

Features

- Measuring range 50-800 mm
- $\pm 0.05\%$ linearity
- 100 million movements life
- < 0.01 mm repeatability
- Infinite resolution
- 5 kOhm: 50-600 mm
- 10 kOhm: 650-800 mm

RS PRO Motion Control Sensor

Linear Potentiometers

Stock No. 100415, 100408, 100409, 100410, 100411, 100413, 100414, 100417

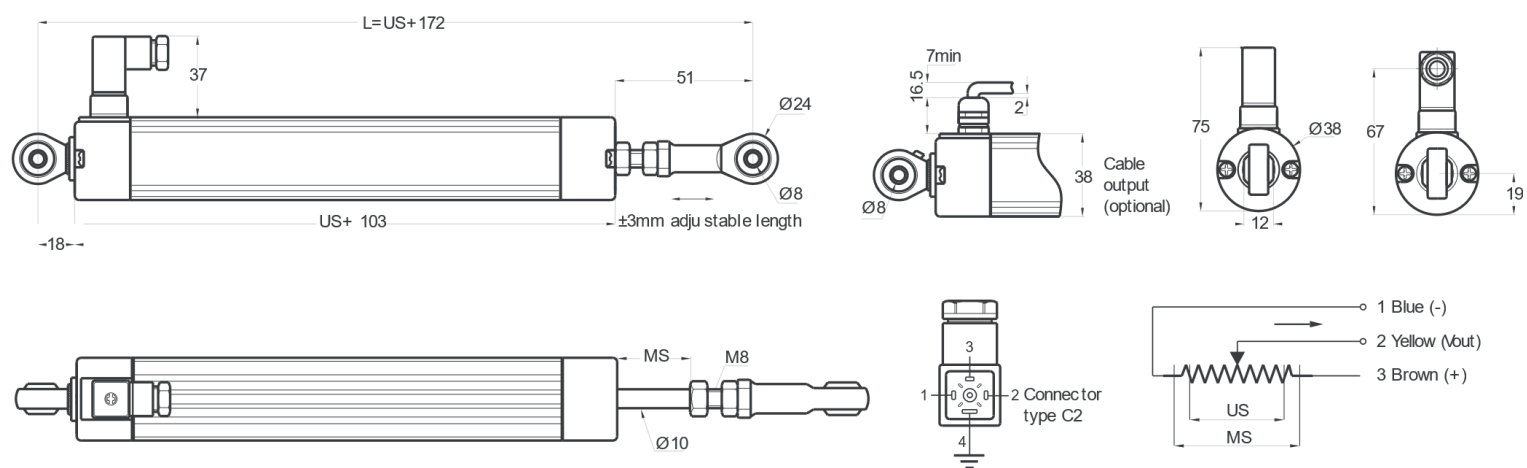


RS Professionally Approved Products bring to you professional quality parts across all product categories. Our product range has been tested by engineers and provides a comparable quality to the leading brands without paying a premium price.

Product Description

Series designed as compact, highly robust, accurate linear position sensors, using potentiometric technology, up to 800 mm measuring length. Series linear position sensors provides absolute linear position feedback for wide range of industrial applications.

Mechanical Specifications



LPC (mm)	50	75	100	125	130	150	175	200	225	250	275	300	325	350	375	400	450	500	550	600	650	700	800
US (Usefull stroke)	50	75	100	125	130	150	175	200	225	250	275	300	325	350	375	400	450	500	550	600	650	700	800
MS (Mechanical stroke)	54	79	104	129	134	154	179	204	229	254	279	304	329	354	379	404	454	504	554	604	654	704	804
L (Total Length)	222	247	272	297	302	322	347	372	397	422	447	472	497	522	547	572	622	672	722	772	822	872	972

General Specifications

Measurement stroke	50-800 mm
Linearity	<75 mm ($\pm 0.5\%$), 75-129 ($\pm 0.2\%$), 130-200 ($\pm 0.1\%$), >200 mm ($\pm 0.05\%$)
Repeatability	< 0.01 mm
Resolution	Infinite
Resistance	5 kOhm: 50-600 mm 10 kOhm: 650-800 mm
Resistance tolerance	$\pm 20\%$
Load resistance	100 kOhm min.
Recommended wiper current	<1 μ A
Permissible applied voltage	28 VDC max.
Electrical connections	4 pin connector(standard), cable(optional)
Displacement speed	<1.5 m/s
Vibration	EN 60068-2-6 5-2000 Hz 200 m/s ² (20g) 2h 30min each axis (x,y,z)
Shock	EN 60068-2-2:2007 500 m/s ² (50g) 11 ms (x,y,z axis)
Mechanical life	100 million movements
Case dimensions	Ø38 mm
Case material	Anodized aluminium
Rod material	Stainless steel
Rod diameter	Ø10 mm
Mechanical fixing	Ball joints on the both sides
Protection level	IP 65 – EN 60529
Operating temperature	-20°C ... +80°C
Storage temperature	-30°C ... +90°C

Approvals

Declarations	CE, UKCA, ROHS, REACH
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Articles In Series

RS PRO Part Number	MPN	Stroke length	Linearity (%)	Resistance (kOhm)	Connector / Cable
	0100415	50	±%0.5 FS	5K	C2 & 1 meter cable
	0100408	100	±%0.2 FS	5K	C2 & 1 meter cable
	0100409	130	±%0.1 FS	5K	C2 & 1 meter cable
	0100410	150	±%0.1 FS	5K	C2 & 1 meter cable
	0100411	200	±%0.1 FS	5K	C2 & 1 meter cable
	0100413	300	±%0.05 FS	5K	C2 & 1 meter cable
	0100414	400	±%0.05 FS	5K	C2 & 1 meter cable
	0100417	500	±%0.05 FS	5K	C2 & 1 meter cable