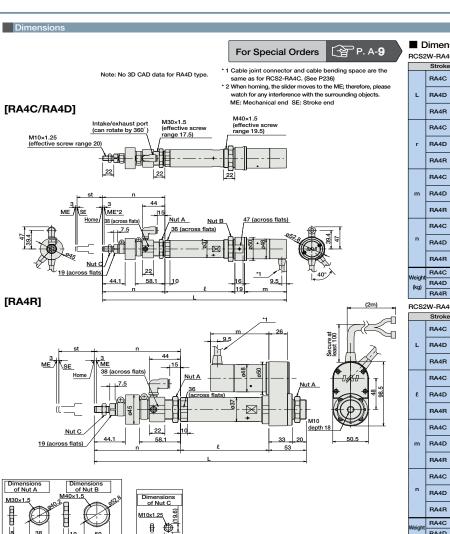
300

(Unit: mm/s)

| | | * See page A-39 f | or cables | for | maintenance | е |
|--|--|-------------------|-----------|-----|-------------|---|
|--|--|-------------------|-----------|-----|-------------|---|

| Actuator Specifications | | | | | | |
|----------------------------------|--|--|--|--|--|--|
| Item | Description | | | | | |
| Drive System | Ball screw ø10mm C10 grade | | | | | |
| Positioning Repeatability | ±0.02mm | | | | | |
| Lost Motion | 0.1 mm or less | | | | | |
| Base | Material: Aluminum (white alumite treated) | | | | | |
| Rod diameter | ø20mm | | | | | |
| Rod non-rotational accuracy | ±1.0 degrees | | | | | |
| Protection Structure | IP54 | | | | | |
| Ambient Operating Temp./Humidity | 0~40°C, 85%RH or less (Non-condensing) | | | | | |





₽ 16 17

■ Dimensions/Weight by Stroke

RCS2W-RA4C/RA4D/RA4R (without brake)

| Stroke | | 50 | 100 | 150 | 200 | 250 | 300 | | |
|--------|------|---------|-------|-------|-------|-------|-------|-------|--|
| | RA4C | 20W | 358.4 | 418.4 | 478.4 | 538.4 | 599.4 | 660.4 | |
| L | HA4C | 30W | 373.4 | 433.4 | 493.4 | 553.4 | 614.4 | 675.4 | |
| | RA4D | 20W | 336.4 | 396.4 | 456.4 | 516.4 | 577.4 | 638.4 | |
| | | 30W | 351.4 | 411.4 | 471.4 | 531.4 | 592.4 | 653.4 | |
| | RA4R | 20W | 299.9 | 359.9 | 419.9 | 479.9 | 540.9 | 601.9 | |
| | | 30W | 299.9 | 359.9 | 419.9 | 479.9 | 540.9 | 601.9 | |
| | RA4C | 20W | 137 | 187 | 237 | 287 | 337 | 387 | |
| | | 30W | 137 | 187 | 237 | 287 | 337 | 387 | |
| r | RA4D | 20W | 137 | 187 | 237 | 287 | 337 | 387 | |
| | | 30W | 137 | 187 | 237 | 287 | 337 | 387 | |
| | RA4R | 20W | 125 | 175 | 225 | 275 | 325 | 375 | |
| | | 30W | 125 | 175 | 225 | 275 | 325 | 375 | |
| | RA4C | 20W | 80.5 | | | | | | |
| m | HA4C | 30W | 95.5 | | | | | | |
| | RA4D | 20W | 58.5 | | | | | | |
| | | 30W | 73.5 | | | | | | |
| | RA4R | 20W | 80.5 | | | | | | |
| | | 30W | 95.5 | | | | | | |
| | RA4C | 20W | 121.9 | 131.9 | 141.9 | 151.9 | 162.9 | 173.9 | |
| | | 30W | 121.9 | 131.9 | 141.9 | 151.9 | 162.9 | 173.9 | |
| n | RA4D | 20W | 121.9 | 131.9 | 141.9 | 151.9 | 162.9 | 173.9 | |
| | | 30W | 121.9 | 131.9 | 141.9 | 151.9 | 162.9 | 173.9 | |
| | RA4R | 20W | 121.9 | 131.9 | 141.9 | 151.9 | 162.9 | 173.9 | |
| | | 30W | 121.9 | 131.9 | 141.9 | 151.9 | 162.9 | 173.9 | |
| Weight | RA4C | 20W/30W | 1.4 | 1.5 | 1.7 | 1.8 | 2.0 | 2.1 | |
| (kg) | RA4D | 20W/30W | 1.3 | 1.5 | 1.6 | 1.8 | 1.9 | 2.1 | |
| | RA4R | 20W/30W | 1.5 | 1.7 | 1.8 | 2.0 | 2.1 | 2.3 | |

| | | | | <u>`</u> | | | | | | |
|--------|------|---------|--------------------------|----------|-------|-------|-------|-------|--|--|
| Stroke | | | 50 | 100 | 150 | 200 | 250 | 300 | | |
| L | RA4C | 20W | 401.4 | 461.4 | 521.4 | 581.4 | 642.4 | 703.4 | | |
| | | 30W | 416.4 | 476.4 | 536.4 | 596.4 | 657.4 | 718.4 | | |
| | RA4D | 20W | No brake-equipped model. | | | | | | | |
| | | 30W | | | | | | | | |
| | RA4R | 20W | 299.9 | 359.9 | 419.9 | 479.9 | 540.9 | 601.9 | | |
| | | 30W | 299.9 | 359.9 | 419.9 | 479.9 | 540.9 | 601.9 | | |
| ٤ | RA4C | 20W | 137 | 187 | 237 | 287 | 337 | 387 | | |
| | | 30W | 137 | 187 | 237 | 287 | 337 | 387 | | |
| | RA4D | 20W | No brake-equipped model. | | | | | | | |
| | | 30W | | | | | | | | |
| | RA4R | 20W | 125 | 175 | 225 | 275 | 325 | 375 | | |
| | | 30W | 125 | 175 | 225 | 275 | 325 | 375 | | |
| m | RA4C | 20W | 123.5 | | | | | | | |
| | | 30W | 138.5 | | | | | | | |
| | RA4D | 20W | No brake-equipped model. | | | | | | | |
| | | 30W | | | | | | | | |
| | RA4R | 20W | 123.5 | | | | | | | |
| | | 30W | 138.5 | | | | | | | |
| n | RA4C | 20W | 121.9 | 131.9 | 141.9 | 151.9 | 162.9 | 173.9 | | |
| | | 30W | 121.9 | 131.9 | 141.9 | 151.9 | 162.9 | 173.9 | | |
| | RA4D | 20W | No books assisted woods | | | | | | | |
| | | 30W | No brake-equipped model. | | | | | | | |
| | RA4R | 20W | 121.9 | 131.9 | 141.9 | 151.9 | 162.9 | 173.9 | | |
| | | 30W | 121.9 | 131.9 | 141.9 | 151.9 | 162.9 | 173.9 | | |
| Weight | RA4C | 20W/30W | 1.6 | 1.7 | 1.9 | 2.0 | 2.2 | 2.3 | | |
| (kg) | RA4D | 20W/30W | - | | | | | | | |
| (Ng) | RA4R | 20W/30W | 1.7 | 1.9 | 2.0 | 2.2 | 2.3 | 2.5 | | |

 Compatible Controllers The RCS2W series actuators can operate with the controllers below. Select the controller according to your usage Positioner Mode Positioning possible for up to 512 points 512 points Operation possible with the same controls as solenoid valve. Solenoid Valve Mode 7 points SCON-C-20 ①-NP-2-② → P547 SCON-C-30D1-NP-2-2 Single-Phase AC 100V Serial Dedicated to seria Communication Type 64 points 360VA communication Single-Phase AC 200V *1 axis type Open Collector Pulse Train Input Type 3-Phase AC 200V (XSEL-P/Q only) Pulse Train Input Control Type When operatin 150W Programmed operation is possible Can operate up to 2 SSEL-C-1-20①-NP-2-② SSEL-C-1-30D①-NP-2-② Program control 1-2 Axes type 20000 points → P577 axes Programmed XSEL-3-1-201-N1-EEE-2-4 XSEL-3-1-30D1-N1-EEE-2-4 operation is possible an operate up to 6 20000 points → P587 axes * For SSEL and XSEL, only applicable to the single-axis model.

- * \oplus is a placeholder for the encoder type (I: incremental, A: absolute.)
- *② is a placeholder for the power supply voltage (1: 100V, 2: single-phase 200V)
 *③ is a placeholder for the XSEL type name (J, K, P, or Q)
- * 4 is a placeholder for the power supply voltage (1: 100V, 2: single-phase 200V, 3: 3-phase 200V).

IAI

RCS2W-RA4C/RA4D/RA4R

