KELLER

Piezoresistive Transmitters

for industrial applications

Series 23 R

Plan 80710.34 (standard)

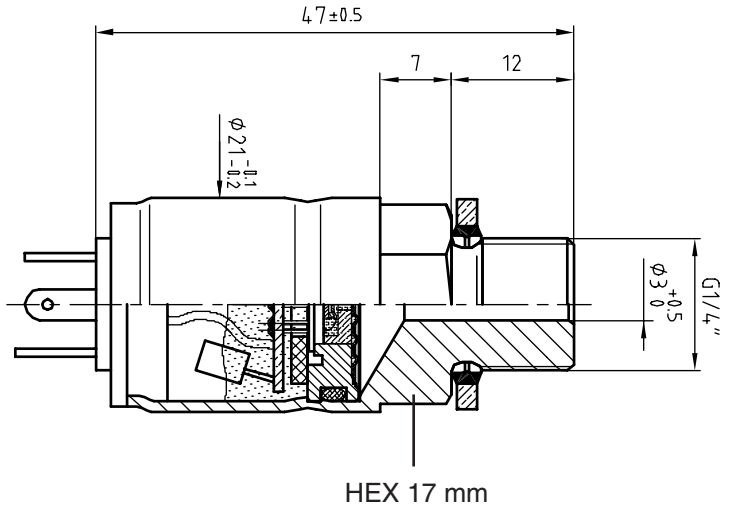
These pressure transmitters have an excellent cost-performance ratio. The sensor is a silicon pressure measuring cell, mounted on a header. The header with the sensor is inbuilt in a stainless steel housing, filled with silicone oil. A thin steel diaphragm transfers the pressure over the oil cushion onto the sensor. The amplifier circuit is soldered to the glass feed throughs. The print and wires are protected for humidity and vibration by a silicone resin. Each unit is fully tested and compensated. Auccracy is achieved by very large scale predictable production quantities of the pressure capsule (over 2,5 million produced today).

SPECIFICATIONS

	Pressure Ranges (FS) in Bar					
PR-23 R	-1	-0,5	0,5	1	2	5
PAA-23 R			0,5	1	2	5
PA-23 R				1	2	5
Overpressure	-1	2,5	2,5	3	4	10

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

	2-Wire	3-Wire
Output (ratiometric@Excitation)	4…20 mA	0…10 V
Excitation	8…28 V	13…28 V
Total Accuracy at RT	± 1% FS	
Total Error Band (0…+50 °C)	± 2% max.	
Stability		
· Range > 2 bar	0,1% FS typ.	0,2% FS max.
· Range ≤ 2 bar	2 mbar typ.	4 mbar max.
Operating Temperature	-25…+80 °C	
Compensated Temperature Range	0…+50 °C	
Protection	IP 65	
Vibration	20 g (5...2000 Hz, max. amplitude ± 3 mm), according to IEC 68-2-6	
Shock	20 g sinusoidal 11 msec.	
CE-Conformity	EN 50081-1, EN 50082-2	
Insulation	> 100 MΩ / 500 V	
Standard Pressure Port / Seals	G 1/4" male / Viton® (USIT-seal or O-ring)	
Connector	mPm incl. mating plug	
Weight (Connector Version)	≈ 60 g	
Housing / Diaphragm	Stainless steel DIN 1.4435 (AISI 316L)	



	3 Wire	2 Wire
1	GND	OUT/GND
2	+OUT	
3	+Vcc	+Vcc