



# 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. Accuracy is achieved by very large scale predictable production quantities of the pressure capsule (over 2,5 million produced today).

### SPECIFICATIONS

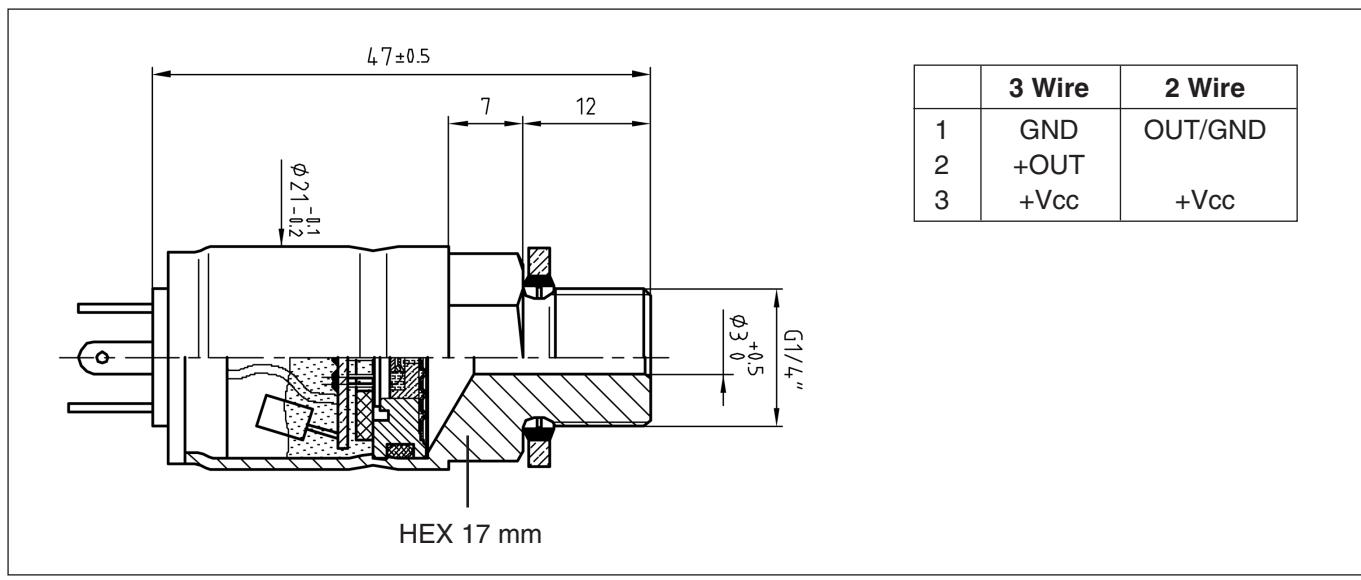
|              | PRESSURE RANGES (FS) IN BAR |      |     |   |   |    |
|--------------|-----------------------------|------|-----|---|---|----|
| PR-23 R      | -1                          | -0,5 | 0,5 | 1 | 2 | 5  |
| PAA-23 R     |                             |      | 0,5 | 1 | 2 | 5  |
| PA-23 R      |                             |      |     | 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 %FS 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)                             |              |



Subject to alterations

12/02