

Conductive Plastic Linear Sensor

LP-10F Series



- Conductive Plastic Linear Sensor
- Effective Electrical Travel : 10mm±0.5mm
- Independent Linearity : ±1%

【Material】

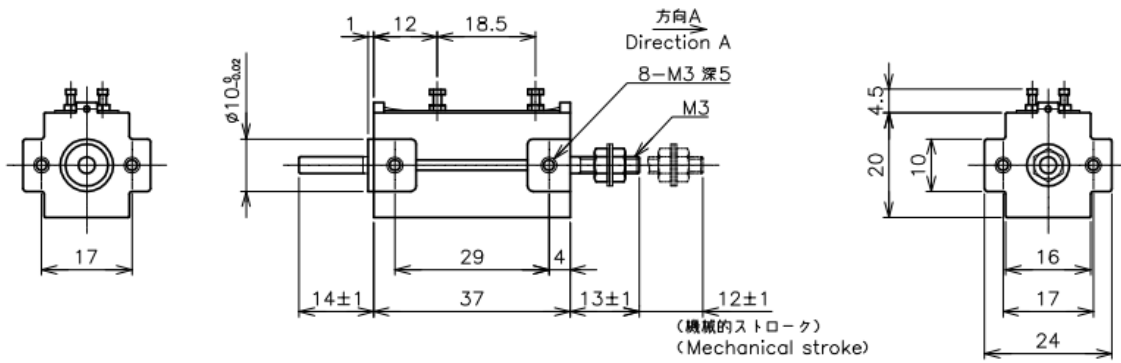
- Housing : Aluminum
- Shaft : Stainless Steel
- Bearing : Copper Alloy

LP-10F : w/o Return Spring

LP-10FB : w/ Return Spring

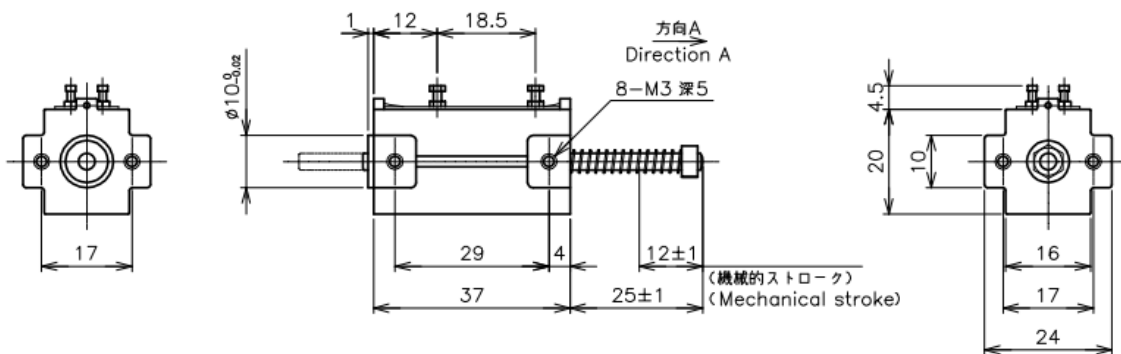
Dimension [mm]

LP-10F

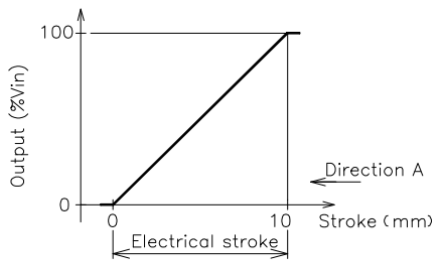


LP-10FB

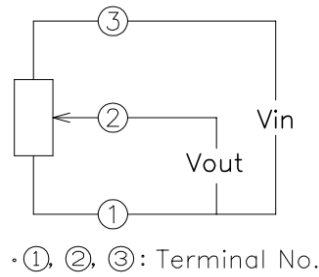
With Return Spring



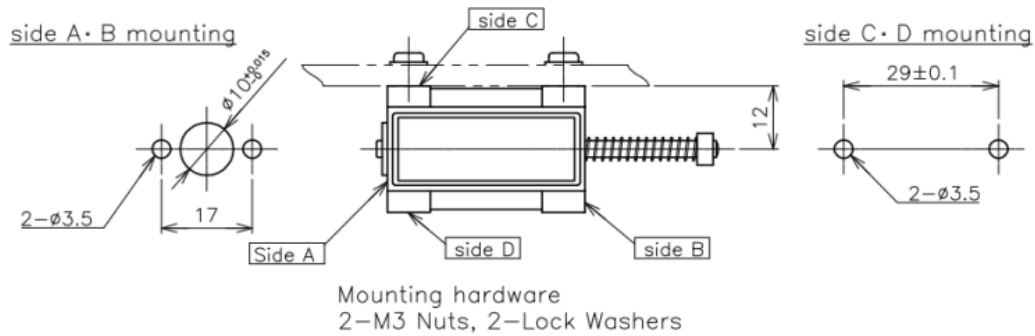
Output Characteristics



Schematic



Mounting



Model No.	LP-10F	LP-10FB
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Electrical Specifications

Effective Electrical Travel	10±0.5	mm
Total Resistance	1	kΩ
Total Resistance Tolerance	±20	%
Independent Linearity	±1	%
Rated Dissipation	0.3/50°C	W
Output Smoothness	MAX. 0.1	%
Insulation Resistance	MIN. 100 / DC 500V	MΩ
Dielectric Strength	AC500 / 1 Minute	V
Temperature Coefficient of Resistance	±1000	ppm/K

Mechanical Specifications

Total Mechanical Travel	12±1	mm
Friction	MAX. 0.3	MAX. 3(Spring Strength) N
Mass	Approx. 60	g

Environmental Specifications

Life Cycles	MIN. 5 Million	Cycle
Category Temperature Range	-40~+100	°C
Storage Temperature Range	-40~+100	°C
Vibration	100m/s ² 500Hz 3 axis 2 hours each	
Shock	500m/s ² 11ms 6 directions 3 times	

Accessories

- M3 Nut
- Plain washers 2 pieces each

Handling Instruction

- To avoid burnout of resistive element, do not supply more than 1mA current to terminal 2.
- Miswiring may 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.