

Pressure Transmitter

21Y

The pressure transmitters of the 21Y series have no internal seal and a high insulation voltage of 300 VDC, and are extremely resistant to environmental influences. The sophisticated compensation circuit makes it possible to specify a narrow total error band. A wide range of pressure connections and electrical connections are available to choose from.



Pressure Ranges: 0...2 to 0...1000 bar

Accuracy: $\pm 0,5$ %FS

Total Error Band: $\pm 1,5$ %FS @ -10...80 °C

Interfaces: 4...20 mA, 0...10 V

Temperature Range: -40...100°C.

21C

The pressure transmitters of the 21C series with radiometric 0,5...4,5V output combine chip-in-oil measuring cells with conventional electrical connections and pressure connections, making them ideal for industrial use. The transmitters are extremely resistant to environmental influences and deliver accurate measurement results over a temperature range of -40 °C to 125 °C.



Pressure Ranges : 0...2 to 0...1000 bar

Accuracy : $\pm 0,25$ %FS

Total Error Band : $\pm 1,5$ %FS @ -10...80 °C

Interfaces : 0,5...4,5 V ratio.

Temperature Range : -40...125 °C

21G

Weighing only 30 grams, the smallest known transmitter with fully welded stainless steel wetted parts. High EMC protection. Protection class 1P65/1P67. Highest stability due to special heat treatment and annealing procedures Series 21G, is the result of a 20 year long development programme for industrial transmitters. 'G' stands for 'Graduate'; this product has received 'summa cum laude'.... the highest honours. The standard mPm electrical connector overlaps the body to remind us of 'mortar board hats' on graduation day. The Series 21 G combines KELLER's 30 year long experience of manufacturing industrial pressure transmitters, with all of the newest technological advantages available in the industry today. This product incorporates the very latest techniques for welding, signal processing and circuitry, automated compensation and adjustment. Each transmitter is subjected to temperature and pressure cycles during manufacture. The laser trimming final adjustment gives unrivalled accuracies over a wide temperature range. The result is a



cost-effective affordable transmitter that has a specification better than other similarly priced products, and equal to many very expensive transmitters.

Pressure Transmitter 23R

Special Features :

- * Piezoresistive silicon pressure transmitter
- * Crevice-free construction of pressure port
- * All welded construction
- * Excellent cost to performance ratio
- * Gauge & absolute versions available

Ideal for compressors, pharmaceutical , pumps, scientific instruments, & ideal replacement for pressure switches when used with controllers & plc.



23SY-25Y

The Y-line transmitters have an extremely small temperature error. This is achieved using an additional circuit containing a temperature sensor that subdivides the temperature range into fields that are 1,5 Kelvin (K) wide. The TK zero and TK compensation values are calculated for each field and programmed into the additional circuit. During operation, these values are fed into the analogue signal path depending on the temperature. Each temperature is the «calibration temperature» for this transmitter. The accuracy thereof is mainly determined by linearity. 120 fields are available, representing a possible temperature range of 180 K. The wider the temperature range, the greater the amount of testing that is needed to minimise the inaccuracy of the mathematical model



The Series 23SY / 25Y product line is outstanding due to its extreme ruggedness towards electromagnetic fields. The limits of the CE standard are undercut by a factor of up to 10 with conducted and radiated fields.

21SC

These piezoresistive silicon pressure transmitters are produced on the new KELLER automatic brazing lines, making possible the mass production of high-quality pressure transmitters at low cost. This new technology allows the crevice-free construction of the pressure port without using seals or O-rings. In the brass sensor line (Series 21 MC), a steel insert and a nickel diaphragm is brazed into a brass housing. In the steel sensor line (Series 21 SC), all parts are of stainless steel (AISI 316 L). The header with the silicon pressure sensor and glass lead-through pins is welded to the steel insert underneath the oil filling. The tiny chip-on-board amplifier (weight ≈1 gram) with the KELLER-specific “PROGRES” circuit is mounted directly on the glass feed-through pins. It is then encapsulated in silicone compound for humidity and vibration protection.

