EPLC
RODLESS LINEAR POTENTIOMETER

MAIN CHARACTERISTICS

EPLC is an absolute linear potentiometer transducer without internal rod.
This transducer is characterized by a cursor with integrated coupling sliding on the axis.
The main characteristic is the absence of variations on the electrical output signal outside of the theoretical electrical stroke.

ORDERING CODE

EPLC	500	X	4	C4	A

SERIES
rodless linear potentiometer model EPLC

STROKE
mm from 100 to 1500
see table for stroke availability

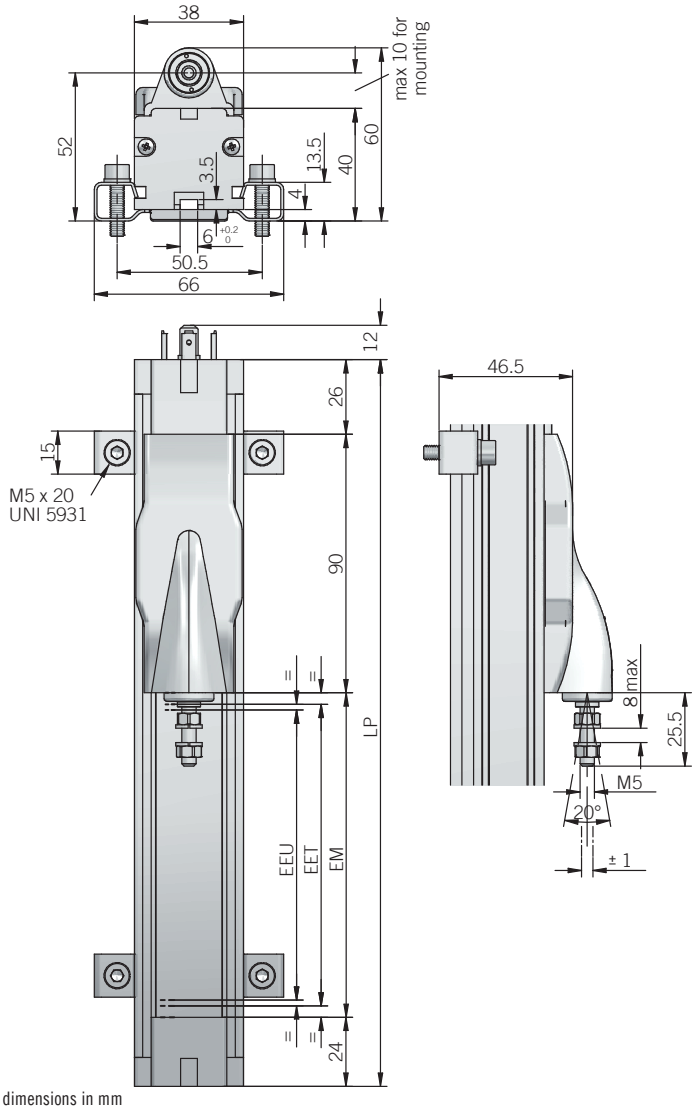
ENCLOSURE RATING
IP 40 X

TRAVEL SPEED
max 4 m/s 4
max 10 m/s 10

OUTPUT TYPE
DIN 43650-A 4 pin connector C4
M16 DIN 43322 5 pin connector C5

OUTPUT DIRECTION
axial A

EPLC

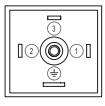


dimensions in mm

CONNECTIONS

Function	4 pin C4	5 pin C5
+	3	3
-	1	1
OUTPUT	2	2
NC	/	/
NC	/	/
⏚	⏚	/

C4 connector (4 pin) DIN 43650-C solder side view FV



C5 connector (5 pin) DIN 45322 solder side view FV

- fixing kit (brackets, screws, grower) included
- female connector not included, please refer to Accessories

ELECTRICAL SPECIFICATIONS

Resolution	virtually infinite
Independent linearity	± 0,05 %
Repeatability	0,01 mm
Resistance tolerance	± 20 %
Recommended cursor current	< 0,1 µA
Resistance temperature coefficient	-200 ... 200 ppm / °C typical
Output voltage temperature coefficient	≤ 5 ppm / °C typical
Power dissipation	3 W at 40 °C / 0 W at 120 °C
Max cursor current	10 mA max
Applicable voltage	60 V max
Electrical insulation	> 100 MΩ, 500 V DC, 1 bar, 2 s
Dielectric strenght	< 100 µA, 500 V AC, 50 Hz, 1bar, 2 s
RoHS	according to 2011/65/EU directive

Important: data are valid if the transducer is used as a ratiometric device with a maximum applicable current ≤ 0,1 µA

MECHANICAL SPECIFICATIONS

Stroke	100 - 150 - 200 - 300 - 400 - 500 - 600 - 700 - 850 - 900 - 1000 - 1250 - 1500 mm
Useful electric stroke (EEU) (+3/-0 mm)	see stroke (mm)
Theoretical electric stroke (EET) (±1 mm)	103 mm (100), 153 mm (150), 204 mm (200), 305 mm (300), 406 mm (400), 509 mm (500), 611 mm (600), 713 mm (700), 865 mm (850), 915 mm (900), 1017 mm (1000),1271 mm (1250), 1521 mm (1500)
Mechanical stroke (EM)	EET + 10mm (100 ... 1500)
Resistance (on the EET)	5 kΩ (100 ... 300) 10 kΩ (400 ... 1000) 20 kΩ (1250 ... 1500)
Case length (LP)	EET + 150mm (100 ... 1500)
Travel speed	4 = 4 m/s max 10 = 10 m/s max
Acceleration	200 m/s² max
Enclosure rating	IP 40 (IEC 60529)
Shock	50 G, 11 ms (IEC 60068-2-27)
Vibration	20 G, 5 ... 2000 Hz (IEC 60068-2-6)
Displacement force	≤ 1,2 N max
Housing material	anodized aluminium / Nylon 66 G 25
Mounting	brackets with variable center-to-center distance with M6 screw ISO4017 - DIN933
Operating temperature[1, 2]	-30° ... +100°C (-22° ... +212°F)
Storage temperature[2]	-50° ... +120°C (-58° ... +248°F)

[1] measured on transducer

[2] condensation not allowed

Installation warning instructions:

- connect the transducer according to the reported connections
- DO NOT use it as a variable resistance
- the transducer calibration has to be done setting the stroke in order to have an output signal between 1 % and 99 % of the voltage level