

PTO

Technical Data

Supply voltage	18 ... 30 Vac/dc
Output signal	0 ... 10 V or 4 ... 20 mA
Load for output, 4 ... 20 mA, 0 ... 10 V	20 ... 500 Ω
Max. current draw	< 40 mA
Pressure medium	Air and non-aggressive gases
Linearity and hysteresis error	± 1% of FS
Working temperature	0 ... 50°C
Storage temperature	- 10 ... 70°C
Typical long-term stability	± 0,5 % to ± 2,5 % of FS/year, depending on pressure range
Repetition accuracy	± 0,2 % of FS
Position dependence	± 0,2 % of FS/g
Humidity	0 ... 95 % rel, non-condensing
Response time, selectable	0,1 - 1,0 s
Process connection	6 mm hose connection
Electrical connection	Spring terminals for wires and leads up to 1,5 mm ²
Mounting	Screw mounting with serrated screws
Housing material	ABS
Housing dimensions	ca. Ø 66 x 28 mm
Weight	50 g
Cable conduit for Protection cap	M12x1,5 threaded connection, made of polyamide
Protection class EN 60529	IP 54
Conformity	EN 60770, EN 61326, 2011/65/EU (RoHS II)

Features

- Low cost version of pressure sensing
- Two types of output signals
- Protection class IP54
- Selectable response time
- Easy offset calibration

General description

The differential pressure transmitters of the PTO series are used to measure differential pressure, overpressure and vacuum.

They provide one adjustable pressure range and one output signal.

Applications

Monitoring of gaseous, non-aggressive media. Possible usage areas are:

- Building automation, air conditioning systems and clean room monitoring
- Valve and flap control
- Filter, ventilator and blower monitoring
- Control of air flows

Adjustable pressure range

The end of the pressure range can be reduced to 50% of its factory set full scale value simply by the use of a push-button.

Output signal

0 ... 10 V or 4 ... 20 mA. Other signals on request.

Configurable response time

The response time of the output signal can be configured using a jumper.

If the jumper is in place the response time is slow (factory setting), which is useful for suppressing brief pressure peaks.

If the application requires a fast response time the jumper must be removed.

Easy offset calibration

The output signal can be calibrated to zero by pressing the push-button (pressure transmitter must be depressurised).

Reset

The transmitter can be reset to its factory setting, just by pressing the push-button for 10 sec.

Measuring method

Piezoresistive pressure transducer

Mounting position

Can be mounted in any position.

The zero offset calibration eliminates any possible position error.

Ordering Codes

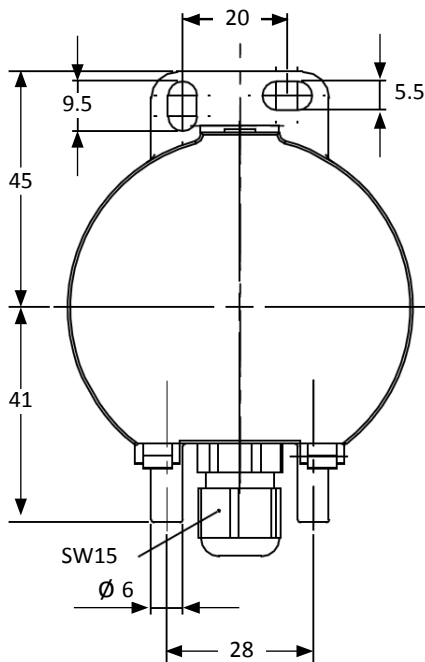
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Technical Data

Range	Overload capacity	Bursting pressure	Temperature error
0... 100 Pa	60 kPa	100 kPa	≤ ± 2,5 % of full scale
0... 250 Pa	60 kPa	100 kPa	≤ ± 2,5 % of full scale
0... 500 Pa	60 kPa	100 kPa	≤ ± 2,5 % of full scale
0... 1000 Pa	75 kPa	125 kPa	≤ ± 1,0 % of full scale
0... 2,5 kPa	85 kPa	135 kPa	≤ ± 1,0 % of full scale
0... 5,0 kPa	85 kPa	135 kPa	≤ ± 1,0 % of full scale
0... 10 kPa	85 kPa	135 kPa	≤ ± 1,0 % of full scale
0... 25 kPa	135 kPa	275 kPa	≤ ± 1,0 % of full scale
0... 50 kPa	200 kPa	400 kPa	≤ ± 1,0 % of full scale
0... 100 kPa	200 kPa	400 kPa	≤ ± 1,0 % of full scale
0... 250 kPa	400 kPa	800 kPa	≤ ± 1,0 % of full scale

Other pressure ranges on request.

Dimensions



Ordering Codes

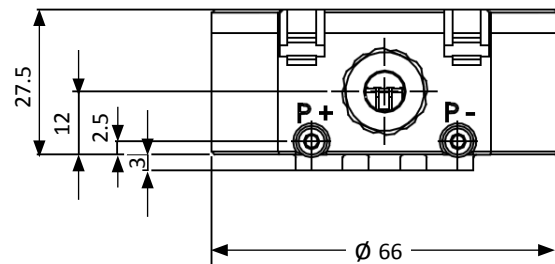
0 - 10Vdc	4 - 20mA
PTO 100V	PTO 100C
PTO 250V	PTO 250C
PTO 500V	PTO 500C
PTO 1000V	PTO 1000C
PTO 2500V	PTO 2500C
PTO 5000V	PTO 5000C
PTO 10KV	PTO 10KC
PTO 25KV	PTO 25KC
PTO 50KV	PTO 50KC
PTO 100KV	PTO 100KC
PTO 250KV	PTO 250KC
Output signal and supply voltage	0 ... 10V, 3-wire, linear, 24Vac/Vdc
	4 ... 20mA, 2-wire, linear, 24Vdc

Display not available

Electrical connection via spring terminals

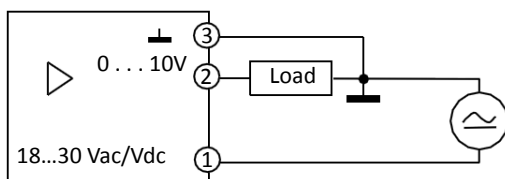
Accessories

DFK 200 Duct kit consisting of 2 m PVC hose and 2 plastic pipes



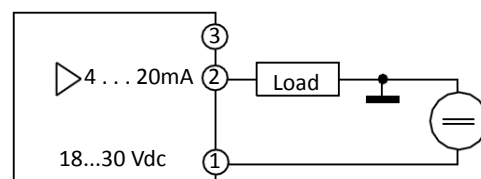
Terminal assignments

3-wire version



3	Ground GND
2	Output Signal 0 ... 10V/4 ... 20mA
1	Supply Voltage 18 ... 30Vac/dc

2-wire version



3	Ground GND
2	Output Signal 4 ... 20mA
1	Supply Voltage 18 ... 30Vdc