

## ROBO Cylinder Long-Stroke Gripper

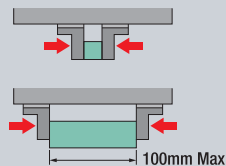
# RCP2-GRST



### 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.

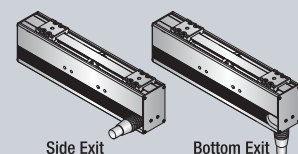
#### 3 High-Speed Specification with Higher Opening/Closing Speeds

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                      20P: Pulse Motor, Size □                      2: Standard Type                      40: 40mm                      P1: PCON                      N: None                      NM: Reversed-Home Specification

GRST: Long-Stroke Type                      1: High-Speed Type                      60: 60mm                      PSEL                      P: 1m                      A0: Bottom Cable Exit

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

100: 100mm                      M: 5m                      X□□: Specified Length                      \*Be sure to specify "A0" or "A1" as the cable exit direction.

**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)

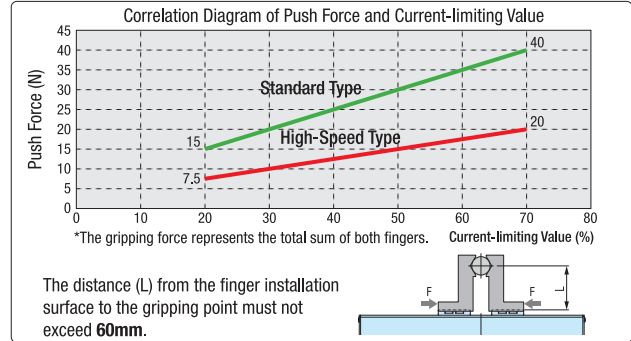
\*The standard integrated motor/encoder cable is a robot cable.  
 \*Replacement Cable Model: CB-PCS-MPA□□□ (□□□ indicates cable length.  
 Example: 030 = 3m)

**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)	

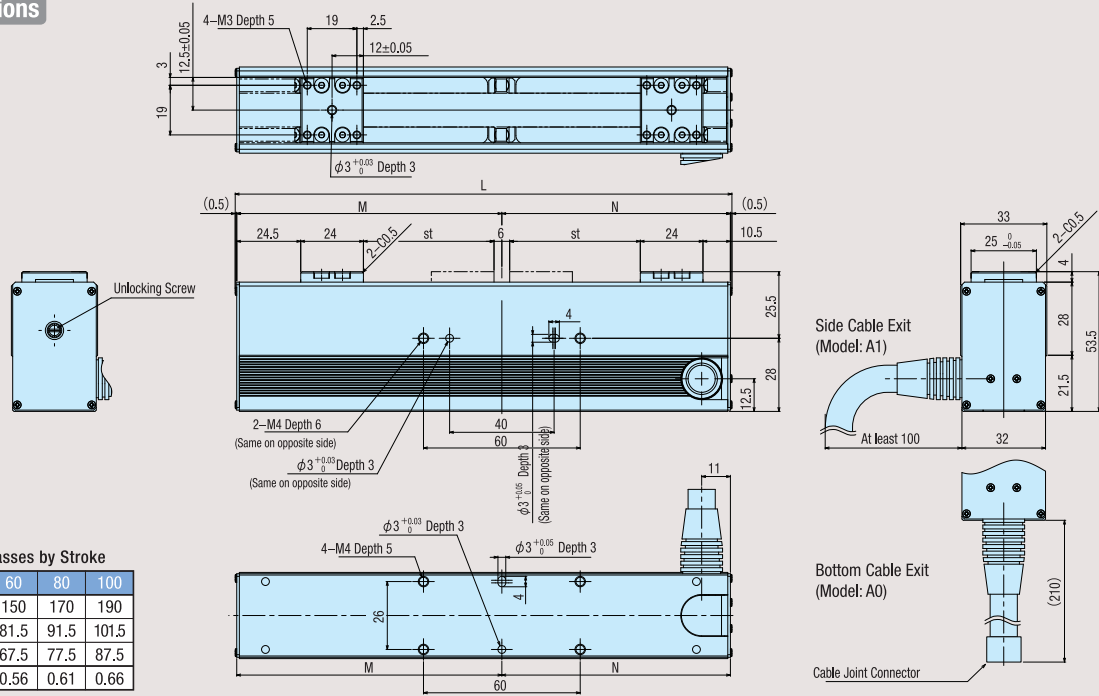
**Adjustment of Gripping Force**

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**



**Dimensions / Masses by Stroke**

	40	60	80	100
L	130	150	170	190
M	71.5	81.5	91.5	101.5
N	57.5	67.5	77.5	87.5
Mass (kg)	0.51	0.56	0.61	0.66

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