

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.



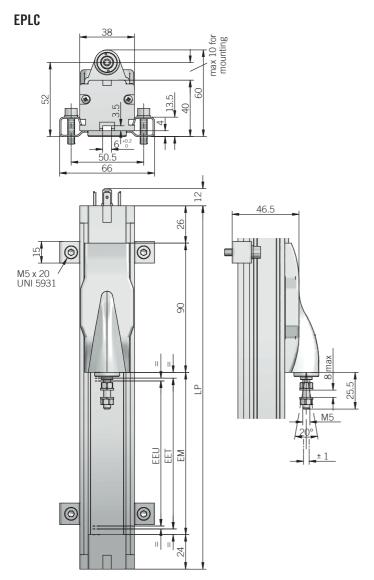




ORDERING CODE	EPLC	500	X	4	C4	A
	rodless linear potentiometer model EPLC mm from 10 see table for stroke a	STROKE 0 to 1500	E RATING IP 40 X TRAVI	EL SPEED 4 m/s 4 0 m/s 10		
			N 43650-A	OUTP 4 pin conn 5 pin conn	PUT TYPE nector C4	RECTION axial A







dimensions in mm

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

C4 connector (4 pin) DIN 43650-C front view



C5 connector (5 pin) DIN 45322 front view



- \cdot fixing kit (brackets, screws, grower) included
- · socket 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 nnm / °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	

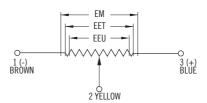
Important: data are valid if the transducer is used as a ratiometric device with a maximum applicable current $\leq 0.1~\mu\text{A}$

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/s ² 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 (0,27 lbs) 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

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







² condensation not allowed