

Conductive Plastic Linear Sensor

MIDORI LP-FJS Series



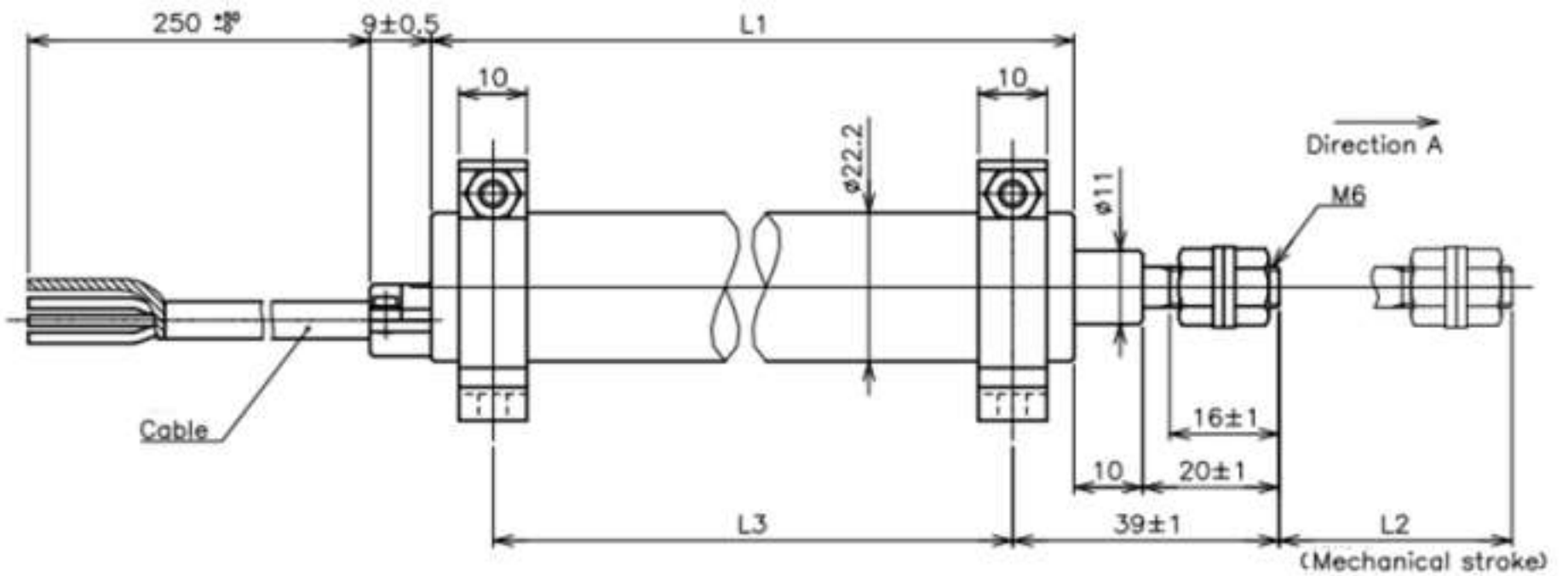
General

- Conductive Plastic Linear Sensor
- Effective Electrical Travel: 50mm ~ 300mm
- Independent Linearity: $\pm 0.3\%$ / $\pm 0.1\%$
- IP 65

Material

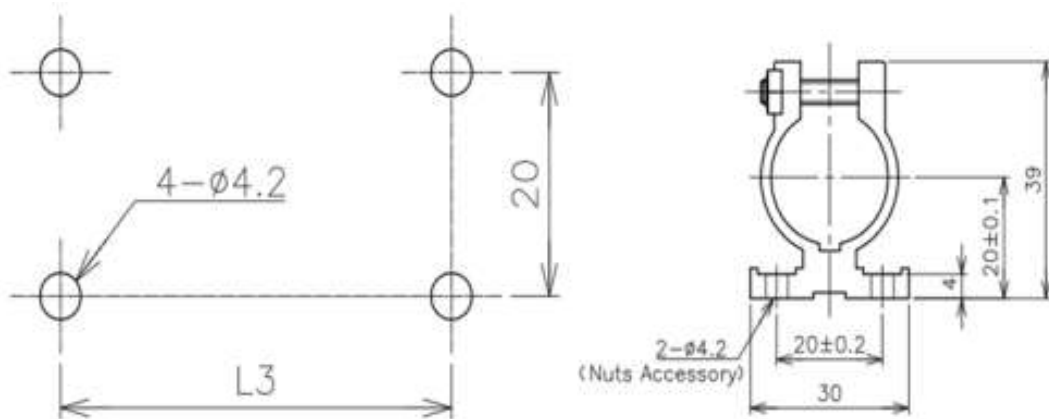
- Housing: Aluminum
- Shaft: Stainless Steel
- Bearing: Copper Alloy

Dimension (mm)

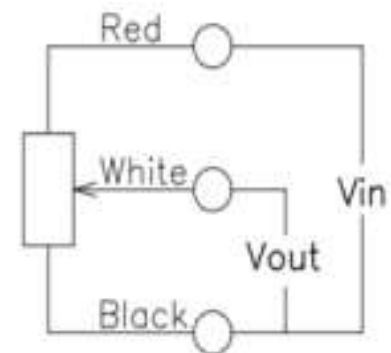


[Model No.]	LP-50FJ LP-50FJS	LP-100FJ LP-100FJS	LP-150FJ LP-150FJS	LP-200FJ LP-200FJS	LP-250FJ LP-250FJS	LP-300FJ LP-300FJS
Housing Length (L1)	88mm ± 1 mm	138mm ± 1 mm	188mm ± 1 mm	238mm ± 1 mm	288mm ± 1 mm	338mm ± 1 mm
Mech. Stroke (L2)	54mm ± 1 mm	104mm ± 1 mm	154mm ± 1 mm	204mm ± 1 mm	254mm ± 1 mm	304mm ± 1 mm
MTG Holes Pitch (L3)	70mm ± 1 mm	120mm ± 1 mm	170mm ± 1 mm	220mm ± 1 mm	270mm ± 1 mm	320mm ± 1 mm

Mounting(mm)

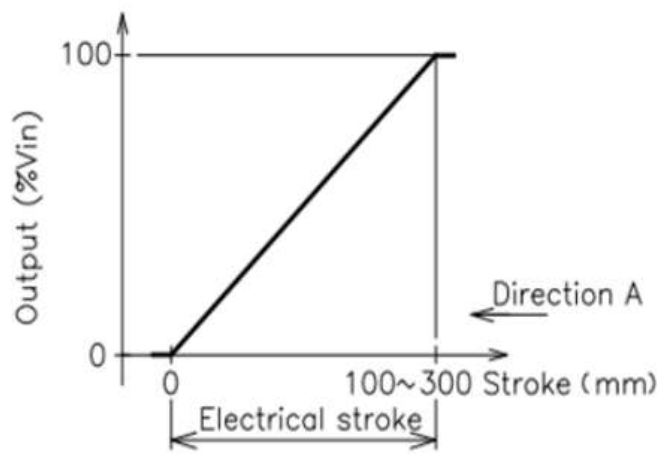


Schematic



• Red, White, Black indicate lead colors.

Output Characteristics



Specifications

Electrical Specifications

	LP-50FJS	LP-100FJS	LP-150FJS	LP-200FJS	LP-250FJS	LP-300FJS
Effective Electrical Travel	50mm ± 0.5mm	100mm ± 0.5mm	150mm ± 0.5mm	200mm ± 1mm	250mm ± 1mm	300mm ± 1mm
Total Resistance	1K, 5K Ω			5KΩ		10KΩ
Total Resistance Tolerance	±20%					
Input Voltage	DC36V MAX./ 50°C					
Independent Linearity	±0.5%	±0.3% (Special Linearity ±0.1%)				
Output Smoothness	0.1% MAX.					
Insulation Resistance	100MΩMIN./DC500V					
Dielectric Strength	AC500V/ 1Minute					
TC of Resistance	±400ppm/K					

Mechanical Specifications

Total Mechanical Travel	54mm ± 1mm	104mm ± 1mm	154mm ± 1mm	204mm ± 1mm	254mm ± 1mm	304mm ± 1mm
Friction	MAX.4N	MAX.4N	MAX.4N	MAX.4N	MAX.4N	MAX.4N
Weight	Approx.120g	Approx.160g	Approx.200g	Approx.240g	Approx.280g	Approx.320g

Environmental Specifications

Life Cycles	5 Million cycles MIN.
Category Temp. Range	-25~+80°C
Storage Temp. Range	-25~+80°C
Vibration	100m/S ² 20~500Hz 3axis 2hours each
Shock	500m/S ² 11ms 6directions 3times
IP Level	IP65 (Except Harness End)

Accessories

Mounting Foot: M4 Nut 4 pieces each

Shaft Joint: M6 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.