



# Small and at a low cost – the new PT pressure sensor.



## Pressure transmitter with analogue voltage or current output.

- Compact type with G 1/4 process connection.
- Pressure ranges adjusted to hydraulic applications.
- Robust metal housing, high protection rating.
- For mobile and industrial applications.
- Accuracy  $< \pm 1 \%$ .  
Repeatability  $< \pm 0.1 \%$ .



### The sensor

The PT pressure sensor has a stainless steel measuring cell with thick film DMS sensor element taken from the PK sensor series. Since the measuring cell is directly welded with the housing, no seal in contact with the medium is required.

The measuring cells have high overload and bursting pressures and are resistant to pressure peaks.

### The applications

The sensors of type PT are suitable for use in industrial and mobile applications, but also for special hydraulic and pneumatic applications with high operating pressure. The high vibration and shock resistance, the high protection rating and the very good EMC resistance make the PT sensor particularly suitable for use in mobile machines.



fluid sensors and diagnostic systems

position sensors and object recognition

bus, identification and control systems



**Stainless steel measuring cell welded without any seal  
Process connection G 1/4 male, M5 female**

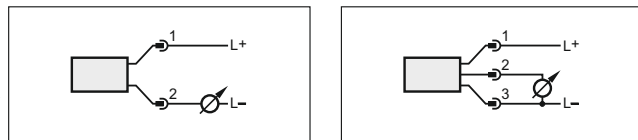
**For industrial applications**

Measuring range Relative pressure [bar]	P <sub>overload</sub> max. [bar]	P <sub>bursting</sub> min. [bar]	Order no.
<b>Output function 4...20 mA</b>			
0...400	600	1600	<b>PT3540</b>
0...250	400	1000	<b>PT3541</b>
0...100	200	1000	<b>PT3542</b>
0...25	60	500	<b>PT3543</b>
0...10	25	300	<b>PT3544</b>
<b>Output function 0...10 V</b>			
0...400	600	1600	<b>PT9540</b>
0...250	400	1000	<b>PT9541</b>
0...100	200	1000	<b>PT9542</b>
0...25	60	500	<b>PT9543</b>
0...10	25	300	<b>PT9544</b>

**EMC for PT354x / PT954x (industrial applications)**

EN 61000-4-2 ESD: 4 kV CD / 8 kV AD  
 EN 61000-4-3 HF radiated: 10 V/m (80...1000 MHz)  
 EN 61000-4-4 Burst: 4 kV coupling clamp  
 EN 61000-4-5 Surge: 1 kV signal for DC units  
 EN 61000-4-6 HF conducted: 10 V

**Wiring diagram**



PT3

PT9

**Connectors and splitter boxes**

Type	Description	Order no.
	M12 socket, 2 m black, PUR cable	<b>EVC001</b>
	M12 socket, 5 m black, PUR cable	<b>EVC002</b>
	M12 socket, 2 m black, PUR cable	<b>EVC004</b>
	M12 socket, 5 m black, PUR cable	<b>EVC005</b>
	M12 socket, 2 m black, PUR cable	<b>EVM001</b>
	M12 socket, 5 m black, PUR cable	<b>EVM002</b>
	M12 socket, 2 m black, PUR cable	<b>EVM004</b>
	M12 socket, 5 m black, PUR cable	<b>EVM005</b>

**For mobile applications**

Measuring range Relative pressure [bar]	P <sub>overload</sub> max. [bar]	P <sub>bursting</sub> min. [bar]	Order no.
<b>Output function 4...20 mA</b>			
0...400	600	1600	<b>PT3550</b>
0...250	400	1000	<b>PT3551</b>
0...100	200	1000	<b>PT3552</b>
0...25	60	500	<b>PT3553</b>
0...10	25	300	<b>PT3554</b>
<b>Output function 0...10 V</b>			
0...400	600	1600	<b>PT9550</b>
0...250	400	1000	<b>PT9551</b>
0...100	200	1000	<b>PT9552</b>
0...25	60	500	<b>PT9553</b>
0...10	25	300	<b>PT9554</b>

**EMC for PT355x / PT955x (mobile applications)**

EN 61000-4-2 ESD: 4 kV CD / 8 kV AD  
 Noise immunity: according to the automotive directive  
 95/54/EC / 04/104 EC / 05/83/EC  
 ISO 11452-2 HF fields: 100 V/m (400...2000 MHz)  
 ISO 11452-4: 100 mA (1...400 Mhz) severity 4  
 ISO 7637-2: severity 3  
 Noise emission: to CISPR 25  
 EN61000-6-1  
 EN61000-6-2

**Common technical data**

Type of pressure: relative pressure Liquids and gases	
Operating voltage	[V DC] PT3 8.5...32 PT9 16...32
Overload protection	•
Reverse polarity protection	•
<b>Accuracy / deviation (in % of the span)</b>	
Deviation of the characteristics	< ± 1
Linearity	< ± 0.25 (BFSL) < ± 0.5 (LS)
Hysteresis	< ± 0.2
Repeatability	< ± 0.1
<b>Temperature coefficients (TEMPCO) in the temperature range -25...90 °C (in % of the span per 10 K)</b>	
Temperature coefficient of zero	0.4
Temperature coefficient of the span	0.2
Medium temperature	[°C] -25...90
Protection	IP 67 / IP 69K
Housing materials	high-grade stainless steel (316S12) TROGAMID
Materials (wetted parts)	high-grade stainless steel (316S12) FPM (Viton)

individual type may differ

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Fluid sensors and diagnostic systems