

# PRESSURE TRANSMITTER

## Flush Diaphragm

# TPM-18

**Desin**  
Instruments

### DESCRIPTION

- PRESSURE RANGE BETWEEN 0 ... 1 bar AND 0 ... 400 bar
- OUTPUT SIGNALS 4 ... 20 mA / 2W , 0 ... 20 MA / 3W  
0 ... 10 V / 3W AND OTHER VOLTAGE OUTPUTS ON REQUEST
- OPTIONAL: STAINLESS STEEL FIELD HOUSING, FIXED CABLE  
OUTLET
- EXCELLENT LINEARITY
- SMALL THERMAL EFFECT
- EXCELLENT LONG TERM STABILITY
- HIGH RESISTANCE AGAINST ELECTRICAL FAULTS (CAUSED  
BY INCORRECT WIRING, SHORT- CIRCUIT AND  
OVERVOLTAGE)
- RUGGED AND RELIABLE UNDER MOST CONDITIONS
- LONG OPERATING LIFE
- WIDE RANGE OF ELECTRICAL CONNECTIONS
- DIFFERENT FILLING FLUIDS
- OPTIONAL: EX: II 1 G EEX IA IIC T4 (TÜV 99 ATEX 1504 X)
- CUSTOMER-DESIGNED APPLICATIONS



### FEATURES

The **TPM-18** is a pressure transmitter designed for process measurement. It has a flush diaphragm and can be ordered either with a screw thread basing on an inch **TPM-18** proportionally converts pressure into an electric signal. It is suitable for gases, fluids and higher viscous media.

Static and dynamic pressure measurement with pressure ranges span from 1 bar up to 400 bar acc. to DIN 16128, as well as special pressure ranges are available. The transmitter can be used for all media, which are compatible with 1.4571 (AISI 316) and 1.4404 (AISI 316L). In connection with an inch thread the sealing material is FKM, for pressure bigger than 100 bar NBR; other materials on request.

A variety of standard output signals and electrical connections make the **TPM-18** covering a wide field of applications.

As complement, we manufacture a wide range of measuring and control instruments to use with the **TPM-18** transmitters. This instruments are configurable 4-20 mA input capability.

- Configurable PID controllers  
**BS-1000, LS-3000 and HS-7000 Series**
- Configurable measuring Indicators  
**BS-1000, LS-3000 and HS-7000 Series**
- Loop-powered field Indicators  
**PM-3650, PM-6670 and PM-2659 Series**
- Potentiometric or Configurable Chart Recorders  
**M-6000/4000 Series**
- 24 Vdc 1 A or 2 A instruments power supply units  
**FAC-24/1000/S and FAC-24/1000/D Series**
- Data acquisition and control systems  
**DAS-8000 and HS-7000**



# 127.60

## SPECIFICATIONS

### TPM-18

- Pressure (bar):

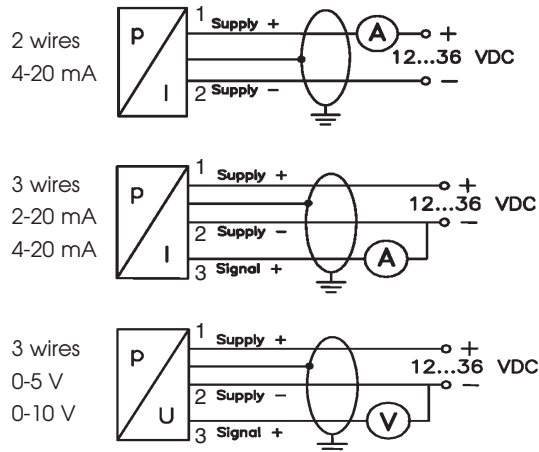
Range: -1...0<sup>1)</sup> 0...1.0<sup>1)</sup> 0...1.6 0...2.5<sup>1)</sup> 0...4 0...6 0...10 0...16 0...25  
 Absolute: - 0...1 0...1.6 0...2.5 0...4 0...6 0...10 0...16 0...25  
 Overpressure: 3 3 6 6 12 12 25 50 50

Range<sup>2)</sup>: 0...40 0...60 0...100 0...160 0...250 0...400  
 Overpressure: 120 120 250 500 500 600

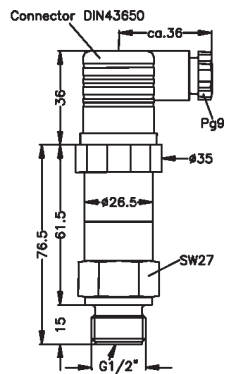
- Accuracy: ..... ≤ ± 0,5 % FSO
- Process connection: ..... 1/2", 3/4" ó 1" GAS DIN 3852
- Output signal: ..... 4-20 mA 2 wires  
 0/4-20 mA / 0/10 V 3 wires (option)
- Electrical connection: ..... connector DIN 43650
- Voltage: ..... between 12 and 36 Vcc
- Permissible Load: ..... 2 wires (U<sub>B</sub> (V)-12V) /0,02A  
 3 wires ≤ 500 Ω
- Operating Temperature range:
  - Sensor: ..... -25 to + 125 °C
  - Ambient: ..... -25 to + 85 °C
  - Storage: ..... -40 to +125 °C
- Materials:
  - Housing ..... Stainless Steel 1.4301
  - Diaphragm ..... Stainless Steel 1.4571
  - Seals ..... FKM

## WIRING DIAGRAM

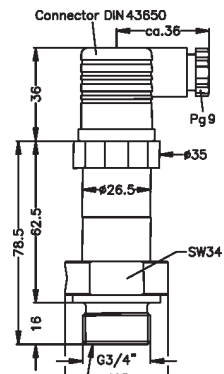
	Electrical connection				
	DIN 43650	M12x1 (4-pin)	Binder 723 (5-pin)	Bulgin Buccaneer	Cable colors (DIN 47100)
2-wire-system: Supply +	1	1	3	1	white
Supply -	2	2	4	2	brown
Ground	Ground pin	4	5	4	green cable shield
3-wire-system: Supply +	1	1	3	1	white
Supply -	2	2	4	2	brown
Signal +	3	3	1	3	green
Ground	Ground pin	4	5	4	green cable shield



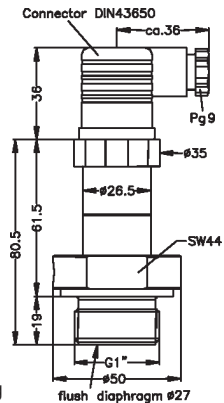
## DIMENSIONS



Weight: appr. 0,230 kg



Weight: appr. 0,300 kg



Weight: appr. 0,350 kg

## APPLICATIONS

- Process- and unit operations
- Chemical Industry
- Foodstuff Industry
- Paper Industry

## HOW TO ORDER

**TPM-18** Ranges 1,6 to 400 bar (1/2" GAS)  
**TPM-18/D** Ranges -1 to 0 bar (3/2" GAS)

Options:  
 Special Ranges  
 0/10 V 3 wires output  
 Absolute pressure