

ULTRA SMALL HOUSING, ENABLE TO INSTALL IN TIGHT SPACE

CONDUCTIVE PLASTIC LINEAR SENSOR

LP-FP series

RoHS compliant



FEATURES

- Conductive Plastic Linear Sensor
- Ultra small housing diameter ϕ 12mm and ϕ 8mm
- Effective Electrical Travel :
20 $\pm$ 0.5 mm / 30 $\pm$ 0.5 mm / 50 $\pm$ 0.5 mm
- Independent Linearity : $\pm$ 1%FS
- Ratio Output

Material

- Housing : Copper alloy
- Shaft : Stainless Steel

PART NUMBER DESIGNATION

LP - 20 F P

Effective Electrical Travel

20 : 20 mm
30 : 30 mm
50 : 50 mm

Output type

P : Housing dia. ϕ 12 mm, Shaft dia. M3 mm
QJ : Housing dia. ϕ 8 mm, Shaft dia. M2.5 mm

STANDARD SPECIFICATIONS

Electrical characteristics

Model No.	LP-20FP	LP-30FP	LP-50FP	LP-30FQJ
Effective Electrical Travel	20 $\pm$ 0.5 mm	30 $\pm$ 0.5 mm	50 $\pm$ 0.5 mm	30 $\pm$ 0.5 mm
Total Resistance	1 k Ω			
Total Resistance Tolerance	$\pm$ 20%			
Independent Linearity	$\pm$ 1%FS			
Power Rating	0.6 W / 70°C	0.9 W / 70°C	1.5 W / 70°C	0.9 W / 70°C
Output Smoothness	0.1% max.			
Insulation Resistance	100 M Ω min. / 500 VDC			
Dielectric Strength	500 VAC / 1 Minute			
TC of Resistance	$\pm$ 400 ppm/K			

Mechanical characteristics

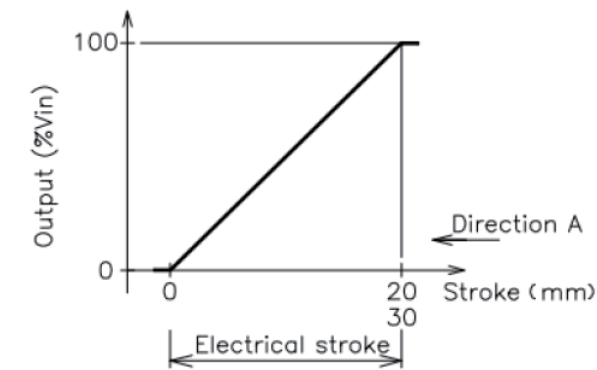
Friction	0.4 N max.	0.4 N max.	0.4 N max.	0.3 N max.
Net weight	Approx.18 g	Approx.20 g	Approx.25 g	Approx.15 g

LP-FP

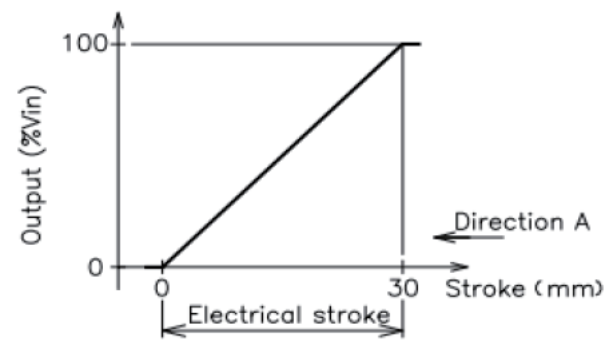
POTENTIOMETERS

■ OUTPUT CHARACTERISTICS

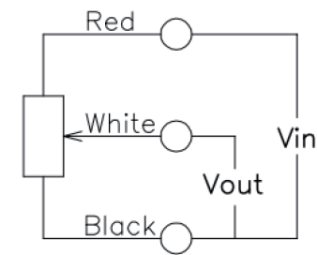
● LP-xxFP



● LP-30FQJ



■ SCHEMATIC



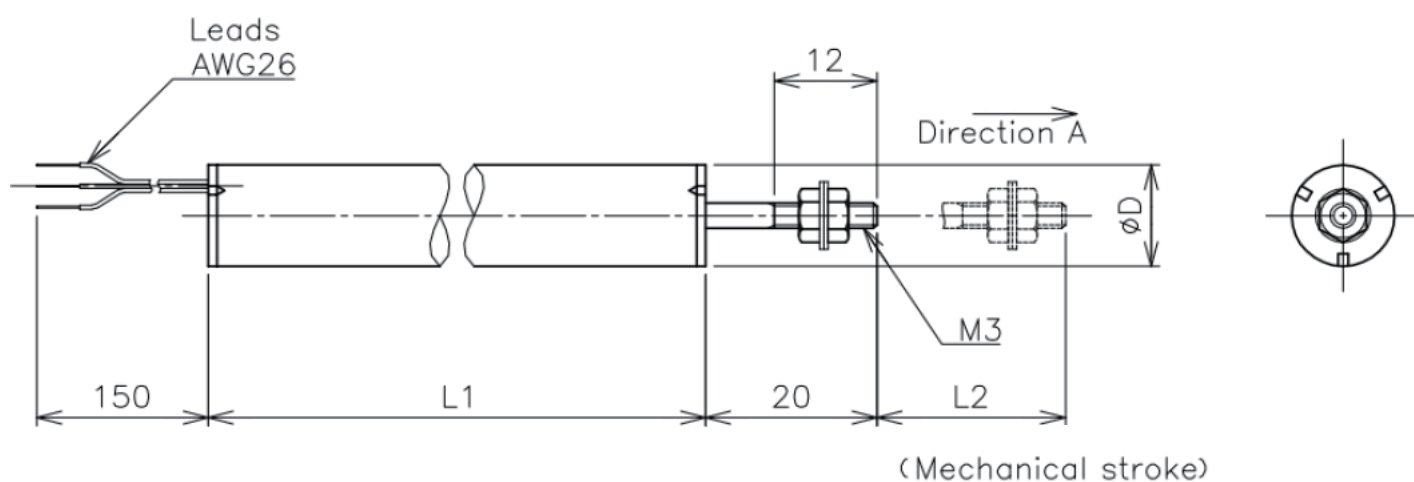
Red, White, Black indicate lead colors.

LP-FP POTENTIOMETERS

OUTLINE DIMENSIONS

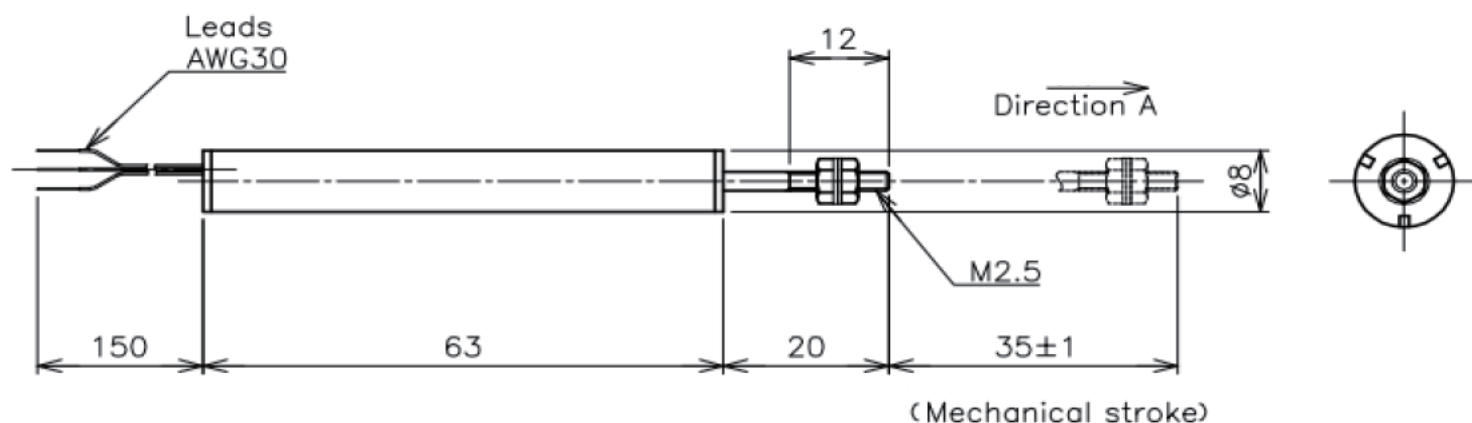
(Unit:mm)

● LP-xxFP



Model No.	LP-20FP	LP-30FP	LP-50FP
Housing Length L1	48 mm	58 mm	78 mm
ϕD	$\phi 12$ mm		
Mechanical stroke L2	22 $\pm$ 1 mm	32 $\pm$ 1 mm	52 $\pm$ 1 mm

● LP-30FQJ



<Accessories>

LP-FP: M3 Nut, Plain washer 2 pieces each
LP-FQJ: M2.5 Nut, Plain washer 2 pieces each

HANDLING INSTRUCTION

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