

The potentiometer transducer IM36-11EX-I/24VDC isolates signals from 3-wire or 5-wire potentiometers and transfers these as standard analog signals from the Ex to the safe area. The resistance value of the potentiometer's wiper contact, ranging from 0 Ω to the nominal resistance value (final value) of the potentiometer, is detected and processed linearly (see fig.).

A potentiometer is defined by its nominal value. Any potentiometer with a nominal resistance value within a range of 800...20000 Ω may be connected. Thus common potentiometer types, e.g. with a

nominal resistance value of 1 k Ω or 10 k Ω , may be used. The permissible line resistance may not exceed 50 Ω at a potentiometer resistance of 800 Ω .

The devices feature galvanic isolation between input circuit, output circuit and power supply.

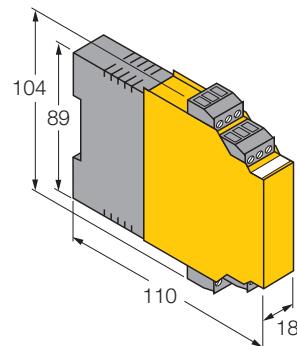
The device is equipped with one current output (0...20 mA).

A green LED indicates operational readiness.

- **Intrinsically safe input circuits EEx ia**
- **Application area according to ATEX : II (1) G**
- **transmission of potentiometer signals from the explosion hazardous area**
- **potentiometer resistance rating: 800...20 kOhm**
- **Removable terminal blocks**
- **Galvanic isolation of input circuits, output circuits and supply voltage**

potentiometer amplifiers**IM36-11EX-I/24VDC**

Type	IM36-11EX-I/24VDC
Ident-No.	7509525

Dimensions

Operational voltage range:	19 ... 29 VDC
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Input circuits	Potentiometer
Potentiometer input	
Cable resistance	$\leq 50 \Omega$
Voltage on resistor	5 VDC
Nominal resistance	800...20000 Ω k Ω

Output circuits	0...20 mA
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Ex approval acc. to conformity certificate

Ex approval acc. to conformity certificate	TÜV 99 ATEX 1405	
Application area	II (1) G	
Protection type	[EEx ia] IIC	
Max.output voltage U_o	≤ 13.8 V	
Max. output current I_o	≤ 35 mA	
Max. output power P_o	≤ 121 mW	
Characteristic	Linear	
External inductance/capacitance L_o/C_o	EEEx ia IIC	EEx ia IIB
Lo [mH]	20,0	100,0
Co [nF]	760	4900

Degree of protection	IP20
Housing length	104 mm
Housing width	18 mm
Housing height	110 mm
Weight	124 g
Mounting instruction	Mounting on DIN rail or mounting panel
Housing material	polycarbonate/ABS
Electrical connection	4 x 3-pole removable terminal blocks, reverse polarity protected, screw connection
Terminal cross-section	1 x 2.5 mm ² / 2 x 1.5 mm ²