

Conductive Plastic Linear Sensor

# LP-20F Series



LP-20F : w/o Return Spring  
 LP-20FB : w/ Return Spring

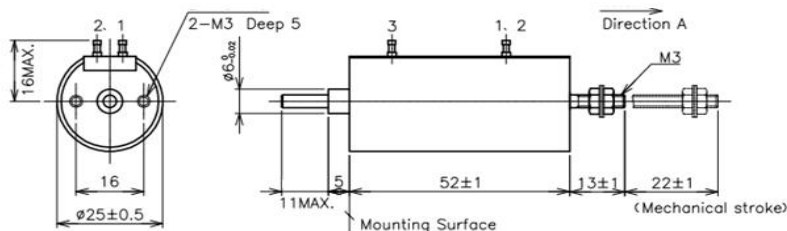
- Conductive Plastic Linear Sensor
- Effective Electrical Travel : 20mm ±0.5mm
- Independent Linearity : ±1%

**[Material]**

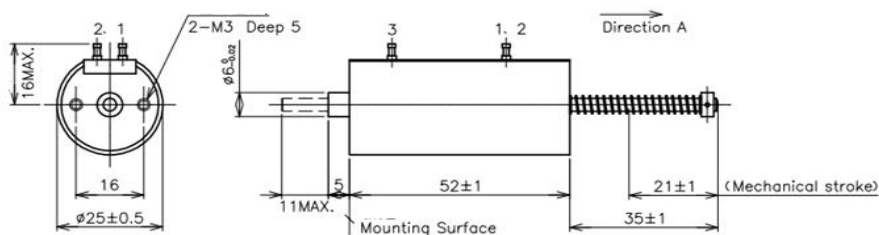
- Housing : Aluminum
- Shaft : Stainless Steel
- Bearing : Copper Alloy

## ■ Dimension (mm)

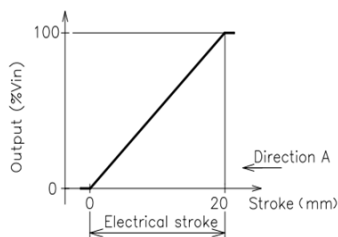
LP-20F



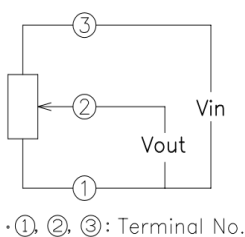
LP-20FB (With Return Spring)



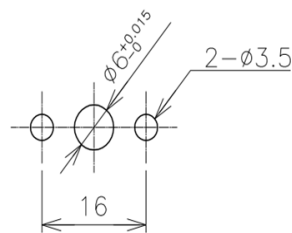
## ■ Output Characteristics



## ■ Schematic



## ■ Mounting



[Model No.]	LP-20F	LP-20FB
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Electrical Specifications		
Effective Electrical Travel	20 mm ± 0.5 mm	
Total Resistance	1K, 2K Ω	
Total Resistance Tolerance	±20%	
Independent Linearity	±1%	
Rated Dissipation	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	22mm ± 1mm	
Friction	MAX. 0.3 N	MAX. 3 N (Spring Strength)
Mass	Approx. 60g	

Environmental Specifications		
Life Cycles	5 Million MIN. Cycles	
Category Temperature Range	-40 ~ +100 °C	
Storage Temperature Range	-40 ~ +100 °C	
Vibration	100m/S <sup>2</sup> 500Hz 3 axis 2 hours each	
Shock	500m/S <sup>2</sup> 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 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.