

LINEAR POTENTIOMETER WITH BALL TIP

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 tip with a spring.

This transducer is suitable for applications where short strokes are requested.

The presence of the spring assures an automatic head positioning making this device suitable for being used in precise applications on cams or to control products coming from automatic production line. EPLT is also characterized by the absence of variations on the electrical output signal outside of the theoretical electrical stroke.



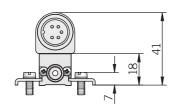


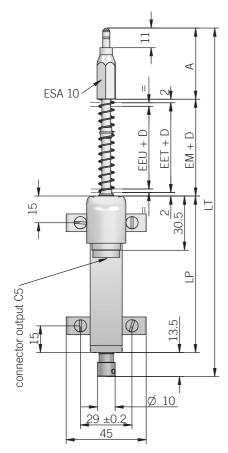


ORDERING CODE	EPLT	100	X	10	Р	A
	SERIES linear potentiometer with ball tip EPLT 10 / 25 / 50 /	STROKE 75 / 100				
	please contact our offices for ot I	ner strokes E nclosur	IP 40 X	E L SPEED 0 m/s 10		
		M16 I	cable (st	OUT! tandard leng 5 pin coni	PUT TYPE	









dimensions in mm

CONNECTIONS		
Function	Cable P	5 pin C5
+	blue	3
-	brown	1
OUTPUT	yellow	2
NC	/	/
NC	/	/
_	shield	/

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



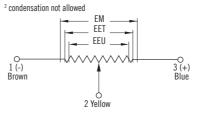
- · fixing kit (brackets, M4x10 screws, washer) and tip with ball included
- $\cdot\,$ female connector not included, please refer to Accessories

ELECTRICAL SPECIFICATIONS						
Resolution	virtually infinite					
Stroke	mm	10	25	50	75	100
Independent linearity	%	± 0,3	± 0,2	± 0,1	± 0,1	± 0,1
Resistance tolerance	± 20 %					
Recommended cursor current	< 0,1 μΑ					
Output voltage temperature coefficient	< 1,5 ppm / °C					
Power dissipation at 40 °C (0 W at +120 °C)	W	0,2	0,6	1,2	1,8	2,4
Max cursor current	10 mA max					
Max applicable voltage	٧	14	25	60	60	60
Electrical insulation	$>$ 100 M Ω , 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 $\leq 0.1~\mu\text{A}$

≤ 0,1 μn						
MECHANICAL SPECIFICATIONS						
Stroke	mm	10	25	50	75	100
Useful electric stroke (EEU) (+1/-0 mm)	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
Resistance (on EET)	kΩ	1	1	5	5	5
Case length (LP)	mm	48	63	88	114	139
Sensing probe length	mm	32	32	40	40	40
Additional length (D)	mm	-	-	-	5	11
Total length (LT)	mm	108	138	196	251	307
Travel speed	10 m/s 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	≤ 4 N					
Housing material	anodized aluminium / Nylon 66 G 25					
Rod material	1.4305 / AISI 303 stainless steel					
Mounting	brackets with variable center-to-center distance					
Life	$>$ 25 x 10^6 m strokes or $>$ 100 x 10^6 operations					
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
- $\cdot\;$ DO NOT use it as a variable resistance
- $\cdot\,$ 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



