EPLA

BASE MOUNTING LINEAR POTENTIOMETER

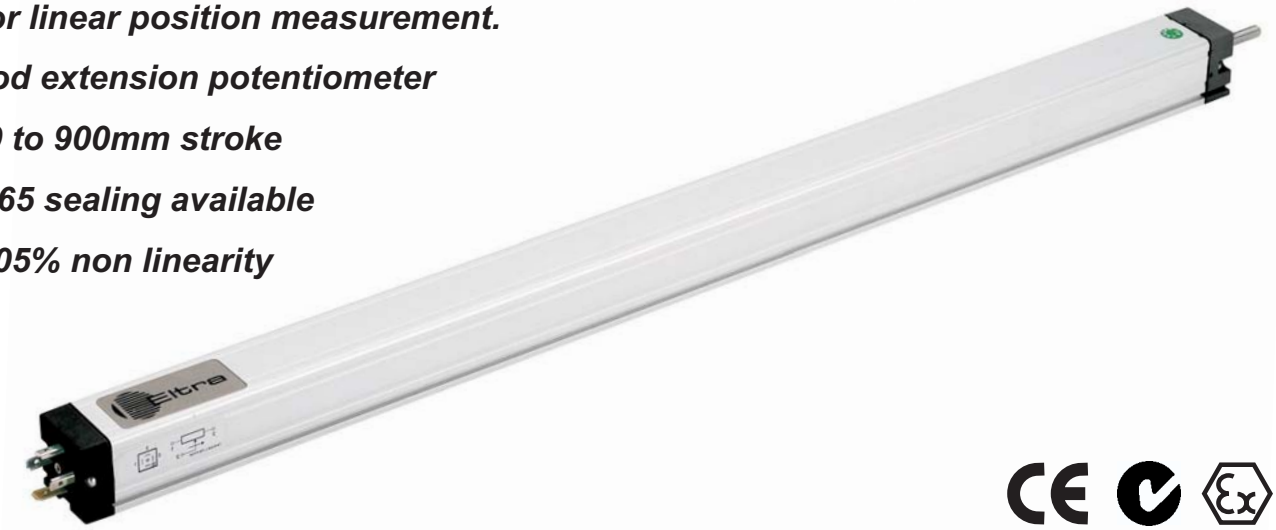
For linear position measurement.

Rod extension potentiometer

50 to 900mm stroke

IP65 sealing available

0.05% non linearity



The EPLA is a high precision rectilinear potentiometer for industrial applications. It has a 3 wire analog resistive output which is absolute so the reading is maintained after loss of power. It is designed for position measurement in materials handling, mining, process control and woodworking or plastic moulding machines.

IP65 shaft and connector sealing is available and electrical stroke length can be upto 900mm. It is designed to be mounted on a flat surface and uses sliding and locking brackets. This enables the potentiometer to be adjusted axially to the correct position when installing. There is a choice of connector styles available.

ORDERING INFORMATION

EPLA	200	X	5	C5	A

POTENTIOMETER MODEL
EPLA

ELECTRICAL STROKE
50,100,150,200,300,350, 400,450,500,600,750,900mm

PROTECTION
standard IP60: ***X***
optional IP65: ***S***

DISPLACEMENT SPEED
maximum speed 5m/sec: ***5***

OUTPUT TYPE
flying cable (1 metre): ***P***
3 pin round connector (IP40): ***C3***
4 pin square connector (IP65): ***C4***
5 pin round connector (IP40): ***C5***

OUTPUT POSITION
axial: A

EAepla_ft A.B.N.: 94 009 232 535

Continuous development may necessitate changes in specifications without notice.

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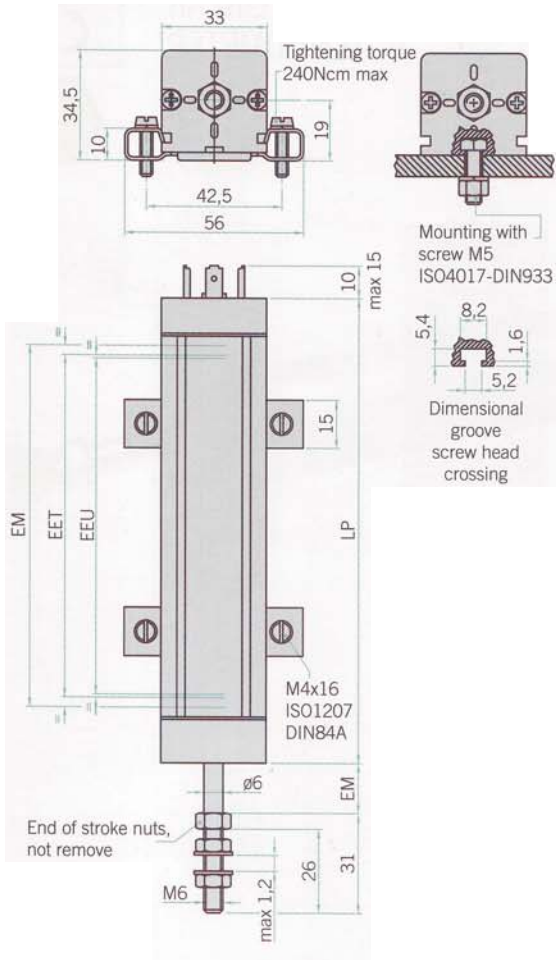
DIMENSIONS

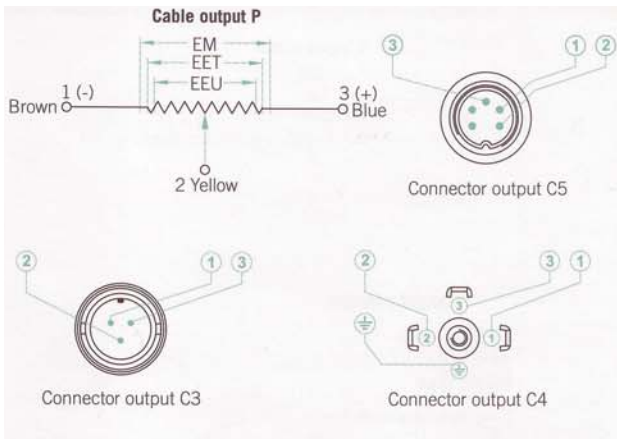


SPECIFICATIONS

Independent linearity	±0,05%
Repeatability	0,01 mm
Displacement speed	5 m/s max
Displacement force	2 N max (IP60) 10 N max (IP65)
Applicable voltage	60 V max
Electrical insulation	100 MΩ, 500 VDC, 1 bar, 2 s
Dielectric rigidity	< 100 µA, 500 VAC, 50 Hz, 1bar, 2 s
Power dissipation	3 W, 40 °C 0 W, 120 °C
Protection class	IP60 (IP65 on request)
Explosion proof	According to ATEX CEI EN 50020 2003 (par. 5.4 a)
Life	>25x10⁶ m strokes or >100x10⁶ uses
Working temperature	-30÷100 °C
Storage temperature	-50÷120 °C
Thermal coefficient of the resistence	-200÷200 ppm/°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/s² 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	stainless steel AISI 303
Mounting	brackets with variable interaxis or screw M5 ISO4017-DIN933

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

CONNECTIONS



Installation warning instructions:
- Connect the transducer according to the reported connections (don't use it as a variable resistance)
- The transducer calibration has to be done setting the stroke in order to have an output signal between the 1% and 99% of the value of operating voltage.

ELECTRICAL/MECHANICAL DATA

Model*	50/100/150/200/300 350/400/450/500
Useful electric stroke(EEU) (+3/-0mm)	It corresponds to the model (mm)
Theoretical electric stroke (EET) (±1mm)	EEU+3 mm (50÷150), EEU+4 mm (200÷300), 355 mm (350), 406 mm (400), 457 mm (450), 508 mm (500)
Mechanical stroke (EM)	EEU+9 mm (50÷150), EEU+10 mm (200÷300), 361 mm (350), 412 mm (400), 463 mm (450), 518 mm (500)
Resistance (on the EET)	5 kΩ (50÷500)
Case length (LP)	EEU+62 mm (50÷150), EEU+63 mm (200÷300), 414 mm (350), 465 mm (400), 516 mm (450), 571 mm (500)

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