Conductive Plastic Linear Sensor LP-F-C Series ·Conductive Plastic



[mm]

• Conductive Plastic Linear Sensor • Effective Electrical Travel : 100mm±0.5mm (LP-100F-C) 150mm±0.5mm (LP-150F-C) 200mm±1mm (LP-200F-C) 250mm±1mm (LP-250F-C) 300mm±1mm (LP-300F-C)

Independent Linearity : ±0.3% (Special Linearity ±0.1%)

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

Dimension



[Model No.]	LP-100F-C	LP-150F-C	LP-200F-C	LP-250F-C	LP-300F-C	
[Housing Length · Mounting]						-
Housing Length(L1)	138±1	188±1	238±1	288±1	338±1	mm
Mech. Stroke(L2)	103±1	153±1	203±1	253±1	303±1	mm
MTG Holes Spacing(L3)	124	174	224	274	324	mm



## Schematic



• Red,White,Black indicate lead colors.

 $4-\phi 4.2$ 

Mounting Holes





[Model No.]	LP-100F-C	LP-150F-C	LP-200F-C	LP-250F-C	LP-300F-C

[Electrical Specifications]						
Effective Electrical Travel	100±0.5	150±0.5	200±1	250±1	300±1	mm
Total Resistance	1、2、5、10 2、5、10				kΩ	
Total Resistance Tolerance		±20				
Independent Linearity		$\pm 0.3$ (Special Linearity $\pm 0.1\%$ )				
Rated Dissipation	2/70°C 3/70°C 4/70°C				W	
Output Smoothness	MAX. 0.1					%
Insulation Resistance	MIN. 100 / DC 500V					MΩ
Dielectric Strength	AC500 / 1 Minute				V	
Temperature Coefficient of Resistance	±400				ppm/K	

# [Mechanical Specifications]

Friction	MAX. 1					N
Mass	110 Approx.	140 Approx.	170 Approx.	200 Approx.	230 Approx.	g

### [Environmental Specifications]

Life Cycles	MIN. 5 Million	Cycle
Category Temperature Range	-25~+80	°C
Storage Temperature Range	-25~+80	°C
Vibration	100m/s <sup>2</sup> 500Hz 3axis 2hours each	
Shock	500m/s <sup>2</sup> 11ms 6directions 3times	

#### Accessories

Mounting Foot: M4 Nut 4 pieces each Shaft Joint: M5 Nut, Plain washer 2 pieces each

#### Handling Instruction

•To avoid burnout of resistive element, do not supply more than 1mA current to terminal white.

•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.

<sup>•</sup> Miswiring may cause burnout of resistive element.