

ERPH Series Linear Motion Potentiometer



- Internal electronic circuit
- Measuring range 100 - 1750mm
- Output 4-20mA, 0-20mA or 0-10V
- Very low temperature drift
- Very stable output signal
- Excellent repeatability <0.01mm



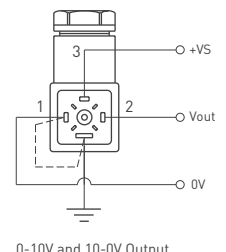
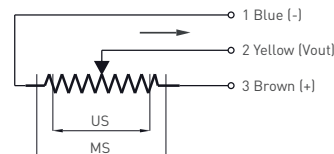
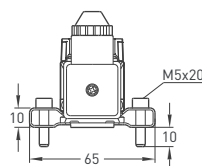
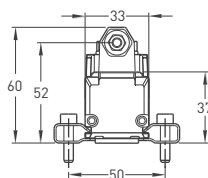
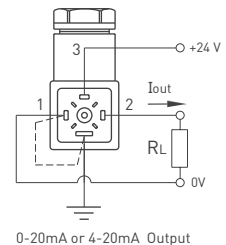
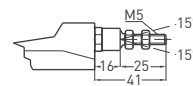
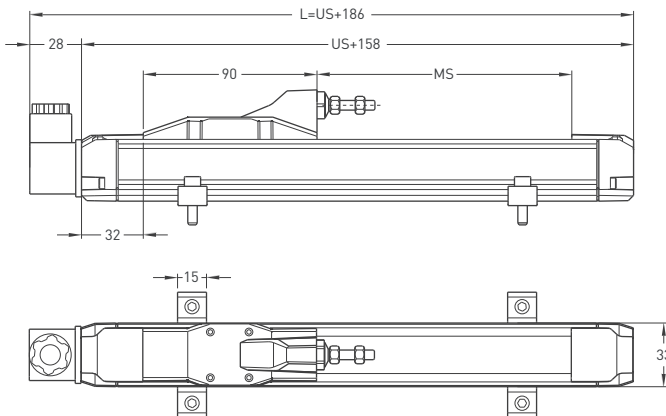
Electrical Specifications*

Linearity	±0.2% (100-125mm), ±0.1% (130-225mm) ±0.05% (≥ 250mm)
Resolution	Infinite
Output	4-20mA or 0-20mA (current output) 0-10VDC (voltage output)
Load resistance	100-500Ω (current output) 10KΩ (voltage output)
Update rate	<1ms
Supply voltage	15-30VDC
Power consumption	27.5mA (current output) 7.5mA (voltage output)
Temperature coefficient	15 ppm/°C
Insulation resistance	>100MΩ @ 500VDC

Mechanical Specifications*

Measurement stroke	100 - 1750mm (see table below)
Repeatability	<0.01mm
Electrical connections	4 pin connector
Displacement speed	<5 m/s
Mechanical life	100 million movements
Case dimensions	33mm x 33mm
Case material	Anodized aluminum
Rod material	Shaftless - sliding cursor
Pivot Linkage	Link ball
Mechanical fixing	Variable brackets
IP degree	IP40 / if mounted upside down IP53
Operating temperature	-20°C to +80°C
Storage temperature	-30°C to +90°C
Vibration	5-2000Hz, Amax = 0.75mm, amax = 20G
Shock	50 G, 6ms

Mechanical Specifications



ERPH (mm)	100	125	130	150	175	200	225	250	275	300	325	350	375	400	450	500	550	600	650	700	750	800	850	900	1000	1250	1500	1750	1950
US (Useful stroke)	100	125	130	150	175	200	225	250	275	300	325	350	375	400	450	500	550	600	650	700	750	800	850	900	1000	1250	1500	1750	1950
MS (Mechanical stroke)	104	129	134	154	179	204	229	254	279	304	329	354	379	404	454	504	554	604	654	704	754	804	854	904	1004	1254	1504	1750	1954
L (Total Length)	321	346	351	371	396	421	446	471	496	521	546	571	596	621	671	721	771	821	871	921	971	1021	1071	1121	1221	1471	1721	1921	2121

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ERPH Series Linear Motion Potentiometer



Ordering Code

Model	Measurement stroke (mm)	Linearity (%)	Output	Connector
ERPH	500	D	V10	CH1
ERPH	100 - 1950 mm	B: ± 0.2 (100 - 125mm) C: ± 0.1 (130 - 225mm) D: ± 0.05 (≥ 250 mm)	I40 : 4-20mA V10 : 0-10V I04 : 20-4mA V01 : 10-0V° I20 : 0-20mA I02 : 20-0mA°	CH1 : 4 pin connector

Examples:

ERPH 100 B V10 C1 (positive gradient)
 ERPH 100 B V01 C1 (negative gradient)
 ERPH 150 C I4 C1 (positive gradient)
 ERPH 150 C I04 C1 (negative gradient)
 ERPH 500 D I20 C1 (positive gradient)
 ERPH 500 D I02 C1 (negative gradient)