



## TP 1 – Bar Potentiometer



Certificate: ATEX



### Use:

A bar potentiometer serves for measuring a hydraulic cylinder extension e.g. in the system of hydraulic mine reinforcement.

### Description:

The TP1 potentiometer consists of a stainless steel case and a bar, where a printed circuit is inserted with resistors and switching magnetic reeds.

A permanent magnet which covers the bar is fixed in the wall of a hydraulic cylinder. By changing the position of the hydraulic cylinder the magnet moves and gradually switches on reed contacts. They switch on resistors and thus total resistance of the potentiometer is changed. The bar length as well as potentiometer resistance are optional and depends on the order.

The bar potentiometer is ended with a bushing from which a connecting cable leads between the potentiometer and an electronic converter.

The cable length is optional. The cable is ended with a connector. The TP1 potentiometer can work together with a CODE 1 electronic converter. An analogue signal is emitted from the CODE 1 converter which enters the data concentrator. This analogue signal serves for automatic control of the movement of the reinforcement hydraulic cylinders.

The TP1 potentiometer is connected in an intrinsically safe operation and made as Eial model. It is certified according to the European ATEX directive.

### Technical Parameters:

Bar length	828 mm
Measurement range	0-36k $\Omega$ ( $\pm$ 10%) TP1-36 version 0-49k $\Omega$ ( $\pm$ 10%) TP1-50 version
Model	Exia I
Weight	0.5kg
Bar material	Stainless steel

**The catalogue has only those selected important parameters for your final decision. For project designs always ask for the user's guide for this product and any engineering consultation about possible uses.**