Pressure Transmitter Explosion proof Model E-10, standard version Model E-11, flush diaphragm





Applications

- Wellhead monitoring
- Refining / Petrochemical
- Offshore platforms / pipelines
- Gas measurement

Special Features

- FM-approved Explosion proof for Class I Division 1 hazardous locations
- ATEX-approved Flameproof for II 2G Ex d II C
- Available with 4 ... 20 mA, 2-wire or 1 ... 5 V, 3-wire output signals
- Engineered to meet harsh demands
- Retrofits many existing applications







WIKA Data Sheet PE 81.27

 Fig. left
 Pressure transmitter E-10 / ATEX

 Fig. center
 Pressure transmitter E-10 / FM, CSA

 Fig. right
 Pressure transmitter E-11 (open wires) / FM, CSA

Description

The Types E-10 and E-11 explosion proof / flameproof pressure transmitters are specifically designed to meet the durability and performance requirements of industrial applications.

These pressure transmitters feature an industry standard 4 ... 20 mA, 2-wire signal output (optional signal output 1 ... 5 V), NEMA 4X (IP 67) ingress protection, and are extremely resistant to vibration, moisture instrusion and pressure spikes. They are applicable for acid gas apllications and therefore they provide extra resistance against sulfide stress cracking when exposed to gases containing sulphur.

The transmitters are engineered to meet Class I Division 1 Explosion proof protection according to FM, CSA or II 2 G Ex d II C according to ATEX for installation in hazardous environments.

Each transmitter undergoes extensive quality control testing and calibration to achieve an accuracy of ≤ 0.5 %. In addition, each pressure transmitter is temperature compensated to assure accuracy and long term stability when exposed to severe ambient temperature variations.

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Data Sheets for related models: Pressure transmitter for general applications; model S-1X; see data sheet PE 81.01 Intrinsically Safe Pressure Transmitter for hazardous environments; model IS-2X; see data sheet PE 81.50 Pressure Transmitter Non-incendive; model N-1X; see data sheet PE 81.26





Over pressure safety Burst pressurebar245101017353580Burst pressure Pressure rangesbar2.44.86121220.5424296Pressure ranges barbar25406010016025040060010Over pressure safety Burst pressurebar96400550800100012001702 ² 2400 ² 30Wacuum, gauge pressure, compound range, absolute pressure are available10nly model E-10.1010012001702 ² 2400 ² 30'1 Only model E-10.2 ² For model E-11:the value specified in the table applies only when sealing is realised with th sealing ring underneath the hex. Otherwise max. 1500 bar applies.1Materials(other materials see WIKA diaphragm seal program)Image: sealing seali	Specifications		Mode	el E-10) / E-1	1							
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• Ambience $^{4)}$ °C $-30 \dots +100 \circ C \{-40 \dots +105 \circ C\}$ $-22 \dots +212 \circ F \{-40 \dots +221 \circ F\}$ • Storage $^{4)}$ °C $-30 \dots +105 \circ C \{-40 \dots +105 \circ C\}$ $-22 \dots +221 \circ F \{-40 \dots +221 \circ F\}$ • Also complex*********************************		۰ <u>۲</u>	-30	100 °C /-/	10 10	5 °C1	-21	0 1010	°E (_40	1221 °EI			
• Storage 4^{1} °C $-30 \dots +105 °C \{-40 \dots +105 °C\}$ $-22 \dots +221 °F \{-40 \dots +221 °F\}$ 4^{1} Also complies with EN 50178, Tab. 7, Operation (C) 4K4H, Storage (D) 1K4, Transport (E) 2KCompensated temp, range°C $0 \dots +80 °C$ $+32 \dots +176 °F$ Temperature coefficients withincompensated temp range% of span $\leq 0.2 / 10 K$ Mean TC of zero% of span $\leq 0.2 / 10 K$ Pressure equipment directive97/23/ECEMC directive89/336/EEC emission (class B) and immunity according to EN 61 326Directive ATEX of equipment intended for use in potentially explosive atmospheresATEXCategory 5^{1} 2GEx-protectionATEXCategory 5^{1} 2GEx-protection type 5^{1} Read the operating instructions and safety relevant data in the EC-type examination certificate in any case (KEMA 05 ATEX 2240 X)													
4) Also complies with EN 50178, Tab. 7, Operation (C) 4K4H, Storage (D) 1K4, Transport (E) 2K Compensated temp. range °C 0 +80 °C +32 +176 °F Temperature coefficients within +32 +176 °F compensated temp range ■ Mean TC of zero % of span ≤ 0.2 / 10 K E-conformitiy ■ Pressure equipment directive 97/23/EC ■ Directive ATEX of equipment intended for use in potentially explosive atmospheres 94/9/EC Ex-protection ATEX Category ⁵) 2G Ignition protection type ⁶ Read the operating instructions and safety relevant data in the EC-type examination certificate in any case (KEMA 05 ATEX 2240 X)													
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HF-immunity V/m 10		examinatio	on certific			•							
	-												
BURST KV 4	BURST	KV	4										
Shock resistance g 1000 according to IEC 60068-2-27 (mechanical shock)	Shock resistance	g	1000 ac	cording to	DIEC 600	68-2-27	(mechai	nical shoo	ck)				
Vibration resistance g 20 according to IEC 60068-2-6 (vibration under resonance)	Vibration resistance	g	20 acco	ording to II	EC 60068	8-2-6	(vibratio	n under r	esonance)			

Specifications		Model E-10 / E-11
Wiring protection		
Short-circuit proofness		Sig+ towards UB-
Reverse polarity protection		UB+ towards UB-
Weight	kg	Approx. 0.2 (0.4 lbs)

{} Items in curved brackets are optional extras for additional price.

Dimensions in mm

Ingress Protection IP per IEC 60529. The ingress protection classes specified only apply while the pressure transmitter is connected with female connectors that provide the corresponding ingress protection.



For installation and safety instructions see the operating instructions for this product. For tapped holes and welding sockets please see Technical Information IN 00.14 for download at www.wika.de -Service

Pressure connections E-11, flush diaphragm



For installation and safety instructions see the operating instructions for this product.

For tapped holes and welding sockets please see Technical Information IN 00.14 for download at www.wika.de -Service

Wiring details



Further information

You can obtain further information (data sheets, instructions, etc.)_



Specifications and dimensions given in this leaflet represent the state of engineering at the time of printing. Modifications may take place and materials specified may be replaced by others without prior notice.

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