

**ROBO Cylinder
Long-Stroke Gripper**

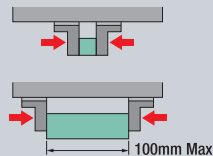
RCP2-GRST



Features

1 Long Strokes up to 100mm (50mm on each side)

The long-stroke actuator can support works of significantly varying sizes and shapes. Four standard strokes of 40mm, 60mm, 80mm and 100mm are available.



2 High Gripping Forces up to 40N

With the standard type, the maximum gripping force is 40N, which is twice the maximum gripping force of the GRS gripper.

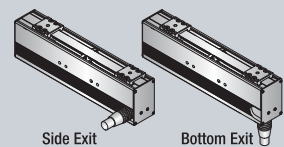
3 High-Speed Specification with Higher Opening/Closing Speeds

You can select a desired model from the two types of the viewpoint of opening/closing speed: the high-speed type whose max opening/closing speed is 75mm/s, or the standard type whose max opening/closing speed is 34mm/s.



4 Selectable Cable Exit Direction

The cable exit direction is selectable. Choose either a side exit or a bottom exit.



Model Designation

RCP2 - GRST - I - 20P - 2 - [] - P1 - [] - []

Series Type Encoder Model Motor Type Gear Ratio Open/Close Stroke (Total Stroke) Applicable Controller Cable Length Option

I: Incremental 2: Standard Type P1: PCON N: None NM: Reversed-Home Specification

1: High-Speed Type 40: 40mm PSEL P: 1m A0: Bottom Cable Exit

80: 80mm RPCON S: 3m M: 5m A1: Side Cable Exit

100: 100mm X[]: Specified Length *Be sure to specify "A0" or "A1" as the cable exit direction.

GRST: Long-Stroke Type 20P: Pulse Motor, Size []

Models

| Type | Model |
|-----------------|------------------------------|
| Standard Type | RCP2-GRST-I-20P-2-40-P1-①-② |
| | RCP2-GRST-I-20P-2-60-P1-①-② |
| | RCP2-GRST-I-20P-2-80-P1-①-② |
| | RCP2-GRST-I-20P-2-100-P1-①-② |
| High-Speed Type | RCP2-GRST-I-20P-1-40-P1-①-② |
| | RCP2-GRST-I-20P-1-60-P1-①-② |
| | RCP2-GRST-I-20P-1-80-P1-①-② |
| | RCP2-GRST-I-20P-1-100-P1-①-② |

*In the above model names, [1] indicates the cable length and [2] indicates the options.

Cables

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

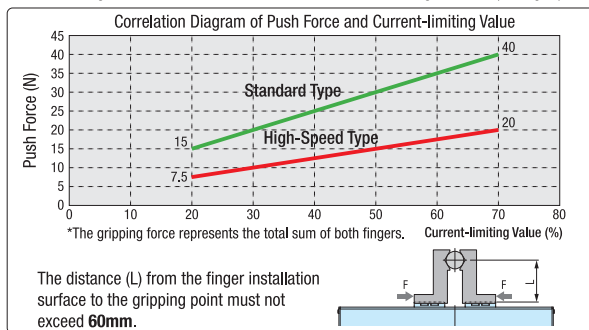
*The standard integrated motor/encoder cable is a robot cable.
 *Replacement Cable Model: CB-PCS-MPA[] [] ([] [] indicates cable length.
 Example: 030 = 3m)

Specifications

| Specs | Specifications | |
|--------------------------------|--|-----------------|
| | Standard Type | High-Speed Type |
| Open/Close Stroke (Total) (mm) | 40 / 60 / 80 / 100 | |
| Max Gripping Force (N) | 40 | 20 |
| Max Open/Close Speed (mm/s) | 34 (each side) | 75 (each side) |
| Positioning Repeatability (mm) | ±0.01 | |
| Backlash (mm) | 0.2mm Max each side | |
| Static Allowable Moment (N·m) | Ma: 2.93 Mb: 2.93 Mc: 5.0 | |
| Actuator Mass | Refer to the table under External Dimensions | |
| Applicable Controllers | PCON / PSEL / RPCON (ROBONET) | |

Adjustment of Gripping Force

You can freely adjust the gripping force according to the applicable push-motion operation within a range of 20 to 70% in controller current-limiting values. (See graph below)



- The precision of the relationship between push force (gripping force) and current-limiting value is not guaranteed. The above graph should be used only as a guide.
- Take note that if the push force is too small, the push force may vary or malfunction may occur depending on the slide resistance, etc. Make sure the current-limiting value is set to 20% or above.
- Keep the fingers as small and light as possible. If the fingers are long and large or heavy, the performance may drop or the guide may be negatively affected.

External Dimensions

