

Pressure transmitter

The pressure transmitters of type series 680 with piezoresistive measuring elements have compensated, calibrated and amplified sensor signals which are available as standardized voltage or current outputs.

The housing which contains the electronic components can be supplied with various pressure and electrical connections.

All metal parts made of stainless steel are water-tight welded. With this sophisticated building-block system, individual designs for meeting specific application needs are possible.

The distinct advantages

- **Effective overload protection due to chemically etched chip diaphragm and specially designed glass glaze**
- **Fast and affordable customer-specific solutions due to building-block system, even for small quantities**
- **Compact construction with SMD technology enhances operational reliability in the presence of shock and vibration**
- **100% sealed against media because fully welded**

Pressure transmitter

-1 up to 1000 bar



Pressure range gradation and executions see order code selection table


Description



Technical data

Overload	3x measurement range, min. 3 bar, max. rupture pressure
Rupture pressure	> 200 bar (0.1 ... 25 bar)
	> 850 bar (> 25 ... 600 bar)
	1500 bar (> 600 ... 1000 bar)
Accuracy	acc. initial point setting DIN 16086,
	inclusive hysteresis and repeatability

	< +/- 0.5 % fs	
	< +/- 0.25 % fs	
	< +/- 0.1 % fs (on request)	
Temperature influences	Compensated temperature ranges: 0 to 70 °C, -25 to +85 °C	
Temperature error	Zero point (0 up to 70 °C)	
	0 ...< 0.5 bar	+/- 0.060 % fs/°C
	0.5 ...< 2 bar	+/- 0.030 % fs/°C
	2 ... 600 bar	+/- 0.015 % fs/°C
	Zero point (-25 up to +85 °C)	
	0 ...< 0.5 bar	+/- 0.080 % fs/°C
	0.5 ...< 2 bar	+/- 0.040 % fs/°C
	2 ... 600 bar	+/- 0.020 % fs/°C
	Operating range (0 up to 70 °C)	+/- 0.015 % fs/°C
	Operating range (-25 up to +85 °C)	+/- 0.020 % fs/°C
	Storage -40 up to +125 °C	
Dynamic response	Response time < 1 msec.	
	Suitable for static and dynamic measurements.	
Outputs and power supply	See order code selection table	
Load	supply voltage - 6 V 0 - 20 mA:  [Ohm] 0.02 A	
	max. 1 kOhm	
	supply voltage - 9 V 4 - 20 mA: max.  [Ohm] 0.02 A	
Intrinsically safe version	Intrinsically safety II 1G EEx ia IIC T3...T6	
	Output	4 - 20 mA
	Power supply	10- 30 VDC
	Load:	

	supply voltage - 10 V max.  [Ohm] 0.02 A	
Current consumption	0 - 5 V	2.5 mA
	0 - 10 V	2.5 mA
	0 - 20 mA	26 mA fs (max. 30 mA)
	4 - 20 mA	20 mA fs (max. 31 mA)
Adjustable versions	Potentiometer for adjustment of all pressure ranges	
	(only with DIN 43650 connector and round binder connector 723,	
	can be screwed up)	