

The standard current signal is galvanically isolated and transmitted via the 2-channel isolating transducer IM35-22EX-HI/24VDC from the safe to the Ex-area without attenuation (1:1). In addition to the analog signals, digital HART®communication signals can be transferred bidirectionally.

Typical applications are the control of I/P converters (e.g. at control valves/actuators) or of indicator displays in explosion hazard-

dous areas.

The actuators are connected to the output terminal 1/2 and 4/5. Handheld Terminals [HHT] can be connected to the output and input terminals 7/10 and 8/9.

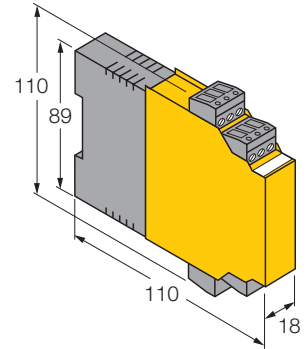
Test sockets (Ø 2 mm) on the removeable terminal blocks are used for signal control.

- **Intrinsically safe output circuits EEx ia**
- **Application area according to ATEX : II (1) GD**
- **power supply of intelligent actuators with HART®communication**
- **input circuits: 0/4...20 mA**
- **output circuits: 0/4...20 mA, intrinsically-safe**
- **galvanic isolation between input circuits and output circuits and supply voltage**
- **removable terminal blocks, with screwable 2mm test socket**
- **Galvanic isolation of input circuits, output circuits and supply voltage**

analogue signal transmitters
2-channel
IM35-22EX-HI/24VDC

Type	IM35-22EX-HI/24VDC
Ident-No.	7506515
Nominal voltage	24 VDC
Operational voltage range:	19 ... 29 VDC
Power consumption	≤ 2.2 W
Current input	
Current input	0-20 mA
Input resistance	110 Ω
Output current	2* 0...20 mA
Load resistance current output	≤ 0.6 kΩ
Limit frequency	< 10 Hz
Rise time (10-90%)	90 ms
Dropout time (90...10%)	90 ms
Measuring accuracy	≤ 0.2 % of full scale
Linearity deviation	≤ 0.1 % of full scale
Drift	< 0.05 % /annually
Effect of load impedance	< 0.02 % of full scale
Effect of supply voltage	< 0.5 % of full scale
Temperature drift	≤ 0.01 % / K
Test voltage	4.0 kV
Constant voltage supply	250 V

Dimensions



Ex approval acc. to conformity certificate	TÜV 03 ATEX 231 1			
Application area	II (1) GD			
Protection type	[EEx ia] IIC			
Max. output voltage U_o	≤ 15.9 V			
Max. output current I_o	≤ 60 mA			
Max. output power P_o	≤ 470 mW			
Characteristic	trapezoidal			
External inductance/capacitance L_o/C_o				
	EEx ia IIC	EEx ia IIB		
L_o [mH]	5,0	0,5	10,0	0,5
C_o [nF]	135	330	860	2200

Ex approval acc. to conformity certificate	TÜV 06 ATEX 553057 X
Application area	II 3 G
Protection type	II 3 G Ex nA [nL] IIC/IIB T4
Max. output voltage U_o	≤ 15.9 V
Max. output current I_o	≤ 60 mA
Max. output power P_o	≤ 470
External inductance/capacitance L_i/C_i	innere Induktivität: vernachlässigbar innere Kapazität: 5nF

External inductance/capacitance L_o/C_o				
	EEx ia IIC	EEx ia IIB		
L_o [mH]	5,0	0,5	10,0	0,5
C_o [nF]	290	640	1700	3900

Ex approval acc. to conformity certificate	IS-1.105
Application area	[Ex ia] IIC/IIB, Ex nA [nL] IIC/IIB T4
Protection type	EEx nA nC [nL] IIC/IIB T4
Ex approval acc. to conformity certificate	IECEx TUN 06.00012X

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2-channel
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Indication

Operational readiness green

Degree of protection

Ambient temperature	IP20
Housing length	-25 ...+ 70 °C
Housing width	110 mm
Housing height	18 mm
Weight	110 mm
Mounting instruction	163 g
Housing material	Mounting on DIN rail or mounting panel
Electrical connection	polycarbonate/ABS
	4 x 3-pole removable terminal blocks with test socket, reverse polarity protected, screw connection
Terminal cross-section	1 x 2.5 mm ² / 2 x 1.5 mm ²