



TECHMAN ROBOTS Official Certified Gripper Compact Type (TECHMAN)

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.

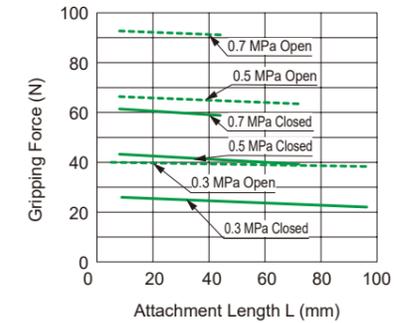
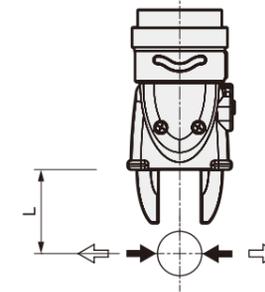
RLSH-TM Series

Gripping Force Performance Data/External Dimensions

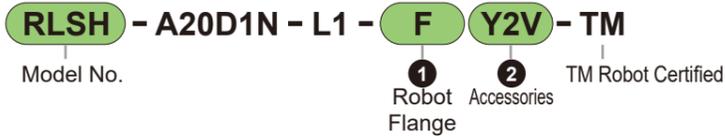
Gripping Force Performance Data

- 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



① Robot Flange

| Code | Content |
|-------|-------------------------------------|
| Blank | No Robot Flange |
| F | With Robot Flange ^(Note) |

^(Note) Robot flange mounting bolts included

② Accessories

| Code | Content |
|-------|---|
| Blank | No Attachments |
| Y2 | Attachment for testing ^{*1} |
| V | Directional Control Valve, Tube ^{*2} |

^{*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 ± 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]

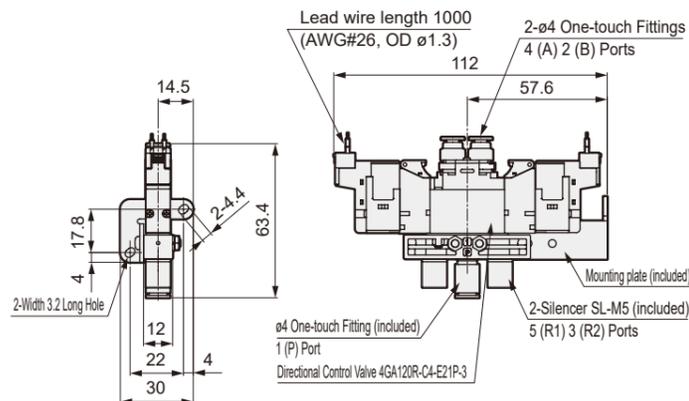
| Item | Solid state 2-wire type | |
|----------------------|----------------------------------|-----|
| | F2H | T2H |
| Applications | For programmable controller only | |
| Load Voltage/Current | 10 to 30 VDC, 5 to 20 mA | |
| Leakage current | 1 mA or less | |
| Shock resistance | 980 m/s ² | |
|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

