

# Conductive Plastic Linear Sensor

## MIDORI LP-20F Series



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

### General

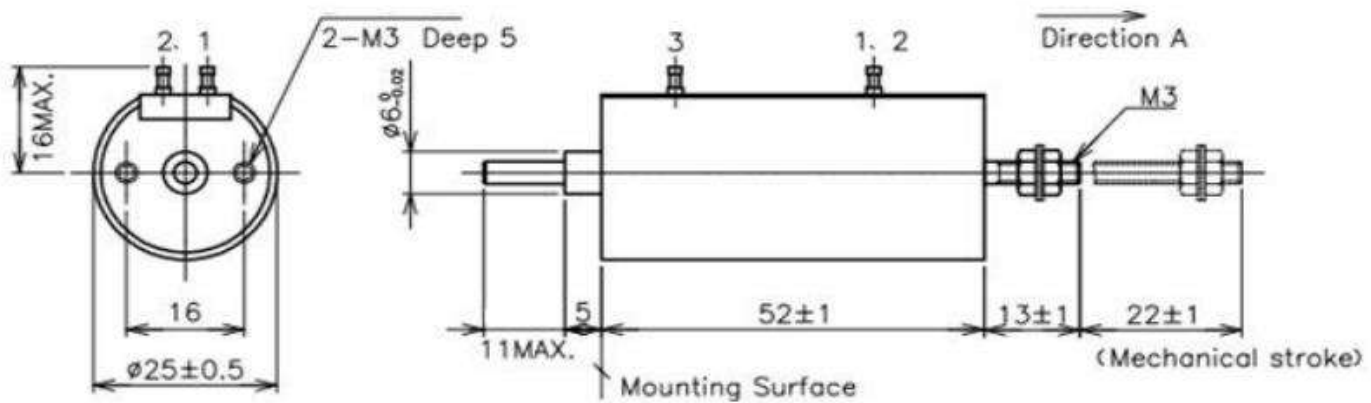
- Conductive Plastic Linear Sensor
- Effective Electrical Travel: 20mm
- Independent Linearity:  $\pm 1\%$

### Material

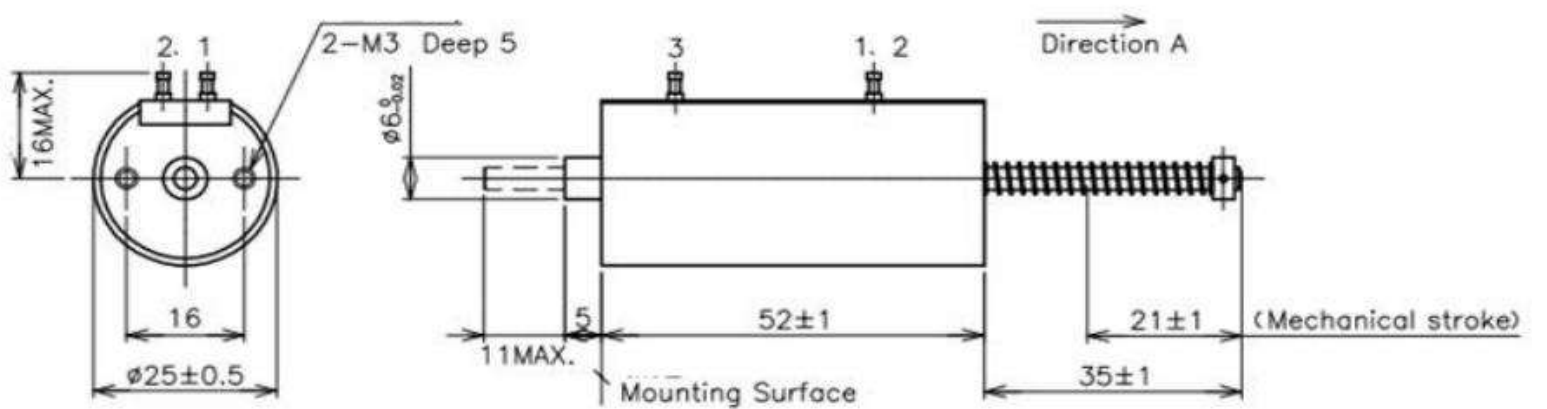
- Housing: Aluminum
- Shaft: Stainless Steel
- Bearing: Copper Alloy

### Dimension (mm)

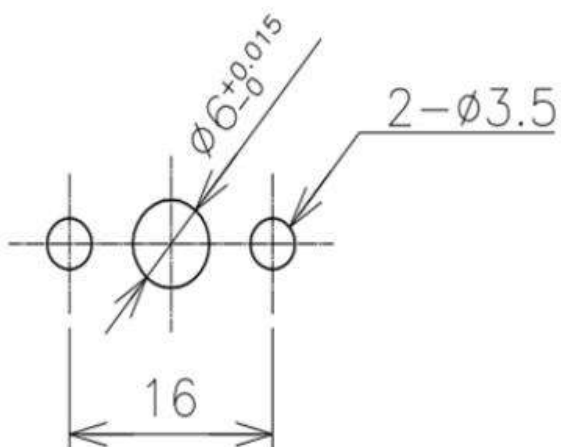
#### LP-20F



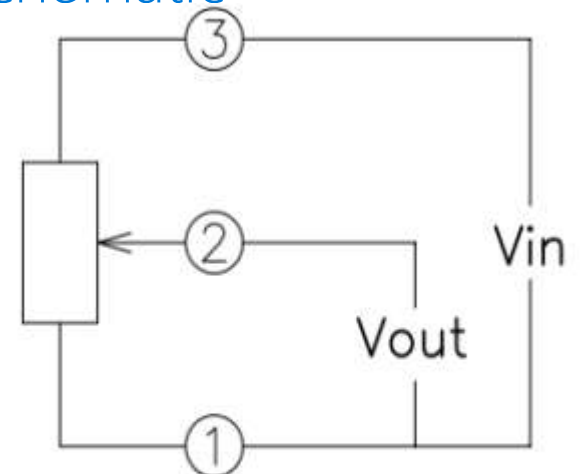
#### LP-20FB (With Return Spring)



### Mounting(mm)

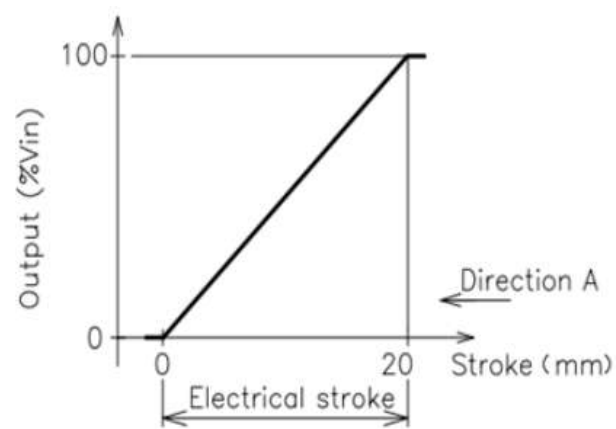


### Schematic



• ①, ②, ③ : Terminal No.

# Output Characteristics



## Specifications

	LP-20F	LP-20FB
	<w/o Return Spring>	<w/ Return Spring>
<b>Electrical Specifications</b>		
Effective Electrical Travel	20mm ±0.5mm	
Total Resistance	1K, 2K Ω	
Total Resistance Tolerance	±20%	
Independent Linearity	±1%	
Rated Dissipation	0.6W/ 50°C	
Output Smoothness	0.1% MAX.	
Insulation Resistance	100MΩMIN./DC500V	
Dielectric Strength	AC500V/ 1Minute	
TC of Resistance	±400ppm/K	
<b>Mechanical Specifications</b>		
Total Mechanical Travel	22mm±1mm	
Friction	0.3N MAX.	3N (Spring Strength) MAX.
Weight	Approx. 60g	
<b>Environmental Specifications</b>		
Life Cycles	5 Million cycles MIN.	
Category Temp. Range	-40~+100°C	
Storage Temp. Range	-40~+100°C	
Vibration	100m/S2 500Hz 3axis 2hours each	
Shock	500m/S2 11ms 6directions 3times	

## Accessories

M3 NUT, Plain Washers 2pieces 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.