

Features

- Measuring range 100-1950 mm
- 100 million movements life
- <0.01 mm repeatability
- Infinite resolution
- 5 kOhm: 100-600 mm
- 10 kOhm: 650-1000 mm
- 20 kOhm: 1250-1950 mm

RS PRO Motion Control Sensor

Linear Potentiometers

Stock No.. 0100418, 0100419, 0100420

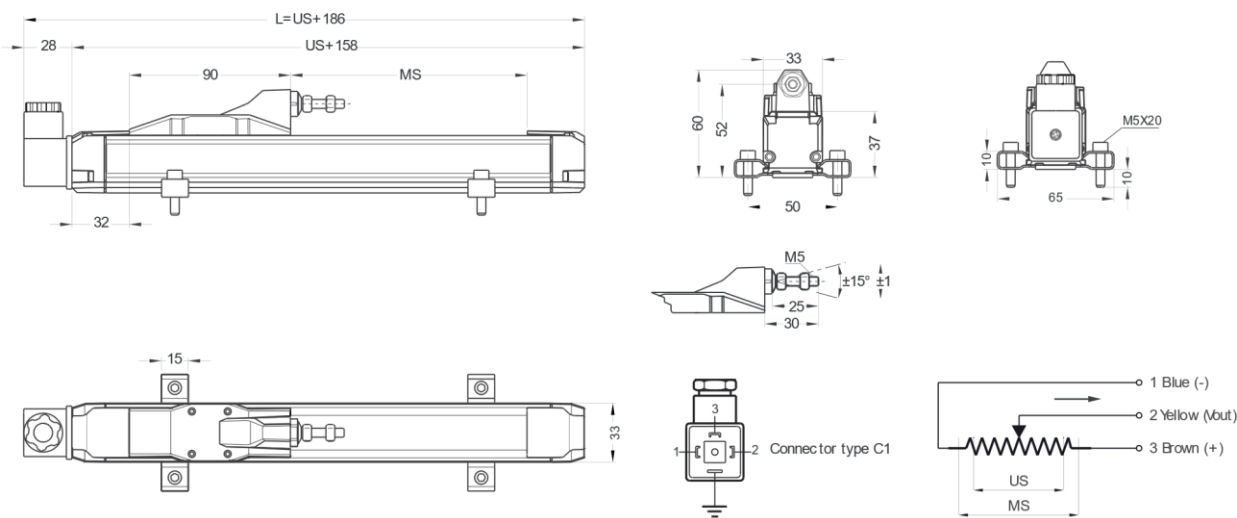


RS Professionally Approved Products bring to you professional quality parts across all product categories. Our product range has been tested by engineers and provides a comparable quality to the leading brands without paying a premium price.

Product Description

Series designed as compact, highly robust, accurate linear position sensors, using potentiometric technology, up to 1950 mm measuring length. Series linear position sensors provides absolute linear position feedback for wide range of industrial applications.

Mechanical Specifications



RPH (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 (Usefull 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	1754	1954
L (Total length)	286	311	315	336	361	386	411	436	461	486	511	536	561	586	636	686	736	786	836	886	936	986	1036	1086	1186	1436	1686	1936	2136

General Specifications

Measurement stroke	100-1950 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: 100-600 mm 10 kOhm: 650-1000 mm 20 kOhm: 1250-1950 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
Displacement speed	<1.5 m/s
Mechanical life	100 million movements
Case dimensions	33 mm x 33 mm
Case material	Anodized aluminium
Mechanical fixing	Variable brackets
Protection level	IP 40 / upside down IP 53
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
	0100418	450	± 0.05 FS	5K	C1 & 1 meter cable
	0100419	500	± 0.05 FS	5K	C1 & 1 meter cable
	0100420	600	± 0.05 FS	5K	C1 & 1 meter cable