

INTRINSICALLY SAFE PRESSURE TRANSMITTERS FOR HAZARDOUS APPLICATIONS



SERIES 23 (S) Ei SERIES 25 (S) Ei, 26 Ei

Series 23 (S) Ei, 25 (S) Ei and 26 Ei pressure transmitters are all ATEX approved for use in Hazardous Areas where there is a high risk of explosion.

Series 23 Ei / 26 Ei

The Series 23 Ei / 26 Ei achieve high stability (especially in low pressure ranges) with large piezoresistive capsules and stress-free, floating mountings with O-rings.

Series 23 S Ei / 25 Ei / 25 S Ei

The 23 S Ei / 25 Ei / 25 S Ei offer a complete range of „Ported“ and „Flush Diaphragm“ pressure transmitters for ranges of 1bar and above. Still giving high stability and accuracy but without any internal O-rings. This is achieved using either an all welded 316L stainless steel housing and diaphragm or an all welded 316L housing fitted with a brazed Nickel diaphragm.

– A complete range

Absolute, barometric, gauge (positive and negative).
16 nominal pressure ranges. Current or voltage output.

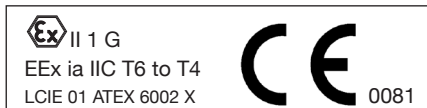
– Flexibility

A modular concept is used, with fast and economical production achieved by using off-the-shelf sensors. Numerous options and variations are available to meet customers' specific requirements: Pressure ranges, mechanical- and electrical interface, process- and plug connection, signal outputs etc.

– Reliability / Quality

Each transmitter is subjected to severe test- and calibration procedures. Transmitters are manufactured and tested according to ISO 9001 / EN 29001.

Classification:



Series 23 Ei



Series 25 Ei



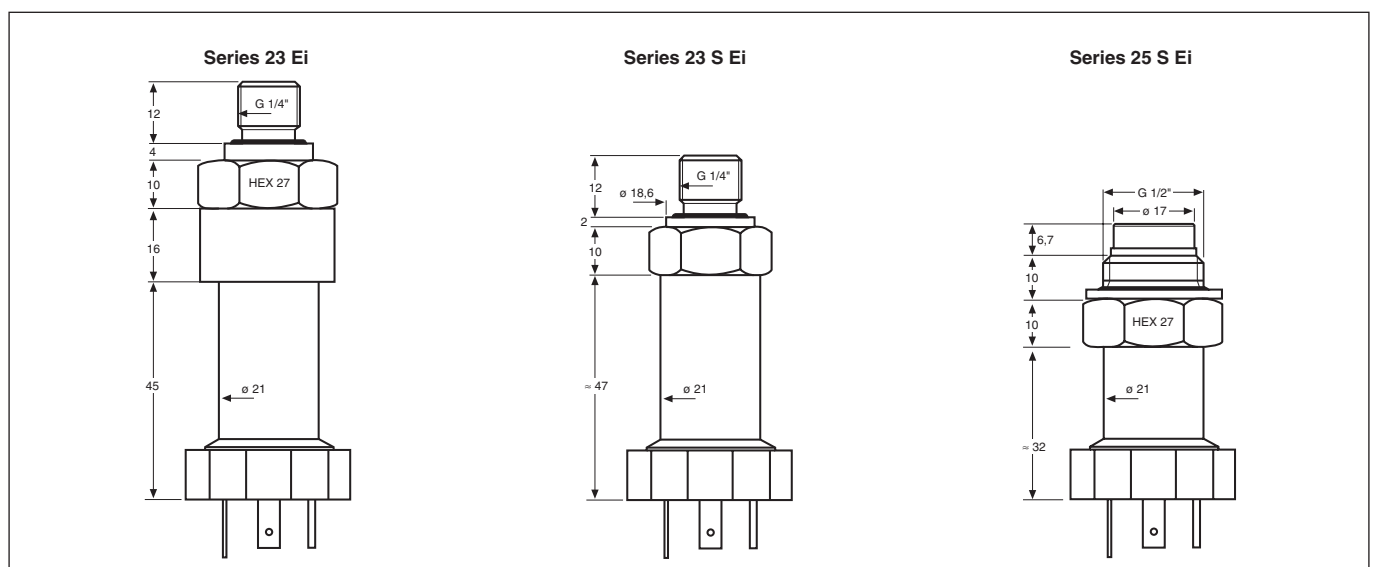
Series 23 S Ei



Series 25 S Ei



Series 26 Ei



Subject to alterations

12/06

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Specifications

	Pressure Ranges (FS) in Bar									
PR/PAA-23 Ei, PR/PAA-25 Ei / 26 Ei	-1	-0,5	-0,3	0,3	0,5	1	2	5	10	20
PR/PAA-23 S Ei, PR/PAA-25 S Ei							2	5	10	20
PA-23 Ei, PA-25 Ei						1	2	5	10	20 50 100 200 400 600 1000
PA-23 S Ei							2	5	10	20 50 100 200
PA-25 S Ei							2	5	10	20
Overpressure	-1	-1	-1	2,5	2,5	3	4	10	20	40 100 200 300 600 900 1200

PAA: Absolute. Zero at vacuum PA: Sealed Gauge. Zero at atmospheric pressure (at calibration day) PR: Vented Gauge. Zero at atmospheric pressure

Linearity⁽¹⁾ + Hysteresis + Repeatability
EX-Temperature Classes

± 0,5 %FS
T6: -40 °C to 70 °C
T5: -40 °C to 85 °C
T4: -40 °C to 100 °C
-10...80 °C

⁽¹⁾ best straight line through zero

Compensated Temperature Range
Temperature Coefficients...

of Zero, in %FS/°C		of Sensitivity
0,005 typ.	0,01 max.	0,02 %/°C max.
0,010 typ.	0,02 max.	0,02 %/°C max.
0,015 typ.	0,03 max.	0,02 %/°C max.
0,025 typ.	0,05 max.	0,02 %/°C max.

- Range > 1 bar
- Range 1 bar
- Range 0,5 bar
- Range 0,3 bar

Stability

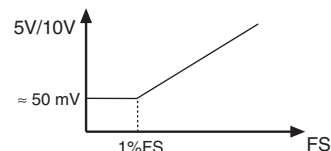
0,1 %FS typ. 0,2 %FS max.
2 mbar typ. 4 mbar max.

- Range > 2 bar
- Range ≤ 2 bar

Signal Output / Type	4...20 mA / 2-Wire	0...10 V / 3-Wire
Supply	10...30 VDC	15...30 VDC
Load Resistance (Ω)	(U-10 V) / 0,02 A	> 5 k
Frequency Response	5 kHz	1 kHz

Electrical Connector	Plug DIN 43650
Dead Volume Change	< 0,1 mm ³
Material in Media Contact	Stainless steel 316L (DIN 1.4435), hard solder
Protection	IP 65
Weight (versions with plug)	23 Ei / 25 Ei: ≈ 260 g 23 S Ei / 25 S Ei: ≈ 130 g
Insulation	> 100 MΩ@50 V
Endurance	> 10 million cycles 0...100% FS at 25 °C

Signal at zero for 0...5 V (0...10 V) transmitters



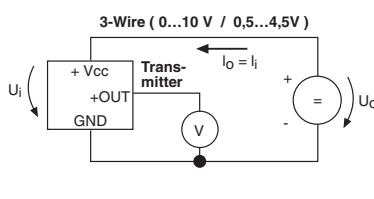
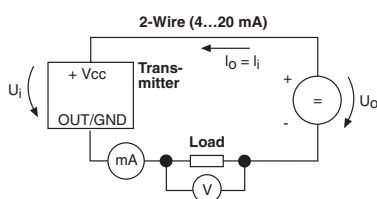
Options

Pressure Port	On request
Electrical Output	Cable (with reference tube for gauge); protection IP 68
Pressure Ranges	Any range between 0,3 and 1000 bar, various units (PSI etc.)
Oil Filling	Fluorocarbon oil (O ₂ -compatible), olive-oil, low temperature oil

Electrical Connections

2-Wire Transmitter	3-Wire Transmitter	DIN 43650 Connector	Cable
-	0 V / GND	1	white
+OUT	OUT	2	red
+IN	+IN	3	black

Output Signal	4...20 mA / 0...10 V	0,5 V...4,5 V
Supply Voltage U _i	≤ 30 V	≤ 17,1 V
Current Input I _i	≤ 100 mA	≤ 100 mA
Power Consumption P _i	≤ 1,2 W	≤ 1,2 W
Capacitance C _i	0 nF	366 nF
Inductivity L _i	0 mH	0 mH



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