

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. This system eliminates problems due to air compression generated from the insertion of the rod and longer strokes are reached. The main characteristic is the absence of variations on the electrical output signal outside of the theoretical electrical stroke. This transducer is also suitable for being used in explosive environment or in presence of gas or inflammable powders.



Linear potentiometer

Ordering code

EPLC 500 X 4 C4 A

Model of linear potentiometer **EPLC**

Stroke (mm)

100/150/200/250/300/400/500
600/700/850/900/1000/1250

N.B.: Please contact our offices for versions and range availability

Protection class

standard IP40 **X**

Output position

A axial

Output type

C4 4 contacts round connector (IP65)

C5 5 contacts round connector (IP40)

Displacement speed

4 max speed 4 m/s

10 max speed 10 m/s

EPLC

Main characteristics

EPLT is an absolute linear potentiometer transducer. This model is characterized by the absence of cursor and the presence of a sensing system, composed by a moving rod, stainless steel sphere mounted on a threaded prod and a spring. This transducer is suitable for applications where short strokes are requested. Moreover, the connector output is disaligned respect to the axis of the device in order to allow the through rod structure and giving greater robustness. The presence of the spring assures an automatic head positioning making this device suitable for being used in precise applications on cams or on product outputs coming from automatic production lines. EPLT is also characterized by the absence of variations on the electrical output signal outside of the theoretical electrical stroke. This transducer is also suitable for being used in explosive environment or in presence of gas or inflammable powders.



Ordering code

EPLT 100 X 10 P A

Model of linear potentiometer **EPLT**

Stroke (mm)

10/25/50/75/100

N.B.: Please contact our offices for versions and range availability

Protection class

standard IP40 **X**

Output position

A axial

Output type

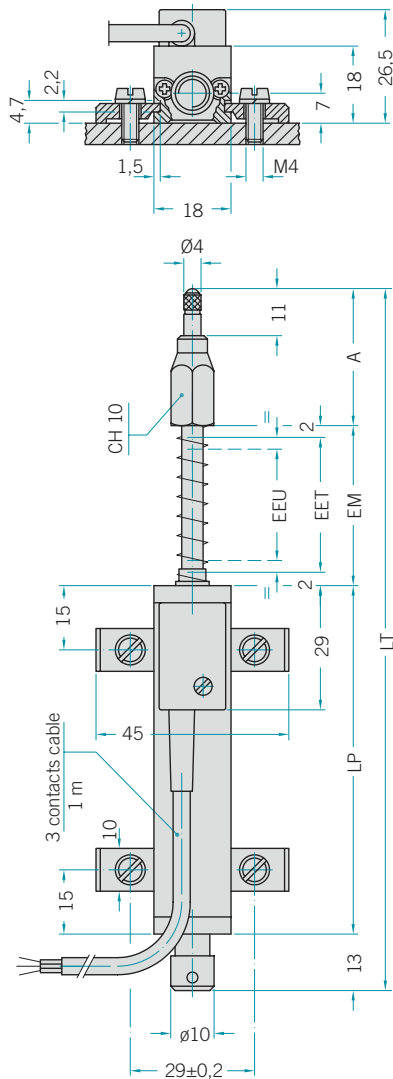
P standard cable length 1 m

C5 3 contacts round connector (IP40)

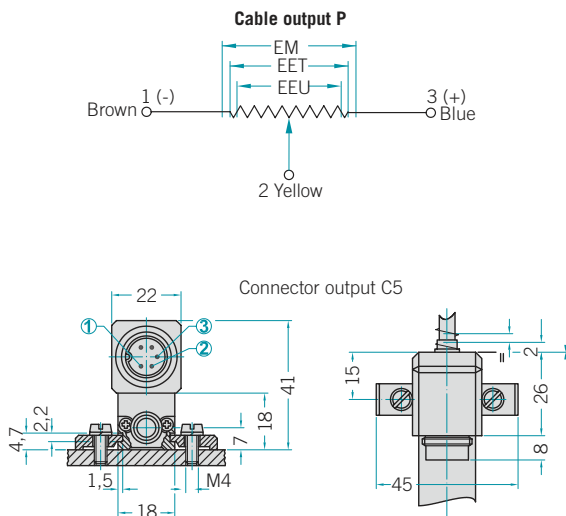
Displacement speed

10 max speed 10 m/s

Mechanical dimensions



Electrical connections



For optional accessories please refer to pg. 10

Technical characteristics

Displacement speed	10 m/s max
Displacement force	4 N max
Electrical insulation	>100 MΩ a 500 VDC, 1 bar, 2 s
Dielectric rigidity	<100 μA a 500 VAC, 50 Hz, 1 bar, 2 s
Protection class	IP40
Explosion proof	According to ATEX CEI EN 50020 2003 (par. 5.4 a)
Life	>100x10 ⁶ uses
Working temperature	-30÷100 °C
Storage temperature	-50÷120 °C
Thermal coefficient of the output voltage	<1,5 ppm/°C
Vibrations	20 G, 5÷2000 Hz
Shock rating	50 G for 11 ms
Resistance tolerance	±20%
Recommended cursor current	0,1 μA max
Max cursor current	10 mA max
Enclosure material	anodized aluminium Nylon 66 G 25
Rod material	stainless steel AISI 303
Mounting	brackets with variable interaxis

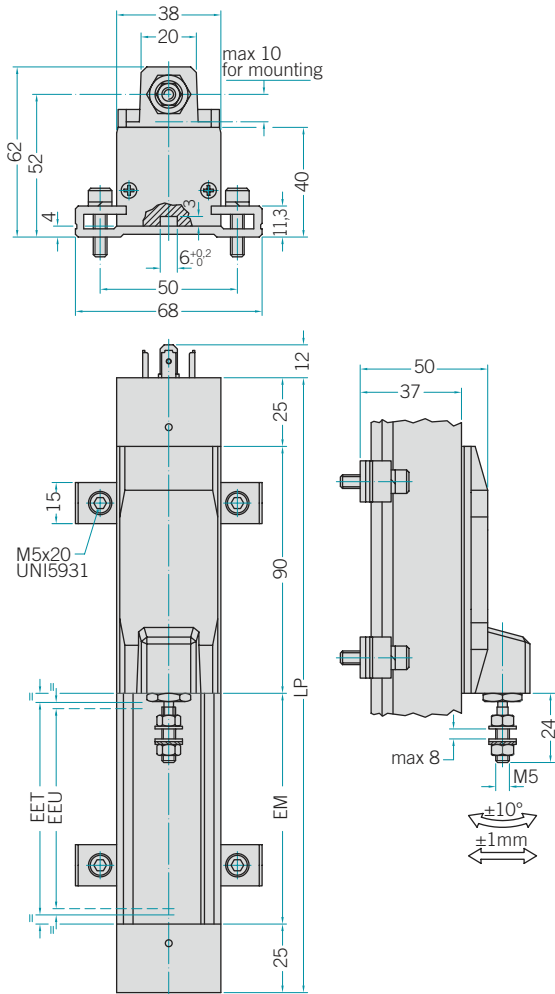
Important: these data are corrected if the transducer is used as voltage divider with a maximum applicable voltage of 0,1μA.

Electrical / mechanical data

Model	mm	10	25	50	75	100
Useful electric stroke (EEU) (+1/-0mm)	mm	10	25	50	76	101
Theoretical electric stroke (EET) ±1 mm	mm	11	26	51	76	101
Mechanical stroke (EM)	mm	15	30	55	81	106
Case length (LP)	mm	48	63	88	114	139
Sensing probe length	mm	32	32	40	40	40
Total length (LT)	mm	108	138	196	221	246
Max applicable voltage	V	14	25	60	60	60
Independent linearity	%	±0,3	±0,2	±0,1	±0,1	±0,1
Resistance (on EET)	kΩ	1	1	5	5	5
Power dissipation 40 °C	W	0,2	0,6	1,2	1,8	2,4

*N.B. For further versions and strokes please contact our offices

Mechanical dimensions

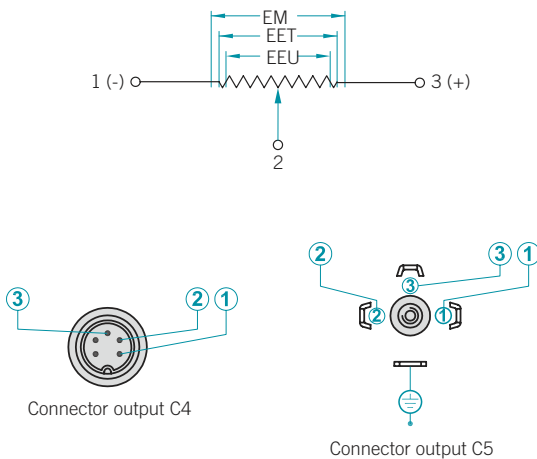


Technical characteristics

Independent linearity	±0,1% (100÷400 mm) ±0,05% (450÷1250 mm)
Displacement speed	4 m/s max (10 m/s max, on request)
Displacement force	1,2 N max
Applicable voltage	60 V max
Electrical insulation	>100 MΩ, 500 VDC, 1 bar, 2 s
Dielectric rigidity	<100 μA, 500 VAC, 50 Hz, 1 bar, 2 s
Power dissipation	3 W, 40 °C 0 W, 120 °C
Protection class	IP40
Explosion proof	According to ATEX CEI EN 50020 2003 (par. 5.4 a)
Life	>25x10 ⁶ m strokes or >100x10 ⁶ uses
Working temperature	-30÷100 °C
Storage temperature	-50÷120 °C
Thermal coefficient of the output voltage	<1,5 ppm/°C
Vibrations	20 G, 5÷2000 Hz
Shock rating	50 G for 11 ms
Acceleration	200 m/s ² max (20 G)
Resistance tolerance	±20%
Recommended cursor current	0,1 μA max
Max cursor current	10 mA max
Enclosure material	anodized aluminium Nylon 66 G 25
Rod material	Nylon 66 GF 40 Latilub 73/13
Mounting	brackets with variable interaxis

Important: these data are corrected if the transducer is used as voltage divisor with a maximum applicable voltage of 0,1μA.

Electrical connections



For optional accessories please refer to pg. 10

Electrical / mechanical data

Model*	100/150/200/250/300/400/500 600/700/850/900/1000/1250
Useful electric stroke (EEU) (+3/-0mm)	It corresponds to the model (mm)
Theoretical electric stroke (EET) (±1mm)	103 mm (100), 153 mm (150), 204 mm (200), 254 mm (250), 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)
Mechanical stroke (EM)	EET+10 mm (100÷1250)
Resistance	5 kΩ (100÷300), 10 kΩ (350÷1000), 20 kΩ (1250)
Case length (LP)	EET+150 mm (100÷1250)

*N.B. For further versions and strokes please contact our offices