

Conductive Plastic Linear Sensor

MIDORI LP-F-63 Series



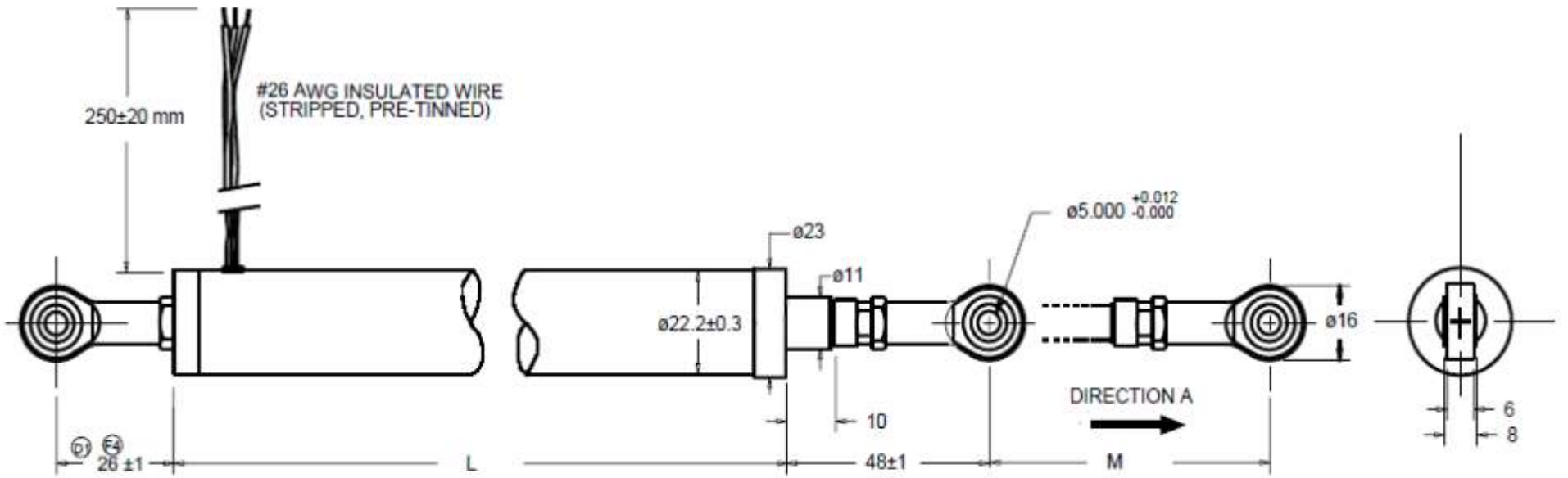
General

- Conductive Plastic Linear Sensor
- Effective Electrical Travel: 100mm ~ 300mm
- Independent Linearity: $\pm 0.3\%$ / $\pm 0.1\%$

Material

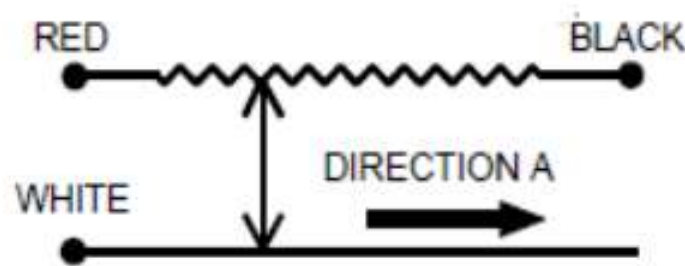
- Housing: Aluminum
- Shaft: Stainless Steel
- Bearing: Copper Alloy

Dimension (mm)

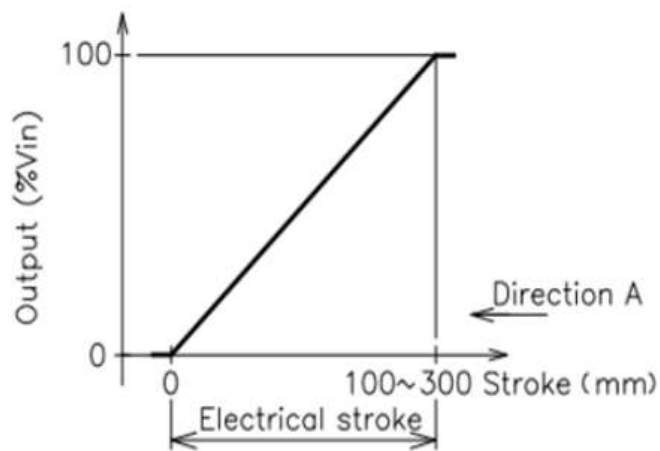


[Model No.]	LP-100F-63	LP-150F-63	LP-200F-63	LP-250F-63	LP-300F-63
Housing Length (L)	145mm ± 1 mm	195mm ± 1 mm	245mm ± 1 mm	295mm ± 1 mm	345mm ± 1 mm
Mech. Stroke (M)	103mm ± 2 mm	153mm ± 2 mm	203mm ± 2 mm	253mm ± 2 mm	303mm ± 2 mm

Schematic



Output Characteristics



Specifications

Electrical Specifications

	LP-100F-63	LP-150F-63	LP-200F-63	LP-250F-63	LP-300F-63
Effective Electrical Travel	100mm ± 0.5mm	150mm ± 0.5mm	200mm ± 1mm	250mm ± 1mm	300mm ± 1mm
Total Resistance	1K, 2K, 5K, 10K Ω			2K, 5K, 10K Ω	
Total Resistance Tolerance	±20%				
Independent Linearity	±0.3%/ ±0.1%				
Rated Dissipation	2.5W/70°C	3W/70°C	4W/70°C		
Output Smoothness	0.1% MAX.				
Insulation Resistance	100MΩMIN./DC500V				
Dielectric Strength	AC500V/ 1Minute				
TC of Resistance	±400ppm/K				

Mechanical Specifications

Friction	2N MAX.				
Weight	Approx.95g	Approx.125g	Approx.165g	Approx.205g	Approx.245g

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	IP40				

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.