

Datasheet

General features

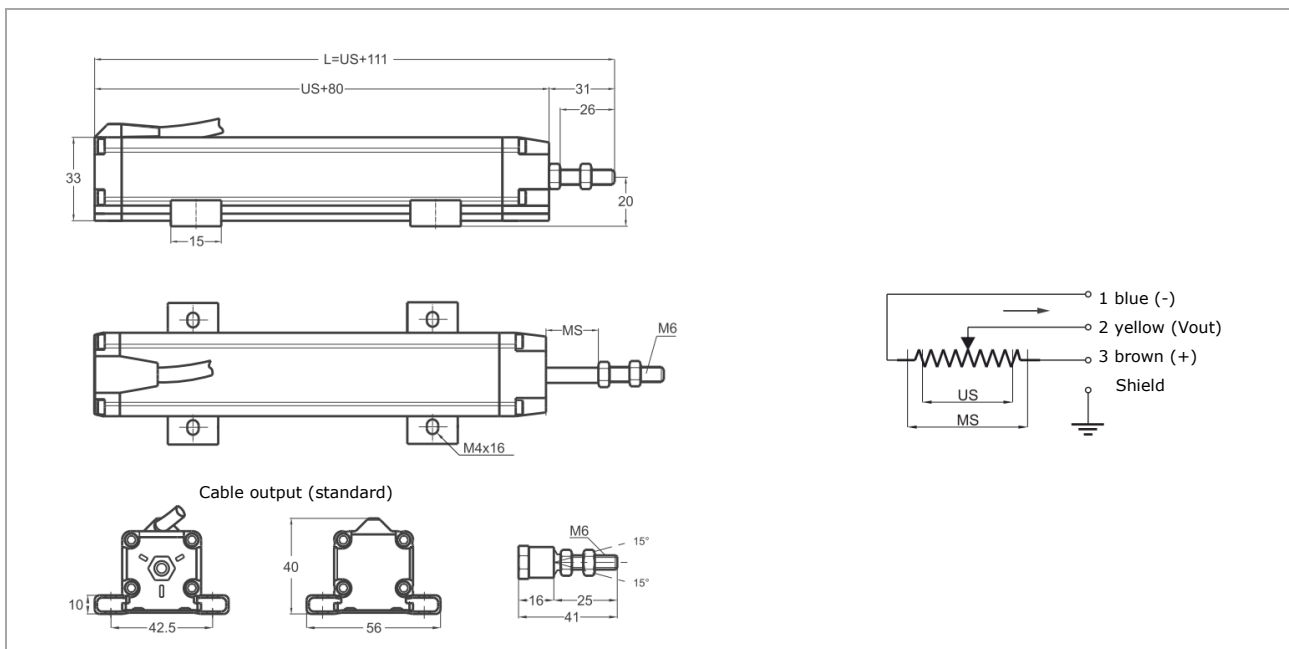
- Measuring range 30 to 1000 mm
- Long mechanical life: 100 million movements
- Excellent repeatability: <math><0.01\text{ mm}</math>
- Infinitely variable resolution
- Resistance:
5 kOhm: 30 ... 600 mm, 10 kOhm: 650 ... 1000 mm



Technical specifications

Measurement stroke	30 to 1000 mm
Linearity	$\pm 0.05\%$ (>200 mm), $\pm 0.1\%$ (130 - 200 mm), $\pm 0.2\%$ (75 - 129 mm), $\pm 0.5\%$ (<75 mm)
Repeatability	<math><0.01\text{ mm}</math>
Resolution	Infinitely variable
Resistance	5 kOhm: 30 ... 600 mm, 10 kOhm: 650 ... 1000 mm
Resistance tolerance	$\pm 20\%$
Load resistance	100 kOhm min.
Recommended consumption current	<math><1\ \mu\text{A}</math>
Permissible applied voltage	28 VDC max.
Electrical connections	1 m cable (standard)
Displacement speed	<math><5\text{ m/s}</math>
Mechanical life	100 million movement
Case dimensions	33 mm x 33 mm
Case material	Anodized aluminium
Rod diameter	$\varnothing 6\text{ mm}$
Rod material	Stainless steel
Mechanical fixing	Variable brackets
IP rating	IP65
Operating temperature	-20°C ... +80°C
Storage temperature	-30°C ... +90°C

Dimensions



WLP-K-MQS1_DB_2023-03-27_EN

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Measuring range

WLP-K-QS1 (mm)	30	50	75	100	125	130	150	175	200	225
US (Useful Stroke)	30	50	75	100	125	130	150	175	200	225
MS (Mechanical Stroke)	34	54	79	104	129	133	153	178	203	228
L (Total Length)	141	161	186	211	236	241	261	286	311	336

WLP-K-QS1 (mm)	250	275	300	325	350	375	400	450	500	550
US (Useful Stroke)	250	275	300	325	350	375	400	450	500	550
MS (Mechanical Stroke)	253	278	303	328	353	378	403	453	403	553
L (Total Length)	361	386	411	436	461	486	511	561	611	661

WLP-K-QS1 (mm)	600	650	700	750	800	850	900	1000
US (Useful Stroke)	600	650	700	750	800	850	900	1000
MS (Mechanical Stroke)	603	653	703	703	803	853	903	1003
L (Total Length)	711	761	811	861	911	961	1011	1111

Ordering example

Type	WLP-K	-	MQS1	-	500	-	D	-	5K	-	1M
Category											
M	= medium; Ohm (resistance)										
Type of construction											
Q	= quadratic										
Location of electrical connection											
S	= lateral										
Connection type											
1	= cable										
Measurement stroke (mm)	30 ... 1000 mm (see table)										
Linearity (%)											
A	= ±%0.05 (>200 mm)										
B	= ±%0.1 (130 - 200 mm)										
C	= ±%0.2 (75 - 129 mm)										
D	= ±%0.5 (<75 mm)										
Resistance (kOhm)											
5K	= 5 kOhm										
10K	= 10 kOhm										
Electrical connection											
1M	= 1 meter cable (standard), open cable end										
2M5	= 2.5 meter cable (optional), open cable end										

Without prior notice, the products may be subject to modifications that the Manufacturer reserves to introduce as deemed necessary for their improvement.