Conductive Plastic Linear Sensor

MIDORI **LP-50F Series**

LP-50F : without Return Spring
LP-50FB : with Return Spring

General

- Conductive Plastic Linear Sensor
- Effective Electrical Travel: 50mm
- Independent Linearity: ±0.5%

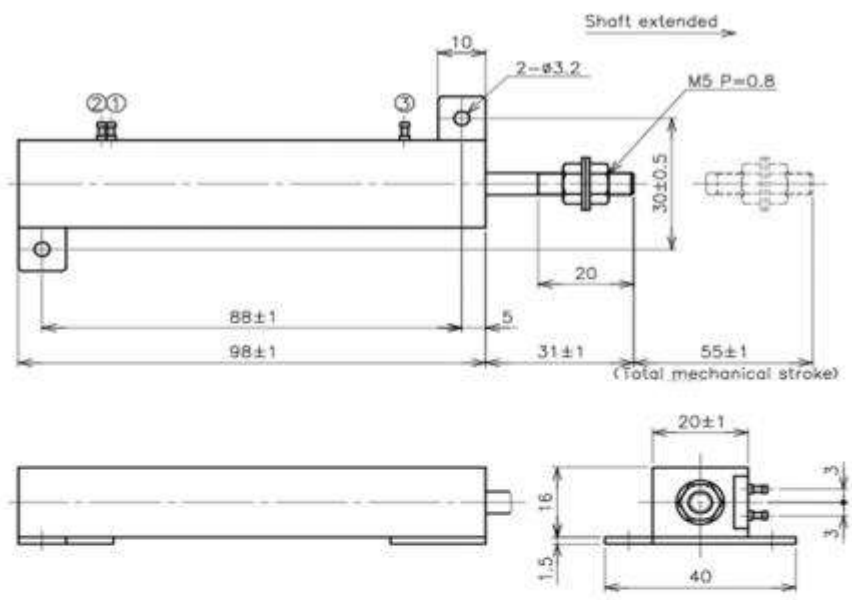
LP-50F: w/o Return Spring
LP-50FB: w/ Return Spring

Material

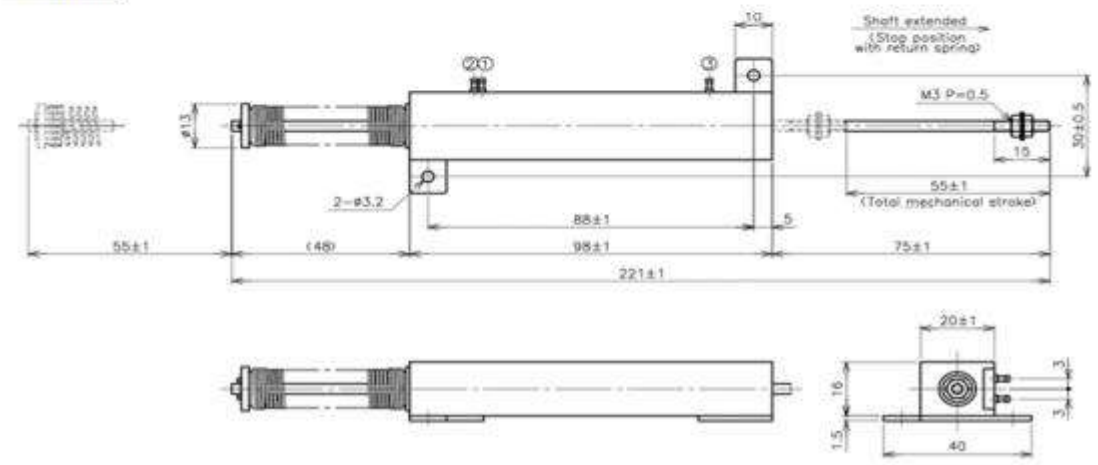
- Housing: Aluminum
- Shaft: Stainless Steel
- Bearing: Copper Alloy

Dimension (mm)

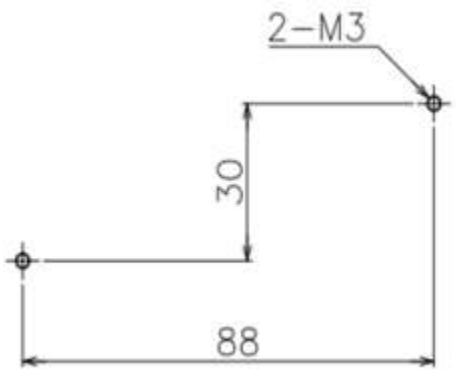
LP-50F



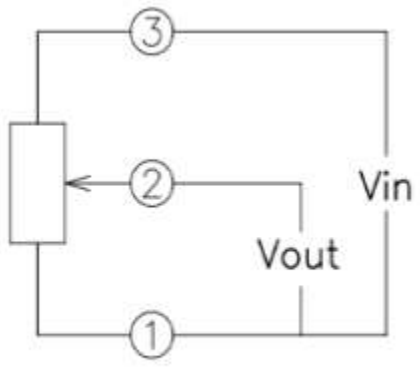
LP-50FB



Mounting(mm)

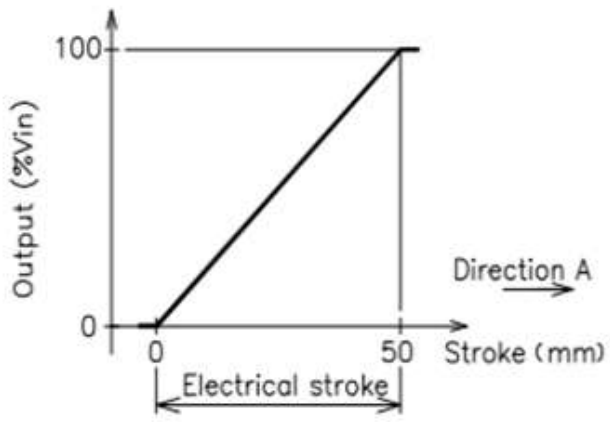


Schematic



·①, ②, ③: Terminal No.

Output Characteristics



Specifications

	LP-50F	LP-50FB
Electrical Specifications	<w/o Return Spring>	<w/ Return Spring>
Effective Electrical Travel	50mm ±0.5mm	
Total Resistance	1K, 2K, 5K, 10K Ω	
Total Resistance Tolerance	±20%	
Independent Linearity	±0.5%	
Rated Dissipation	1.5W/ 70℃	
Output Smoothness	0.1% MAX.	
Insulation Resistance	100MΩMIN./DC500V	
Dielectric Strength	AC500V/ 1Minute	
TC of Resistance	±400ppm/K	
Mechanical Specifications		
Total Mechanical Travel	55mm±1mm	
Friction	0.5N MAX.	1.7N (Spring Strength) MAX.
Weight	Approx. 75g	
Environmental Specifications		
Life Cycles	5 Million cycles MIN.	
Category Temp. Range	-40~+100℃	
Storage Temp. Range	-40~+100℃	
Vibration	100m/S2 500Hz 3axis 2hours each	
Shock	500m/S2 11ms 6directions 3times	

Accessories

LP-50F: M5 NUT, Plain Washer 2pieces each

LP-50FB: M3 NUT, Plain Washer 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.**