

# IAI

Quality and Innovation

## Gripper Series

### Solenoid Motor

Max. Stroke (mm) : 4 (2 per side)  
Max. Grip Force [N] : 10 (5 per side), 20 (10 per side)

**GRS-SEG** (Outer diameter grip)  
**GRS-SIG** (Inner diameter grip)

**GRS-MEG** (Outer diameter grip)  
**GRS-MIG** (Inner diameter grip)

### Rotary Chuck Type

#### RCP6-RTCK

24V Stepper motor  
Battery-less Absolute Encoder

- Multi-point positioning of the rotary part
- Compact size
- Highly flexible installation

Rotation Operation Range (deg) : 0 to 360  
Max. Torque (N·m) : 0.29, 0.36  
Max. Rotation Speed (deg/s) : 1800  
Max. Grip Force [N] : 10 (5 per side), 20 (10 per side)



### 24V Stepper motor Coupling Type

Battery-less Absolute Encoder Built-in controller available

Max. Stroke (mm) : 230 (115 per side), 260 (130 per side)  
Max. Grip Force [N] : Lead 8 : 110 (55 per side), 340 (170 per side)  
Lead 2 : 310 (155 per side), 880 (440 per side)  
Max. Speed (mm/s) : Lead 8 : 360 (180 per side)  
Lead 2 : 90 (45 per side)

**RCP6-GRST6C**  
**RCP6S-GRST6C**

Body width 60 mm



**RCP6-GRST7C**  
**RCP6S-GRST7C**

Body width 70 mm



### 24V Stepper motor RCP2 / RCP4 Series

#### Incremental Encoder

Max. Stroke (mm) : 8 (4 per side) ~ 40 (20 per side)  
Max. Grip Force [N] : 14 (7 per side) ~ 220 (110 per side)  
Max. Speed (mm/s) : 66 (33 per side) ~ 314 (157 per side)

**RCP2-GRSS**

Body width 40 mm



**RCP4-GRSML**

Body width 50 mm



**RCP4-GRSLL**

Body width 70 mm



**RCP4-GRSWL**

Body width 80 mm



**RCP2-GRS**

Body width 70 mm



**RCP2-GRM**

Body width 70 mm



**RCP2-GRHM**

Body width 120 mm



**RCP2-GRHB**

Body width 130 mm



**RCP2-GRST**

Body width 130 mm



Deceleration ratio: 1/1  
Max. Stroke (mm) : 100 (50 per side)  
Max. Grip Force [N] : 20 (10 per side)  
Max. Speed (mm/s) : 150 (75 per side)

Deceleration ratio: 1/2  
Max. Stroke (mm) : 100 (50 per side)  
Max. Grip Force [N] : 40 (20 per side)  
Max. Speed (mm/s) : 68 (34 per side)

### 24V Stepper motor Side-mounted Motor Type

Battery-less Absolute Encoder Built-in controller available

Max. Stroke (mm) : 230 (115 per side), 260 (130 per side)  
Max. Grip Force [N] : Lead 8 : 110 (55 per side), 340 (170 per side)  
Lead 2 : 310 (155 per side), 880 (440 per side)  
Max. Speed (mm/s) : Lead 8 : 360 (180 per side)  
Lead 2 : 90 (45 per side)

**RCP6-GRST6R**  
**RCP6S-GRST6R**

Body width 60 mm



**RCP6-GRST7R**  
**RCP6S-GRST7R**

Body width 70 mm



### 24V Stepper motor Thin Slide Type

Battery-less Absolute Encoder

Max. Stroke (mm) : 30 (15 per side), 80 (40 per side)  
Max. Grip Force [N] : 120 (60 per side), 150 (75 per side), 300 (150 per side)  
Max. Speed (mm/s) : 150 (75 per side), 240 (120 per side), 120 (60 per side)

**RCP6-GRT7A**

Body width 90 mm



**RCP6-GRT7B**

Body width 120 mm



### 24V DC brush less motor

#### Incremental Encoder

Max. Stroke (mm) : 4 (2 per side)  
Max. Grip Force [N] : 10 (5 per side)  
Max. Speed (mm/s) : 134 (67 per side)

**RCD-GRSNA**

Body width 20 mm



Ultra Compact Type

### Servo Motor

**RCS2-GR8**

Max. Stroke (mm) : 200  
Max. Grip Force [N] : 31.3 (15.65 per side)  
Max. Speed (mm/s) : 400

Body width 100 mm



### 24V Stepper motor Cleanroom Type

Cleanroom Class 10

#### Incremental Encoder

Max. Stroke (mm) : 8 (4 per side), 10 (5 per side), 14 (7 per side)  
Max. Grip Force [N] : 14 (7 per side), 21 (10.5 per side), 80 (40 per side)  
Max. Speed (mm/s) : 156 (78 per side), 66 (33 per side), 72 (36 per side)

**RCP2CR-GRSS**

Body width 40 mm



**RCP2CR-GRS**

Body width 70 mm



**RCP2CR-GRM**

Body width 80 mm



### 24V Stepper motor Dust-Proof Type

IP50

#### Incremental Encoder

Max. Stroke (mm) : 8 (4 per side), 10 (5 per side), 14 (7 per side)  
Max. Grip Force [N] : 14 (7 per side), 21 (10.5 per side), 80 (40 per side)  
Max. Speed (mm/s) : 156 (78 per side), 66 (33 per side), 72 (36 per side)

**RCP2W-GRSS**

Body width 40 mm



**RCP2W-GRS**

Body width 70 mm



**RCP2W-GRM**

Body width 80 mm



### Lever Type

#### 24V Stepper motor

#### Incremental Encoder

Max. Stroke (deg/s) : 180 (90 per side)  
Max. Grip Force [N] : 6.4 (3.2 per side) ~ 90 (45 per side)  
Max. Speed (deg/s) : 1200 (600 per side), 1286 (643 per side)

**RCP2-GRLS**

Body width 40 mm



**RCP2-GRLM**

Body width 50 mm



**RCP4-GRLL**

Body width 70 mm



**RCP4-GRLW**

Body width 80 mm



### Cleanroom Type

Cleanroom Class 10

Max. Stroke (deg/s) : 180 (90 per side)  
Max. Grip Force [N] : 6.4 (3.2 per side)  
Max. Speed (deg/s) : 1200 (600 per side)

**RCP2CR-GRLS**

Body width 40 mm



### Dust-proof Type

IP50

Max. Stroke (deg/s) : 180 (90 per side)  
Max. Grip Force [N] : 6.4 (3.2 per side)  
Max. Speed (deg/s) : 1200 (600 per side)

**RCP2W-GRLS**

Body width 40 mm



### 3-finger type Series

#### 24V Stepper motor

#### Incremental Encoder

#### Slider Type

Max. Stroke (mm) : 10 (5 per side), 14 (7 per side)  
Max. Grip Force [N] : 22 (11 per side), 102 (51 per side)  
Max. Speed (mm/s) : 80 (40 per side), 100 (50 per side)

**RCP2-GR3SS**

Body width 60 mm



**RCP2-GR3SM**

Body width 80 mm



#### Lever Type

Max. Stroke (deg/s) : 38 (19 per side)  
Max. Grip Force [N] : 18 (9 per side), 51 (25.5 per side)  
Max. Speed (deg/s) : 400 (200 per side)

**RCP2-GR3LS**

Body width 60 mm



**RCP2-GR3LM**

Body width 80 mm



### Cleanroom Type

Cleanroom Class 10

#### Slider Type

Max. Stroke (mm) : 10 (5 per side), 14 (7 per side)  
Max. Grip Force [N] : 22 (11 per side), 102 (51 per side)  
Max. Speed (mm/s) : 80 (40 per side), 100 (50 per side)

**RCP2CR-GR3SS**

Body width 60 mm



**RCP2CR-GR3SM**

Body width 80 mm



### Dust-Proof Type

IP50

#### Slider Type

Max. Stroke (mm) : 10 (5 per side), 14 (7 per side)  
Max. Grip Force [N] : 22 (11 per side), 102 (51 per side)  
Max. Speed (mm/s) : 80 (40 per side), 100 (50 per side)

**RCP2W-GR3SS**

Body width 60 mm



**RCP2W-GR3SM**

Body width 80 mm



24V Stepper motor

Incremental Encoder

Battery-less Absolute Encoder is available

Build in controller is standard  
Wireless operation is available as an option

IP20

**EC-RTC9**

Deceleration Ratio : 1/45  
Max. Torque (N·m) : 1.5  
Max. Speed (deg/s) : 600

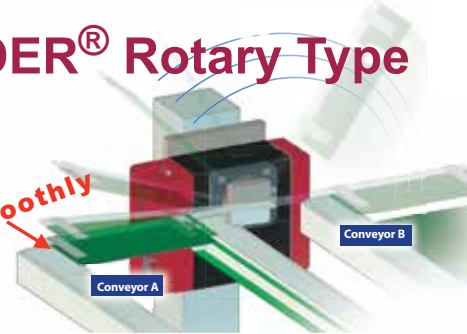
**EC-RTC12**

Deceleration Ratio : 1/45  
Max. Torque (N·m) : 8.0  
Max. Speed (deg/s) : 600



**ELECYLINDER® Rotary Type**

Stop smoothly



24V Stepper motor

Incremental Encoder

**RCP2-RTBS**  
**RCP2-RTBSL**

Deceleration Ratio : 1/30 1/45  
Max. Torque (N·m) : 0.24 0.36  
Max. Speed (deg/s) : 400 266



**RCP2-RTB**  
**RCP2-RTBL**

Deceleration Ratio : 1/20 1/30  
Max. Torque (N·m) : 1.1 1.7  
Max. Speed (deg/s) : 600 400



**RCP2-RTBB**  
**RCP2-RTBBL**

Deceleration Ratio : 1/20 1/30  
Max. Torque (N·m) : 3 4.6  
Max. Speed (deg/s) : 600 400



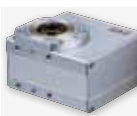
**RCP2-RTCS**  
**RCP2-RTCSL**

Deceleration Ratio : 1/30 1/45  
Max. Torque (N·m) : 0.24 0.36  
Max. Speed (deg/s) : 400 266



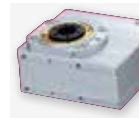
**RCP2-RTC**  
**RCP2-RTCL**

Deceleration Ratio : 1/20 1/30  
Max. Torque (N·m) : 1.1 1.7  
Max. Speed (deg/s) : 600 400



**RCP2-RTCB**  
**RCP2-RTCBL**

Deceleration Ratio : 1/20 1/30  
Max. Torque (N·m) : 3 4.6  
Max. Speed (deg/s) : 600 400



**Hollow Rotary Type**  
**RCP6-RTFML**

24V Stepper motor

Battery-less Absolute Encoder

Slim and lightweight RCP6-RTFML Rotary with large-diameter hollow shaft of Ø49, suitable for combined axes, is now available

Deceleration Ratio : 1/30  
Max. Torque (N·m) : 5.2  
Max. Speed (deg/s) : 800



Wrist Unit

24V Stepper motor

Battery-less Absolute Encoder

	WU-S	WU-M
Body length (mm)	148	196
Maximum payload (kg)	1	2
B-axis (Wrist Swing)	±100	±105
T-axis (Wrist Rotation)	±360	±360
Maximum speed (deg/s)	600	

WU-S

WU-M



**Rotary Chuck Type**  
**RCP6-RTCK**

24V Stepper motor

Battery-less Absolute Encoder

- Multi-point positioning of the rotary part
- Compact size
- Highly flexible installation

Rotation Operation Range (deg)	within 0 to 360
Max. Torque (N·m)	0.29 0.36
Max. Rotation Speed (deg/s)	1800
Max. Grip Force [N]	10 (5 per side) 20 (10 per side)



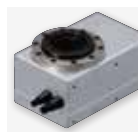
AC Servo Motor

Incremental Encoder

Absolute Encoder

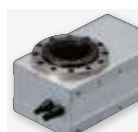
**RCS2-RTC8L**  
**RCS2-RTC8HL**

Motor Output (W) : 20 30  
Deceleration Ratio : 1/24 1/15 1/24  
Max. Torque (N·m) : 0.55 0.53 0.85  
Max. Speed (mm/s) : 750 1200 750



**RCS2-RTC10L**

Motor Output (W) : 60  
Deceleration Ratio : 1/15 1/24  
Max. Torque (N·m) : 1.7 2.8  
Max. Speed (mm/s) : 1200 750



**RCS2-RTC12L**

Deceleration Ratio : 1/18 1/30  
Max. Torque (N·m) : 5.6 8.2  
Max. Speed (deg/s) : 800 600



**RS-30**

Deceleration Ratio : 1/50 1/100  
Max. Torque (N·m) : 6.6 13.3  
Max. Speed (deg/s) : 360 180



**RS-60**

Deceleration Ratio : 1/50 1/100  
Max. Torque (N·m) : 11.17 22.28  
Max. Speed (deg/s) : 360 180



Direct Motor Drive

Index Absolute Encoder

Multi-Rotation Absolute Encoder

**DDA-LT18C**

Motor Output (W) : 200  
Max. Torque (N·m) : 25.2 (17 bit /20 bit)  
Max. Speed (mm/s) : 1800 (17 bit /20 bit)



**DDA-LT18C-B**

Motor Output (W) : 200  
Max. Torque (N·m) : 25.2 (17 bit /20 bit)  
Max. Speed (mm/s) : 1800 (17 bit /20 bit)



**DDA-LH18C**

Motor Output (W) : 600  
Max. Torque (N·m) : 75 (17 bit /20 bit)  
Max. Speed (mm/s) : 1440 (17 bit /20 bit)



**DDA-LH18C-B**

Motor Output (W) : 600  
Max. Torque (N·m) : 75 (17 bit /20 bit)  
Max. Speed (mm/s) : 1440 (17 bit /20 bit)



Cleanroom Type

24V Stepper motor

Incremental Encoder

Cleanroom Class 10

**RCP2CR-RTBS**  
**RCP2CR-RTBSL**

Deceleration Ratio : 1/30 1/45  
Max. Torque (N·m) : 0.24 0.36  
Max. Speed (deg/s) : 400 266



**RCP2CR-RTB**  
**RCP2CR-RTBL**

Deceleration Ratio : 1/20 1/30  
Max. Torque (N·m) : 1.1 1.7  
Max. Speed (deg/s) : 600 400



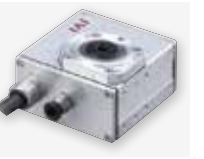
**RCP2CR-RTBB**  
**RCP2CR-RTBBL**

Deceleration Ratio : 1/20 1/30  
Max. Torque (N·m) : 3.0 4.6  
Max. Speed (deg/s) : 600 400



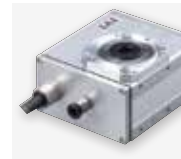
**RCP2CR-RTCS**  
**RCP2CR-RTCSL**

Deceleration Ratio : 1/30 1/45  
Max. Torque (N·m) : 0.24 0.36  
Max. Speed (deg/s) : 400 266



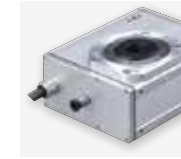
**RCP2CR-RTC**  
**RCP2CR-RTCL**

Deceleration Ratio : 1/20 1/30  
Max. Torque (N·m) : 1.1 1.7  
Max. Speed (deg/s) : 600 400



**RCP2CR-RTCB**  
**RCP2CR-RTCBL**

Deceleration Ratio : 1/20 1/30  
Max. Torque (N·m) : 3.0 4.6  
Max. Speed (deg/s) : 600 400



Index Absolute Encoder

Multi-Rotation Absolute Encoder

Cleanroom Class 10  
Cleanroom Class 2.5  
(Fed.Std.209D) (ISO14644-1)

**DDACR-LT18C**

Motor Output (W) : 200  
Max. Torque (N·m) : 25.2 (17 bit /20 bit)  
Max. Speed (deg/s) : 1800 (17 bit /20 bit)



**DDACR-LH18C**

Motor Output (W) : 600  
Max. Torque (N·m) : 75 (17 bit /20 bit)  
Max. Speed (deg/s) : 1440 (17 bit /20 bit)



Dust/Splash-proof Type

24V Stepper motor

Incremental Encoder

IP54

**RCP2W-RTBS**  
**RCP2W-RTBSL**

Deceleration Ratio : 1/30 1/45  
Max. Torque (N·m) : 0.24 0.36  
Max. Speed (deg/s) : 400 266



**RCP2W-RTB**  
**RCP2W-RTBL**

Deceleration Ratio : 1/20 1/30  
Max. Torque (N·m) : 1.1 1.7  
Max. Speed (deg/s) : 600 400



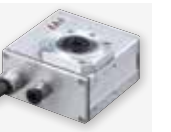
**RCP2W-RTBB/RCP2W-RTBBL**

Deceleration Ratio : 1/20 1/30  
Max. Torque (N·m) : 3.0 4.6  
Max. Speed (deg/s) : 600 400



**RCP2W-RTCS/RCP2W-RTCSL**

Deceleration Ratio : 1/30 1/45  
Max. Torque (N·m) : 0.24 0.36  
Max. Speed (deg/s) : 400 266



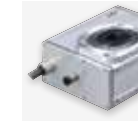
**RCP2W-RTC**  
**RCP2W-RTCL**

Deceleration Ratio : 1/20 1/30  
Max. Torque (N·m) : 1.1 1.7  
Max. Speed (deg/s) : 600 400



**RCP2W-RTCB**  
**RCP2W-RTCBL**

Deceleration Ratio : 1/20 1/30  
Max. Torque (N·m) : 3.0 4.6  
Max. Speed (deg/s) : 600 400



Index Absolute Encoder

Multi-Rotation Absolute Encoder

**DDW-LH18C**

Max. Torque (N·m) : 67 (17 bit /20 bit)  
Max. Speed (deg/s) : 1440 (17 bit /20 bit)



Gripper /Rotary\_Lineup-1A (2020SEP)

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