

# PRESSURE TRANSMITTER

- Pressure switch
- Digital Pressure Gauge

# TPM-40

**Desin**  
Instruments

## DESCRIPTION

- NOMINAL PRESSURE 0 ... 100 mbar UP TO 0 ... 400 bar
- SPECIAL PRESSURE RANGE E.G. -250 MBAR ... +150 mbar
- ANALOGUE OUTPUT 4 ... 20 mA / 2-WIRE , 0 ... 10 V / 3-WIRE
- LED-DISPLAY 7-SEGMENT-VERSION 4-DIGITS
- DISPLAY AND HOUSING ROTABLE
- 1 OR 2 SET POINTS, FREE CONFIGURABLE
- HYSTERESIS- OR WINDOW-MODE
- DELAY TIME ON / OFF
- HIGH CONTROL COMFORT, VARIOUS SOFTWARE FEATURES  
ACCESS PROTECTION FREE CONFIGURABLE DISPLAY
- VERSION WITH INTRINSIC SAFETY: II (1) 2 G EEX IA IIC T4  
(ZONE 0/1)
- CUSTOMER-DESIGNED VERSIONS



CE

## FEATURES

The multifunction pressure gauge **TPM-40** is the successful combination of

- precise pressure transmitter
- intelligent pressure switch
- digital display

Areas of application of the TPM-40 are from pneumatics to hydraulics and the item is suitable for most varied MSR functions – **precisely and long-term stable**.

The TPM-40 is suitable with all media compatible with stainless steel. For applications e.g. for pharmacy and foodstuffs industry different process connections with flush welded stainless steel diaphragms are available.

On the 4-digits LED display is represented the system pressure. Besides the display supports the programming of the TPM-40 by means of transparency keyboard. The software has functions, e.g. access protection, configuring the display and the switching outputs, etc..

Set points are completely free configurable within the range from 0 to 100 % of nominal pressure.

As additional highlight you can turn the display of the TPM-40, so that final positions can be adapted due to the installation position fast.

As complement, we manufacture a wide range of measuring and control instruments to use with the **TPM-40** transmitters. This instruments are configurable 4-20 mA input capability.

- Controllers: **BS-1000, LS-3000 and HS-7000 Series**
- Indicators: **BS-1000, LS-3000 and HS-7000 Series**
- Loop-powered field Indicators  
**PM-3650, PM-6670 and PM-2659 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**

TUV  
PRODUCT SERVICE  
EMPRESA  
CERTIFICADA  
CERTIFIED  
COMPANY  
ISO 9001

127.66

## SPECIFICATIONS

### - Pressure (bar):

Relative: -1.0 0.01 0.025 0.04 0.06 0.1 0.16 0.25 0.4 0.6 0.10 0.16 0.25 0.40

Absolute: - - - - 0.06 0.1 0.16 0.25 0.4 0.6 0.10 0.16 0.25 0.40

Overpressure: 3 1 1 1 3 3 6 6 20 20 20 60 100 100

Range: 0...60 0...100 0...160 0...250 0...400 0...600

Overpressure: 120 250 500 500 600 1000

- Accuracy: .....  $\leq \pm 0,35\%$  FSO

- Process connection: ..... 1" GAS DIN 3852

1/2" GAS DIN EN 837-1/-3 / 1/4" GAS DIN 3852

1/4" NPT / 1/2" NPT

1/4" GAS EN 837-1/-3 / 1/2" GAS flush ( $P_N < 40$  bar)

- Output signal: ..... 4-20 mA 2 wires

0-10 V 3 wires (option)

- Electrical connection: ..... connector DIN 43650

- Voltage: ..... between 18 and 41 Vcc 2 wires

between 19 and 30 Vcc 3 wires

- Permissible Load:

2 wires ..... ( $U_B$  (V) -18 V) / 0,02 A

3 wires .....  $> 1$  M $\Omega$

- Operating Temperature range:

Sensor: ..... -25 to +125 °C

Ambient: ..... 0 to +70 °C

Storage: ..... -40 to +85 °C

- Materials:

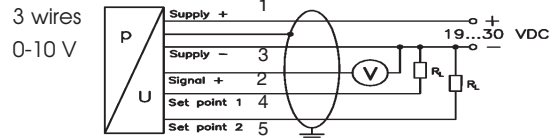
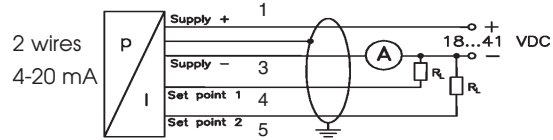
Housing ..... Stainless Steel 1.4571

Diaphragm ..... Stainless Steel 1.4404

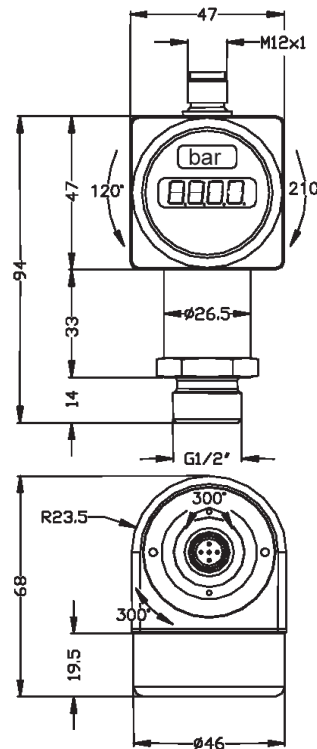
Seals ..... FKM /  $P_N \geq 100$  bar: NBR

## WIRING DIAGRAM

		Electrical connection			
		M12x1 (5-pin) (plastic version)	M12x1 (5-pin) (metal version)	Cable colours (DIN 47100)	DIN 43650
2-wire-system	Pin configuration	1	1	white	1
	Supply +	3	3	brown	2
	Supply -	4	4	grey	3
	Set point 1	5	5	pink	-
	Set point 2	via pressure port	connectors housing	Cable shield	ground contact
3-wire-system	Pin configuration	1	1	white	-
	Supply +	3	3	brown	-
	Supply -	2	2	green	-
	Signal +	4	4	grey	-
	Signal -	5	5	pink	-
Ground	via pressure port	connectors housing	Cable shield	-	



## DIMENSIONS



Weight:  
appr. 0,200 kg

## HOW TO ORDER

### MODELS:

**TPM-40** Ranges 0,1 to 400 bar

**TPM-40/D** Ranges (-1 to 0 bar)

### Options

Special ranges

Absolute pressure

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

## APPLICATIONS

- Hydraulics and Pneumatics
- Mechanical engineering (presses, jet moulding machines etc.)
- Test stand and apparatus engineering
- Equipment construction