

Conductive Plastic Linear Sensor

LP-FBS-3 Series

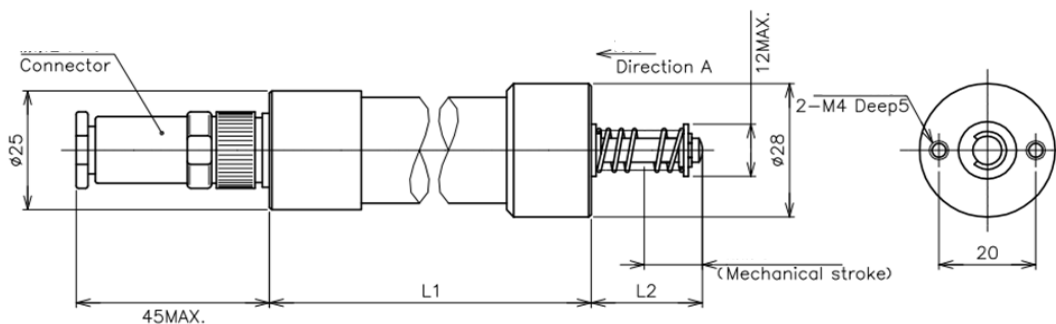


- Conductive Plastic Linear Sensor
- Effective Electrical Travel : 10 mm \pm 0.5mm (LP-10FBS-3)
: 20mm \pm 0.5mm (LP-20FBS-3)
- Independent Linearity : \pm 1%
- with Back Spring
- Dust and Drip Proof (IP54)

[Material]

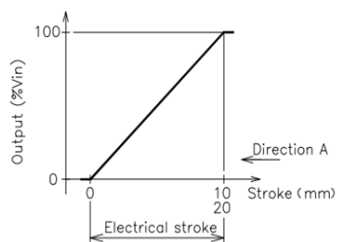
- Housing : Aluminum
- Shaft : Stainless Steel
- Bearing : Copper Alloy

Dimension (mm)

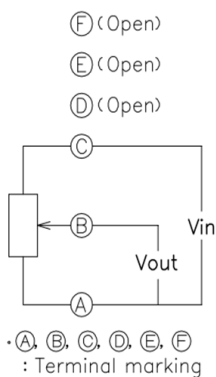


| [Model No.] | LP-10FBS-3 | LP-20FBS-3 |
|---------------------|-----------------|-----------------|
| Housing Length (L1) | 66.5 mm | 76.5 mm |
| Shaft Length (L2) | 23 mm \pm 1mm | 51mm \pm 1 mm |

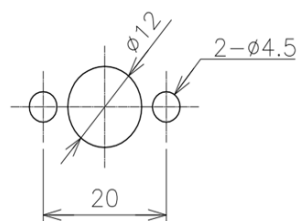
Output Characteristics



Schematic



Mounting



| [Model No.] | LP-10FBS-3 | LP-20FBS-3 |
|-------------|------------|------------|
|-------------|------------|------------|

| Electrical Specifications | | |
|---------------------------------------|--------------------|----------------|
| Effective Electrical Travel | 10 mm ± 0.5 mm | 20 mm ± 0.5 mm |
| Total Resistance | 1 K Ω | 1, 2 K Ω |
| Total Resistance Tolerance | ±20% | |
| Independent Linearity | ±1% | |
| Rated Dissipation | 0.3W/70°C | 0.6W/70°C |
| Output Smoothness | MAX. 0.1% | |
| Insulation Resistance | MIN. 100MΩ/DC 500V | |
| Dielectric Strength | AC500 V/ 1 Minute | |
| Temperature Coefficient of Resistance | ±400 ppm/K | |

| Mechanical Specifications | | |
|---------------------------|----------------------------|-----------------------------|
| Total Mechanical Travel | 12mm ± 1 mm | 22mm ± 1 mm |
| Friction | MAX. 17N (Spring Strength) | MAX. 18 N (Spring Strength) |
| Mass | Approx. 80 g | Approx. 100 g |
| | | |

| Environmental Specifications | | |
|------------------------------|---|--|
| Life Cycles | 5 Million MIN. Cycles | |
| Category Temperature Range | -25 ~ +80 °C | |
| Storage Temperature Range | -25 ~ +80 °C | |
| Vibration | 100m/S ² 500Hz 3 axis 2 hours each | |
| Shock | 500m/S ² 11ms 6 directions 3 times | |
| IP Level | IP 54 | |
| | | |
| | | |

■ Accessories

Connector Plug : TAJIMI R04-P6F(6.3)
Mating Cable Diameter Φ 6.3 mm

■ Handling Instruction

- To avoid burnout of resistive element, do not supply more than 1mA current to terminal B.
- Miswiring might cause burnout of resistive element.
- To reduce sliding noise, add load resistance should be more than 100times and less than 1000times of total resistance.
- Slight continuous vibration such as dither might cause short lifetime of the sensor.
- Do not apply high temperature solder on the terminals.