

**MAIN FEATURES**

EPLA is an absolute linear potentiometer assuring great reliability even in tough applications with heavy vibrations and shocks.

The groove on the enclosure of the transducer represents an excellent alternative to the usual system of fastening with brackets.

Installation is also made simpler by the absence of variations on the electrical output signal outside of the theoretical electrical stroke.

EPLA is the right solution in machinery for material processing such as injection presses for plastic, rubber and so on.

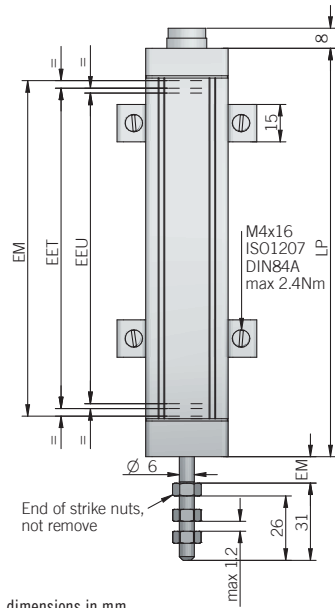
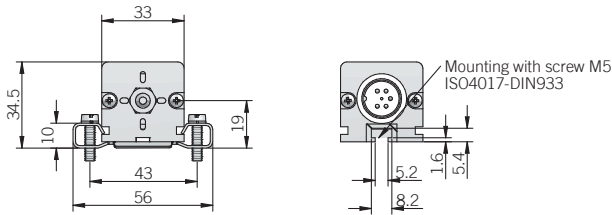


**ORDERING CODE**

**EPLA 200 X 10 C5 A**

<b>SERIES</b> linear potentiometer model <b>EPLA</b>					
<b>STROKE</b> mm from <b>50</b> to <b>900</b> see table for stroke availability					
<b>ENCLOSURE RATING</b> IP 60 <b>X</b> IP 65 <b>S</b>					
<b>TRAVEL SPEED</b> max 10 m/s <b>10</b>					
<b>OUTPUT TYPE</b> cable (standard length 1 m) <b>P</b> 3 pin connector <b>C3</b> DIN 43650-A 4 pin connector <b>C4</b> DIN 43322 5 pin connector <b>C5</b>					
<b>OUTPUT DIRECTION</b> axial <b>A</b>					

EPLA



dimensions in mm

ELECTRICAL SPECIFICATIONS

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

<b>Stroke</b>	50 - 100 - 150 - 200 - 300 - 350 - 400 - 450 - 500 - 600 - 750 - 900 mm
<b>Useful electric stroke (EEU) (+ 3 / - 0 mm)</b>	see stroke (mm)
<b>Theoretical electric stroke (EET) (±1 mm)</b>	EEU + 3 mm (50 ... 150), EEU + 4 mm (200 ... 300), 355 mm (350), 406 mm (400), 457 mm (450), 508 mm (500), 609 mm (600), 762 mm (750), 914 mm (900)
<b>Mechanical stroke (EM)</b>	EEU + 9 mm (50 ... 150), EEU + 10 mm (200 ... 300), 361 mm (350), 412 mm (400), 463 mm (450), 518 mm (500), 619 mm (600), 772 mm (750), 924 mm (900)
<b>Resistance (on the EET)</b>	5 kΩ (50 ... 600) 10 kΩ (750 ... 900)
<b>Case length (LP)</b>	EEU + 63 mm (50 ... 150), EEU + 64 mm (200 ... 300), 415 mm (350), 466 mm (400), 517 mm (450), 572 mm (500), 673 mm (600), 826 mm (750), 978 mm (900)
<b>Travel speed</b>	10 m/s max
<b>Acceleration</b>	200 m/s <sup>2</sup> max
<b>Enclosure rating</b>	X = IP 60 (IEC 60529) S = IP 65 (IEC 60529)
<b>Shock</b>	50 G, 11 ms (IEC 60068-2-27)
<b>Vibration</b>	20 G, 5 ... 2000 Hz (IEC 60068-2-6)
<b>Displacement force</b>	3,5 N typical (IP 60) / 15 N typical (IP 65)
<b>Housing material</b>	anodized aluminium / Nylon 66 G
<b>Pull shaft material</b>	1.4305 / AISI 303 stainless steel
<b>Mounting</b>	brackets with variable center-to-center distance or M5 ISO4017 - DIN933 screw
<b>Life</b>	> 25 x 10 <sup>6</sup> m strokes or > 100 x 10 <sup>6</sup> manoeuvres
<b>Operating temperature<sup>1,2</sup></b>	-30° ... +100°C (-22° ... +212°F)
<b>Storage temperature<sup>2</sup></b>	-50° ... +120°C (-58° ... +248°F)

<sup>1</sup> measured on transducer

<sup>2</sup> 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

CONNECTIONS

Function	Cable	3 pin C3	4 pin C4	5 pin C5
+	blue	3	3	3
-	brown	1	1	1
OUTPUT	yellow	2	2	2
NC	/	/	/	/
NC	/	/	/	/
⊖	shield	/	⊖	/

C3 connector (3 pin)

C4 connector (4 pin)

C5 connector (5 pin)

solder side view FV

DIN 43650-A  
solder side view FV

DIN 45322  
solder side view FV



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

