

Precision Linear Potentiometer DL30 V2

Standard version



The precision linear potentiometers type DL30 provide a 30x30 mm aluminium housing and offer protection class IP60 in the standard version. Optionally protection class IP65 is possible. The smooth running is ensured by permaglide sliding bearings.



The standard version is supplied with 4 clamping claws.

Mechanical Data

- 1.1 Housing.....: Aluminium
- 1.2 Pushrod.....: Stainless steel
- 1.3 Bearing.....: Permagliding bearing
- 1.4 Resistor element.....: Precision wire winding
- 1.5 Slider / wiper tap.....: Noble metal, single
- 1.6 Protection class.....: IP60
- 1.7 Type of connection.....: Cable connection, 3 m
- 1.8 Mounting element.....: Clamping claws
- 1.9 Functional path.....: 30 ... 500 mm
- 1.10 Adjusting speed.....: 1 m / sec.
- 1.11 Lifetime.....: 1×10^6 path

Options

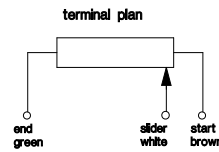
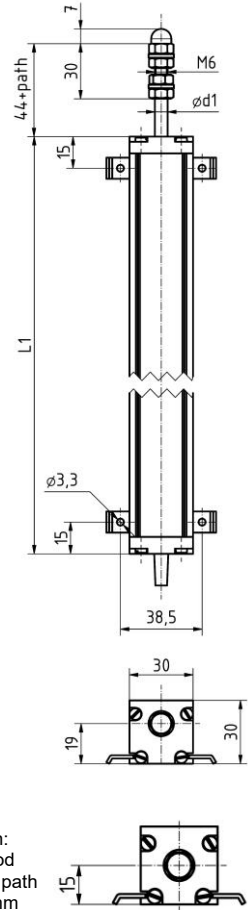
- Short-circuit tracks
- Differing functional path
- Resistance tolerance: $\pm 1\%$
- Pushrod: special length
- Protection class IP65
- Plug connection
- Oilfilling

Accessories

- Adapter plate
- Extended connection cable
- Swivel head

Other versions

- Integrated measuring transducer
- 0/4...20 mA or 0...10 VDC (housing length $L1 = L1 + 50$)
- Linear potentiometer with spring function



Electrical Data

- 2.1 Resistance values, standard....: 1, 2, 5, 10 K-Ohm
- 2.2 Max. resistance value.....: see table
- 2.3 Resistance tolerance.....: $\pm 3\%$
- 2.4 Min. starting resistance.....: 0,05 % of total resistance
- 2.5 Linearity tolerance.....: $\pm 0,3\%$
- 2.6 Insulation Resistance.....: 20 M-Ohm
- 2.7 Test voltage.....: 500 V, 50 Hz
- 2.8 Operating voltage.....: max. 50 V
- 2.9 Total load.....: max. 2 Watt
- 2.10 Slider load current.....: 1 mA (max. lifetime)
- 2.11 Temperature range.....: $-50\text{ }^\circ\text{C} \dots +100\text{ }^\circ\text{C}$
- 2.12 Temperature coefficient.....: 20 ppm/ $^\circ\text{C}$

| Type | path in mm | | $\phi d1$ in mm | max K Ω | L1 in mm | | | | | | | |
|-------------|-----------------|--------------------|-----------------|----------------|----------|------|-----------|----------|-----------|----------|-----------|----------|
| | electr. +0,8 mm | mechan. ± 3 mm | | | cable | plug | cable Tfa | plug Tfa | cable Tfi | plug Tfi | cable Rfi | plug Rfi |
| DL30/ 30 V2 | 30 | 40 | 6 | 25 | 95 | 165 | 95 | 165 | | | | |
| DL30/ 50 V2 | 50 | 60 | 6 | 40 | 115 | 165 | 115 | 165 | 165 | 215 | 165 | 215 |
| DL30/100 V2 | 100 | 110 | 6 | 80 | 165 | 215 | 165 | 215 | 215 | 265 | 215 | 265 |
| DL30/150 V2 | 150 | 160 | 6 | 120 | 215 | 265 | 215 | 265 | 265 | 315 | 165 | 315 |
| DL30/200 V2 | 200 | 210 | 6 | 160 | 265 | 315 | 265 | 315 | | | 315 | 365 |
| DL30/250 V2 | 250 | 260 | 6 | 200 | 315 | 365 | 315 | 365 | | | 365 | 415 |

Paths in excess of 500 mm only in sensor version (0/4...20 mA, 0...10 VDC).

* At construction set calliper spring outside (Tfa) + nominal length ≥ 100 mm, dimension 95 mm + path

| Option |
|---|
| Return spring inside (Rfi) DL30 |
| Construction set calliper spring inside (Tfi) DL30 |
| Construction set calliper spring outside (Tfa) DL30 |
| Construction set plug DL30 |

Scope of delivery includes

| | | |
|----------------|-------|--------|
| Cap nut | 1 pce | 101577 |
| Hexagon nut | 3 pcs | 101578 |
| U-plate | 2 pcs | 101541 |
| Clamping claws | 4 pcs | 104642 |

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