

# RTL Series

## Linear Motion Potentiometer

- Measuring range 30 - 1000mm
- Long mechanical life
- Excellent repeatability <0.01mm
- Infinite resolution



### Electrical Specifications\*

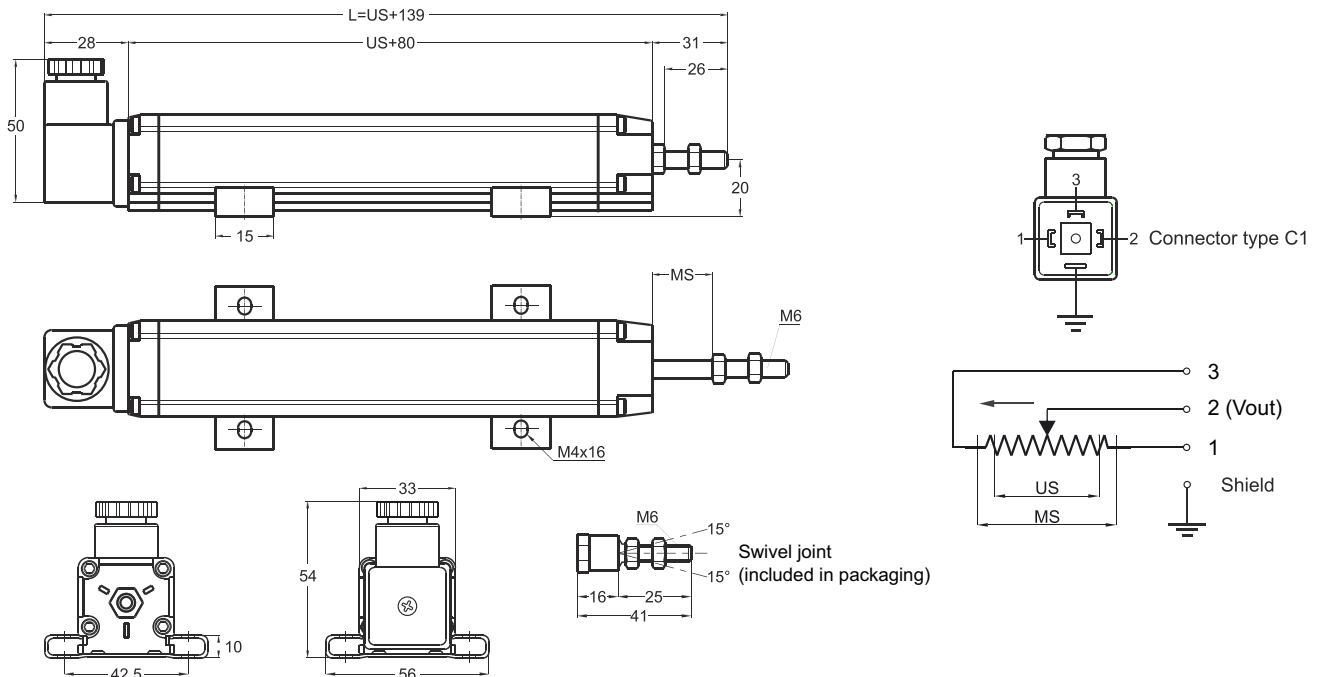
Linearity	$\pm 0.5\%$ (<75mm), $\pm 0.2\%$ (75-130mm) $\pm 0.1\%$ (130-200mm), $\pm 0.05\%$ (>200mm)
Resolution	Infinite
Resistance	5K $\Omega$ (<650mm) 10K $\Omega$ (650-1000mm)
Resistance tolerance	$\pm 20\%$
Load resistance	100K $\Omega$ min.
Wiper current	<1 $\mu$ A
Max applied voltage	28VDC
Output smoothness	< 0.1% against applied voltage
Contact resistance variation	< 2% C.R.V.
Temperature coefficient	400 ppm/ $^{\circ}$ C
Insulation resistance	>100M $\Omega$ @ 500VDC
Dielectric Strength	<100 $\mu$ A @ 500V~, 50Hz, 2s

### 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	$\varnothing$ 6mm
Mechanical fixing	Variable brackets (included)
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)



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 (Usefull 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 $\pm 0.5$ (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, other resistance values.