

PRESSURE TRANSMITTER

Agressive Media

High Pressure

TPR-21/TPR-22

Desin
Instruments

DESCRIPTION

TPR-21

- PRESSURE RANGES BETWEEN 0 ... 1 bar AND 0 ... 400 bar AND -1 ... 0 bar
- STANDARD: G1/2" OPEN PORT OPTION: G1/2" QUASI-FLUSH (OPTION : CLEANED FOR OXYGEN APPLICATIONS)

TPR-22

- PRESSURE RANGES BETWEEN 0...400 bar AND 0...2200 bar
- G1/2" OPEN PORT
- WIDE RANGE OF ELECTRICAL AND MECHANICAL CONNECTIONS
- EXCELLENT LINEARITY

TPR-21 and TPR-22

- CUSTOMER-DESIGNED PRESSURE RANGES
- OUTPUT SIGNALS 4 ... 20 mA / 2-WIRE-SYSTEM, 4 ... 20 mA / 0 ... 10 V / 3-WIRE-SYSTEM AND OTHER VOLTAGE OUTPUTS
- ACCURACY ACC. TO IEC 60770: 0,5% FSO
- SMALL THERMAL EFFECT
- SHORT RESPONSE TIME
- EXCELLENT LONG TERM STABILITY
- HIGH RESISTANCE AGAINST ELECTRICAL FAULTS CAUSED BY INCORRECT WIRING, SHORT-CIRCUIT AND OVER VOLTAGE
- RUGGED AND RELIABLE UNDER MOST CONDITIONS
- LONG OPERATING LIFE
- CUSTOMER-DESIGNED APPLICATIONS

TPR-21



TPR-22



CE

FEATURES

TPR-21

The pressure transmitter **TPR-21** is a supplement to our industrial pressure transmitters - TPR series.

It is available with mechanical connections:

- **Standard** with open pressure port G1/2" with ceramic diaphragm.
- **Option** with quasi-flush ceramic sensor with pressure port G1/2" for low pressure 0 ... 1 up 0 ... 25 bar

All versions are particularly suitable for viscous, pasty or strongly contaminated media

For aggressive media which are not compatible with stainless steel pressure port material PVDF is recommended; e.g. medical technology, water purification as well as chemical industry.

TPR-22

The TPR-22 pressure transmitter is specially designed for use in hydraulic equipment under severe operation conditions. Demands of machine and equipment manufacturers for ruggedness and reliability have been optimally fulfilled.

These characteristics in connection with the outstanding instrumentation data of the TPR-22, as well as excellent offset stability, offer the user an easy-to-use, reliable and rugged pressure transmitter that can be handled easily to the hydraulic user. The stainless steel sensor is welded to pressure port.

TUV
PRODUCT SERVICE
EMPERIA
CERTIFIED
COMPANY
ISO 9001

127.57

SPECIFICATIONS

TPR-21

- Pressure (bar):

Relative: -1.0 0.1 0.16 0.25 0.4 0.6 0.10 0.16 0.25 0.40 0.60 0.100 0.160 0.250 0.400

Absolute: - 0.1 0.16 0.25 0.4 0.6 0.10 0.16 0.25 - - - - -

Overpressure: 4 4 4 4 10 10 20 40 40 100 100 200 400 400 800

- Accuracy: $\leq \pm 0,5\%$ FSO

- Process connection: 1/2" GAS DIN 3852

- Output signal: ... 4-20 mA 2 W (0-20 mA / 0-10 V 3 W option)

- Electrical connection: connector DIN 43650

- Voltage: between 12 and 36 Vcc

- Permissible Load:

2 wires (UB (V) -12 V) / 0,02 A

3 wires $\leq 500\Omega$ / $> 1\text{ M}\Omega$

- Thermal effect: $\leq \pm 0,05\%$ FSO / 10 V

- Operating Temperature range

Sensor: -25 to +135 °C

Ambient: -25 to +85 °C

Storage: -40 to +125 °C

- Materials:

Housing Stainless steel 1.4305

Diaphragm Ceramic Al_2O_3 96%

Seal FKM / $P_N \geq 100$ bar: NBR

TPR-22

- Pressure (bar):

Range: 0...400 0...1000 0...1600 0...2000 0...2200

Overpressure: 800 1400 2200 2800 2800

- Accuracy: $\leq \pm 0,5\%$ FSO

- Process connection: 1/2" GAS EN 837

- Output signal: 4-20 mA 2 W (0-10 V 3 W option)

- Electrical connection: connector DIN 43650

- Voltage: between 12 and 36 Vcc

- Permissible Load:

2 wires (UB (V) -12 V) / 0,02 A

3 wires $> 1\text{ M}\Omega$

- Thermal effect: $\leq \pm 0,05\%$ FSO / 10 V

- Operating Temperature range

Sensor: -40 to +150 °C

Ambient: -25 to +85 °C

Storage: -40 to +125 °C

- Materials:

Housing Stainless steel 1.4301

Sensor Stainless steel 1.4305

Seals Stainless steel 1.4301

HOW TO ORDER

MODELS:

TPR-21

TPR-22

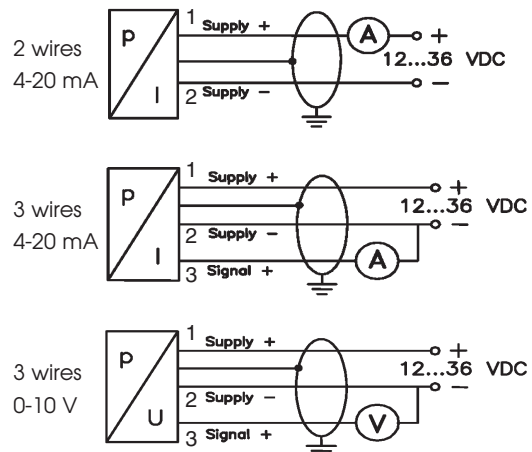
Options:

- Special ranges

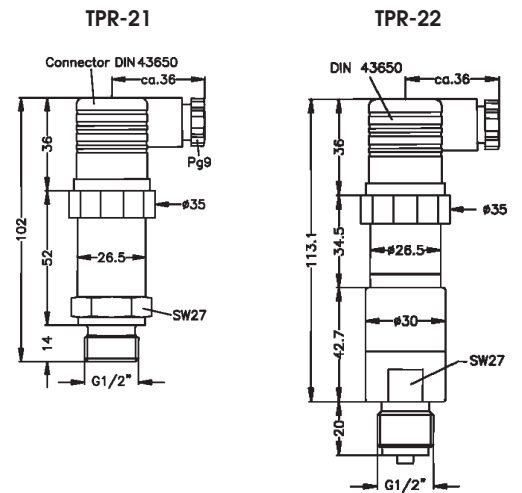
- Absolute pressure

- 0/10 V and 0-20 mA 3 wires output

WIRING DIAGRAM



DIMENSIONS



Weight: appr. 0,200 kg

Weight: appr. 0,200 kg

APPLICATIONS

TPR-21

- Medical Equipment
- Environmental Technology
- Galvanic Coating
- Oxygen Applications

TPR-22

- Machine tools
- Hydraulic presses
- Injection molding machines
- Handling equipment and mobile hydraulics
- Lifting platforms
- Test stands.