

FLAMEPROOF PRESSURE TRANSMITTERS

FOR HAZARDOUS APPLICATIONS



SERIES 23 Ed

SERIES 25 Ed

These piezoresistive pressure transmitters with pressure proof housing are approved for use in high explosion risk areas. They provide stable and accurate measurements of absolute and gauge pressures of liquid and gaseous media in the pressure range between 0,2 and 300 bar.

- **Series 23 Ed** Linearity 0,5 %FS, optional 0,1 and 0,2 %FS
- **Series 25 Ed** Linearity 0,5 %FS, optional 0,1 and 0,2 %FS
Flush Diaphragm

Flexibility

A modular concept uses the selection of off-the-shelf flameproof capsules, allowing rapid customised production. Numerous options and variants are available, fully adapted to the customer's requirements: Mechanical and electrical interface, ports, signal outputs, materials in media contact, oil filling, oxygen-compatibility, special features.

Reliability / Quality

These transmitters use the highly stable KELLER Series 10 capsules, proven in millions of applications throughout the world. Each capsule is subjected to severe test and calibration procedures.

Ex-Classification

 EEx d IIC T6 to T4 LCIE 03 ATEX 6082X	 0081
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T4 for $T_a \leq 100 \text{ }^\circ\text{C}$, T5 for $T_a \leq 95 \text{ }^\circ\text{C}$, T6 for $T_a \leq 80 \text{ }^\circ\text{C}$

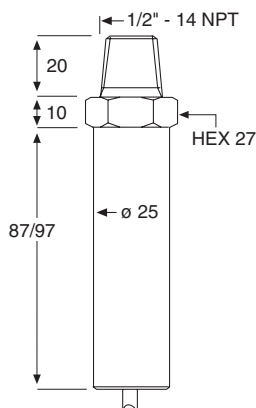


Series 23 Ed

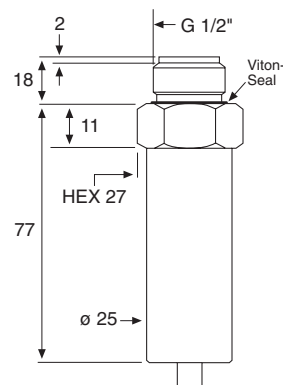


Series 25 Ed

Series 23 Ed



Series 25 Ed



SPECIFICATIONS

	Pressure Ranges (FS) in Bar													
PR-23/25 Ed	-1	-0,5	-0,2	0,2	0,5	1	2	5	10	20				
PAA-23/25 Ed				0,2	0,5	1	2	5	10	20				
PA-23 Ed						1	2	5	10	20	50	100	200	300
PA-25 Ed						1	2	5	10	20	50	100		
Overpressure	-1	-1	-1	2,5	2,5	3	4	10	20	40	100	200	300	450

PAA: Absolute. Zero at vacuum PA: Sealed Gauge. Zero at 1000 mbar abs. PR: Vented Gauge. Zero at atmospheric pressure

Linearity ⁽¹⁾ + Hysteresis + Repeatability	0,2 %FS typ.	0,5 %FS max.
Storage-/Operating Temperature	-30...100 °C	
Compensated Temperature Range	-10...80 °C	
Temperature Coefficients...	<u>of Zero (%FS/°C)</u>	<u>of Sensitivity (%/°C)</u>
· FS > 1 bar	0,005 typ.	0,01 max.
· FS 1 bar	0,010 typ.	0,02 max.
· FS 0,5 bar	0,015 typ.	0,03 max.
· FS 0,2 bar	0,025 typ.	0,05 max.
Stability		
· FS > 2 bar	0,1 %FS typ.	0,2 %FS max.
· FS ≤ 2 bar	1 mbar typ.	2 mbar max.

⁽¹⁾ best straight line, based zero

	2-Wire	3-Wire	3-Wire
Signal Output	4...20 mA	0...20 mA	0...10 V
Supply (U)	10...28 Vcc	10...28 Vcc	13...28 Vcc
Load Resistance (R _L)	(U-10 V) / 0,02 A	(U-5 V) / 0,02 A	> 5 k

Electrical Connection	PUR-cable, length 2 m (with PE-sheath and reference tube for gauge). Others on request.
Volumetric Change	< 0,1 mm ³ / FS
Pressure Connection	See drawings front page
Material in Media Contact	Stainless steel 1.4435 (316L), Viton
Protection	IP65
Weight	PR/PA/PAA ≈ 200 g
Insulation	> 10 MΩ @ 50 V
Endurance	> 10 million cycles 0...100 %FS at 25 °C
Frequency Response	250 Hz (< 1 bar), 1 kHz (≥ 1 bar)

Options	
Pressure Connection / Electrical Out	On request / Many possibilities
Pressure Ranges	All pressure ranges between 0,2 and 300 bar
Linearity / Specifications	0,1 and 0,25 %FS / Customer-specific on request
Material in Contact with Media	Hastelloy C, monel, platinum, nickel, tantalum, gold-plated
Oil Filling	Fluorized oil (O ₂ -compatible), olive-oil, low temperature oil
Frequency Response	Auf Anfrage

