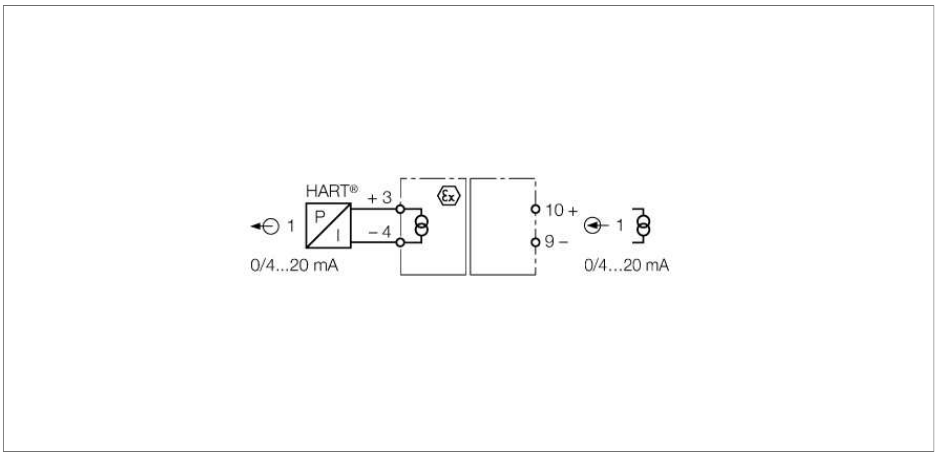
Analog signal isolator
1-channel
IME-AO-11Ex-Hi/L



The analogue data transmitter IME-AO-11Ex-i/L features 1 channel and the input circuit is intrinsically safe.

The standard current signal is galvanically isolated and transmitted from the safe to the Ex-area without attenuation (1:1).

The output circuit is equipped with a short circuit protected power source. Intrinsically analog actuators like I/P converters (e.g. at control valves) or displays can be applied in the Ex area.

The device is loop-powered.

- **Intrinsically safe output circuit Ex ia**
- **Application area acc. to ATEX: II (1) G, II (1) D, II 3G**
- **SIL 2**
- **Output isolator, 1-channel**
- **HART® transmissible**
- **Connection of positioner, displays etc.**
- **Complete galvanic separation**

Edition • 2013-07-13T20:18:57+02:00

Hans Turck GmbH & Co.KG ● D-45472 Mülheim an der Ruhr ● Witzlebenstraße 7 ● Tel. 0208 4952-0 ● Fax 0208 4952-264 ● more@turck.com ● www.turck.com

interface modul

Analog signal isolator
1-channel
IME-AO-11Ex-Hi/L

TURCK
Industrial Automation

Type code	IME-AO-11Ex-Hi/L
Ident no.	7541194
Nominal voltage	Loop-powered
Power consumption	≤ 0.75 W
Power loss, typical	≤ 0.18 W
Voltage input	max. 30 VDC
Current input	0…20 mA
Control circuits	Current limiting 42 mA
Probe voltage	Udrop=2V+360Ω*Iin
Output circuits	0 … 20 mA
Output current	0...20 mA
Output voltage	max. 13 V
Load resistance current output	≤ 0.4 kΩ
Limit frequency	≤ 65 Hz
Rise time (10-90%)	≤ 10 ms
Dropout time (90…10%)	≤ 10 ms
Linearity deviation	≤ 0.1 % of full scale
Reference temperature	23 °C
Galvanic separation	
Test voltage	2.5 kV
Ex approval acc. to conformity certificate	TÜV 08 ATEX 554800
Application area	II (1) G, II (1) D
Protection type	[Ex ia] IIB/IIC; [Ex iaD]
Max.output voltage U_o	≤ 13.3 V
Max. output current I_o	≤ 97 mA
Max. output power P_o	≤ 322 mW
Rated voltage	250 V
Characteristic	linear
Internal inductance/capacitance L_i/C_i	negligibly small

External inductance/capacitance L_o/C_o

Ex ia	IIC		IIB	
Lo[mH]	2	0.2	2	0.2
Co[µF]	0.42	0.91	2.7	5.5

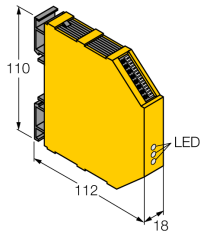
Ex approval acc. to conformity certificate	TÜV 08 ATEX 554818 X
Application area	II 3 G
Protection class for belonging equipment	Ex nA [nL] IIC/IIB T4
Max.output voltage U_o	≤ 13.3 V
Max. output current I_o	≤ 97 mA
Max. output power P_o	≤ 322 mW
Rated voltage	250 V
Characteristic	linear
Internal inductance/capacitance L_i/C_i	negligibly small

External inductance/capacitance L_o/C_o

Ex nL	IIC		IIB	
Lo [mH]	5	0.5	10	1
Co [µF]	0.51	1.2	2.9	5.8

Approval	SIL 2
MTTF	600 years acc. to SN 29500 (Ed. 99) 40 °C
Protection class	IP20
Ambient temperature	-25…+70 °C
Storage temperature	-40…+80°C
Dimensions	112x 18x 110 mm
Weight	122 g
Mounting instruction	For mounting on DIN rail
Housing material	Polycarbonate/ABS
Electrical connection	cage clamp terminals made of Beryllium-Bronze
Terminal cross-section	1.5 mm²

Dimensions



Edition • 2013-07-13T20:18:57+02:00

Hans Turck GmbH & Co.KG ● D-45472 Mülheim an der Ruhr ● Witzlebenstraße 7 ● Tel. 0208 4952-0 ● Fax 0208 4952-264 ● more@turck.com ● www.turck.com