



OMRON ROBOT Official Certified Gripper Compact Type (OMRON)

# RLSH-TM Series

With Speed Controller, Cylinder Switch  
Connection Port Diameter:  $\phi 4$  One-touch Fitting



For suitable detailed model No.s, please see our website.

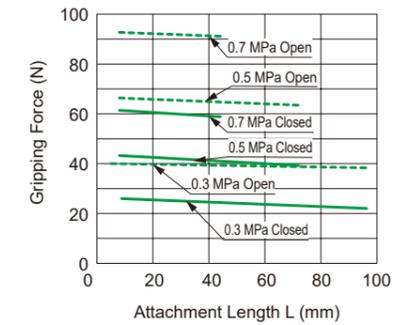
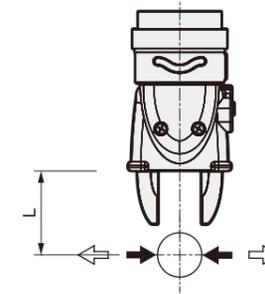
## RLSH-TM Series

Gripping Force Performance Data/External Dimensions

### Gripping Force Performance Data

- Gripping force represents the thrust (for one finger) in the direction of the arrow shown in the figure.
- This represents the gripping force acting in the opening and closing directions at a gripper's attachment length L when the supply pressure is 0.3, 0.5, and 0.7 MPa.

Open direction (←) ----- (broken line)  
Closing direction (→) ————— (solid line)



### Model No. Notation Method

**RLSH** - **A20D1N** - **L1** - **F** **Y2V** - **TM**

Model No.

1 Robot Flange  
2 Accessories  
OMRON Robot Certified

#### 1 Robot Flange

| Code  | Content           |
|-------|-------------------|
| Blank | No Robot Flange   |
| F     | With Robot Flange |

Note) Robot flange mounting bolts included

#### 2 Accessories

| Code  | Content                         |
|-------|---------------------------------|
| Blank | No Attachments                  |
| Y2    | Attachment for testing          |
| V     | Directional Control Valve, Tube |

\*1 Made of resin, so use for gripping tests. (Weight is 25 g per piece)

\*2 The directional control valve is a  $\phi 4$  one-touch fitting (air supply port, A/B port) with silencer (R1/R2 port) and mounting plate. Tubes are  $\phi 4$  outer diameter, 2.5 m length x 2 pieces.

### Specifications

| Item                    | RLSH                              |
|-------------------------|-----------------------------------|
| Bore size               | mm $\phi 20$                      |
| Actuation method        | Double Acting Type                |
| Operating Fluid         | Compressed Air                    |
| Max. Operating Pressure | MPa 0.7                           |
| Min. Working Pressure   | MPa 0.1                           |
| Port Size               | $\phi 4$ One-touch Fitting        |
| Ambient Temperature     | $^{\circ}\text{C}$ 0 to 50        |
| Operating Stroke        | mm 18                             |
| Repeatability           | mm $\pm 0.01$                     |
| Weight                  | kg 0.8                            |
| Indicator LED           | Blue/Green                        |
| Cylinder Switch         | With F2H (Yellow LED ON when lit) |

Note) For attachments manufactured to match workpieces, refer to P. 568.

### [Switch Specifications]

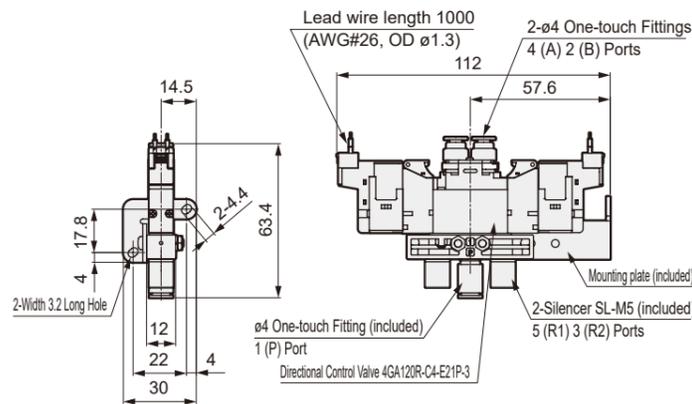
| Item                 | Solid state 2-wire type          |     |
|----------------------|----------------------------------|-----|
|                      | F2H                              | T2H |
| Applications         | For programmable controller only |     |
| Load Voltage/Current | 10 to 30 VDC, 5 to 20 mA         |     |
| Leakage current      | 1 mA or less                     |     |
| Shock resistance     | 980 m/s <sup>2</sup>             |     |
| Weight               | g 10                             | 18  |

### [Directional Control Valve (V) Specifications]

| Item                              | 4GA120R-C4-E21P-FLA28482-3-ST                         |
|-----------------------------------|---|
| Valve Type and Operation Method   | Pilot Operated Soft Spool Valve                       |
| Switching Position Classification | 2-position double solenoid                            |
| Max. Operating Pressure           | MPa 0.7   |
| Min. Working Pressure             | MPa 0.2   |
| Ambient Temperature               | $^{\circ}\text{C}$ -5 to 55 (No freezing)             |
| Fluid Temperature                 | $^{\circ}\text{C}$ 5 to 55                            |
| Manual Override                   | Non-lock/Lock Common Type                             |
| Response Time                     | ms 9  |
| Flow Characteristics              | P → A/B: C=1.2, b=0.47<br>A/B → R1/R2: C=0.72, b=0.37 |
| Rated voltage                     | V 24 VDC  |
| Voltage Fluctuation Range         | $\pm 10\%$  |
| Holding Current                   | A 0.017   |
| Power Consumption                 | W 0.40  |
| Surge Suppressor                  | Built-in  |
| Indicator                         | Built-in Lamp   |

For other specification products, please refer to "Directional Control Valve ① (No.RJ-011AA)".

### Outline Dimension Drawing



### Outline Dimension Drawing

