

ERTL Series

Linear Motion Potentiometer

- Internal electronic circuit
- Measuring range 30 - 1000mm
- Output 4-20mA, 0-20mA or 0-10V
- Very low temperature drift
- Very stable output signal
- Excellent repeatability <0.01mm



Electrical Specifications*

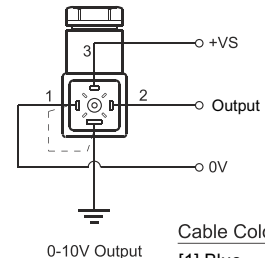
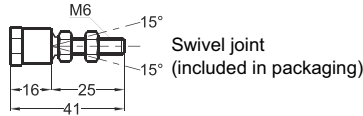
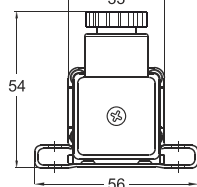
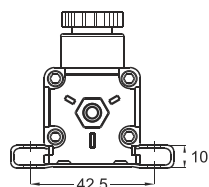
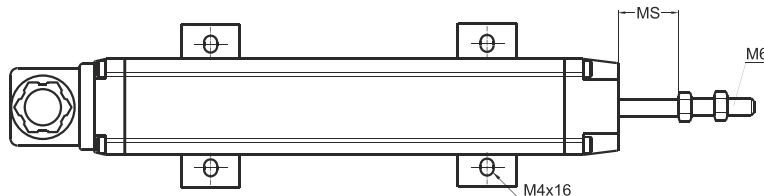
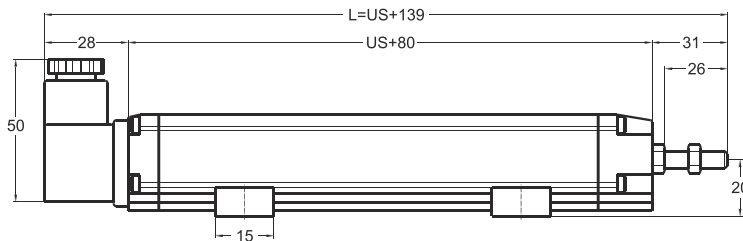
Linearity	$\pm 0.5\%$ (<75mm), $\pm 0.2\%$ (75-130mm) $\pm 0.1\%$ (130-200mm), $\pm 0.05\%$ (>200mm)
Resolution	Infinite
Output	4-20mA or 0-20mA (current output) 0-10VDC (voltage output)
Load resistance	100-500 Ω (current output) 10K Ω (voltage output)
Update rate	<1ms
Supply voltage	15-30VDC
Power consumption	27.5mA (current output) 7.5mA (voltage output)
Temperature coefficient	15 ppm/ $^{\circ}$ C
Insulation resistance	>100M Ω @ 500VDC

Mechanical Specifications*

Measurement stroke	30 - 1000mm (see table below)
Repeatability	<0.01mm
Electrical connections	4 pin connector
Displacement speed	<5 m/s
Mechanical life	75 million cycles
Case dimensions	33mm x 33mm
Case material	Anodized aluminum
Rod material	Stainless Steel
Rod diameter	$\varnothing 6$ mm
Mechanical fixing	Variable brackets
IP degree	IP65
Operating temperature	-20 $^{\circ}$ C to +80 $^{\circ}$ C
Storage temperature	-30 $^{\circ}$ C to +90 $^{\circ}$ C
Vibration	5-2000Hz, Amax = 0.75mm, amax = 20G
Shock	50 G, 6ms

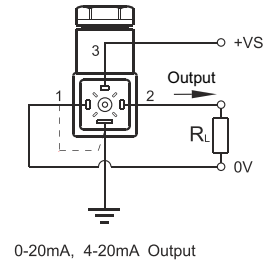
* Customers should test and verify part performance in any given application. Specifications subject to change without notice.

Dimensions (mm)



Cable Colors

- [1] Blue : 0V
- [2] Yellow : Output
- [3] Brown : +VS
- [4] Black : GND



RTL (mm)	30	50	75	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
US (Useful Stroke)	30	50	75	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
MS ± 0.5 (Mechanical Stroke)	33	53	73	103	128	133	153	178	203	228	253	278	303	328	353	373	403	453	503	553	603	653	703	753	803	853	903	1003
L (Total Length)	169	189	214	239	264	269	289	314	339	364	389	414	439	464	489	514	539	589	639	689	739	789	839	889	939	989	1039	1139

Special Specifications Available

Improved linearity, special stroke lengths, shaft modifications.