



# OEM PRESSURE TRANSMITTER

## OEM Pressure Transmitter for Refrigeration and Ventilation

### PTS2008

Standard output: 4...20 mA; 2-wire system  
 or 0...10 VDC; 3-wire system  
 or 0.5...4.5 VDC; 3-wire system



#### Description

##### Application area in refrigeration and ventilation technology

The model PTS2008 pressure transmitter has been optimally designed for the specific requirements of refrigeration and ventilation technology. Its monolithic construction dispenses with the need to use seals on the process side.

This enables the model PTS 2008 to be used with all typical refrigerants (e.g. Freon and Ammonia).

##### Excellent reliability

The hermetically-welded, dry, thin-film cell ensures long-term leak tightness. Moreover, these efficient cells, made with a sputtering technique, feature high long-term stability and a very high burst pressure.

The pressure sensor complies with electromagnetic compatibility requirements (EMC) as per EN 61326.

#### Features

- Wetted parts from stainless steel
- Resistant to all common refrigerants
- Special case design for the best possible condensation tightness
- Private labelling possible

#### Measuring ranges

Relative Pressure Range 0...2bar/0...400bar

#### Applications

Refrigeration

Ventilation

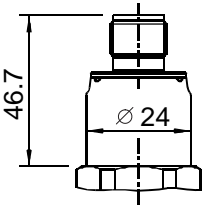
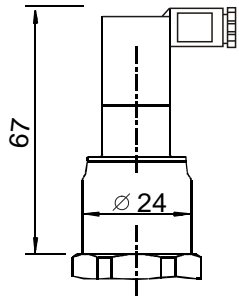
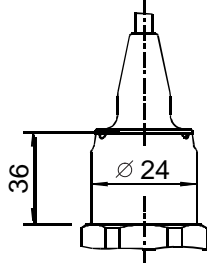
## Technical data

Type	PTS2008	
Pressure type	positive or negative gauge pressure	
- measuring ranges [bar]	0...2 bar to 0...400 bar -1..7 bar -1..9 bar 0..30 bar other measuring ranges on request	
- overrange limit [bar]	≤40 bar 2 x ; >40 bar 1,6 x	
- burst pressure [bar]	6 x	
Sensor element	thin film	
Signal and Signal Type	4...20 mA                      2-wire system 0...10 VDC                    3-wire system 0,5...4,5 VDC ratio.       3-wire system	
Non-linearity Accuracy Stability annual	≤±0.5 % BFSL according to IEC 61298-2 ≤±0.5 % of F. S <sup>1)</sup> ≤0,3 (at reference condition)	
Material case medium wetted parts	Stainless steel Stainless steel Highly resistive, fibreglass- enforced plastic ( PBT GF 30 )	
Pressure connection	7/16-20 UNF-2A 7/16-20 UNF Schrader female screw thread G1/4 B acc. to EN 837 1/4 NPT 1/8 NPT	
Electrical connection	Circular connection M12x1 (4-pin) (IP 67) Connector Metri Pack Serie 150 flying lead 1m DIN43650 Plug                      other electrical connection on request	
Power Supply DC 7...30V DC 14...30V DC 4.5...5.5V	Maximum load $R_A$ $R_A \leq (U_B - 9V) / 0,02 A$ $R_A > 10 k\Omega$ $R_A > 4,5 k\Omega$	Power Supply Depends On Output Signal 4...20 mA 0...10 V 0,5...4,5 V
Response Time	≤5 ms inside of 10% bis 90% of range	
RoHS-conformance	yes	
CE-conformity	2004/108/EG transient emissions (Group 1, Class B ) and immunity according to EN61326 Emission	
Electrical protections Short-circuit protection Reverse polarity protection Overvoltage protection	Sig+ towards 0V $U_{B+}$ towards 0V 36 VDC	
Temperature influence Zero point Span	typ. ≤0,5% / 10K ≤0,3% / 10K	
Temperatures of Compensated temperature range Storage Medium Ambience	-25..80°C -25..80°C -40..80°C / -40..135°C -25..80°C	
Weight	ca. 0,085	

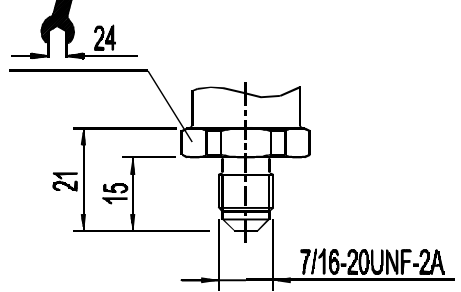
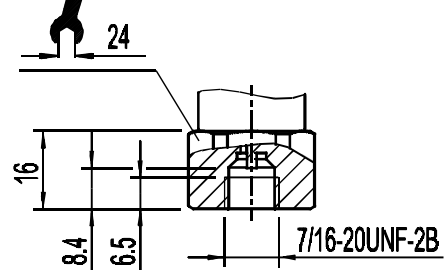
1) Including non-linearity, hysteresis, zero point and full scale error  
(corresponds to error of measurement according to IEC 61298-2)

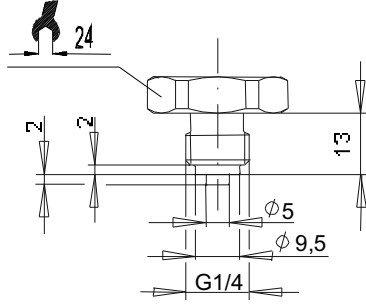
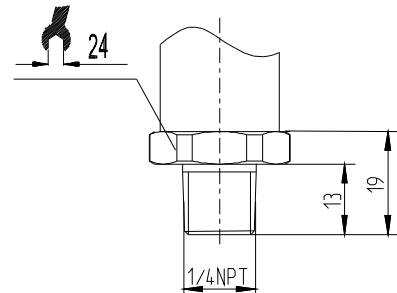
Dimensions (mm)

Case

Circular connector M12x1	DIN 43650 Plug	Moulded cable connection with flying lead
		

Pressure connections

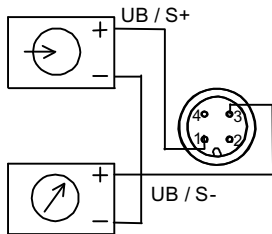
7/16-20UNF-2A	7/16-20UNF-2B Schrader inside
	

G 1/4 B	1/4 NPT
	

## Electrical connections

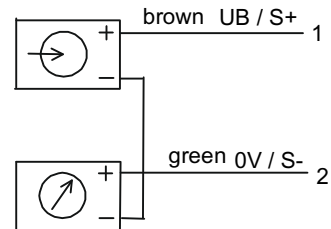
### 2- wire systems

#### Circular connector M12x1



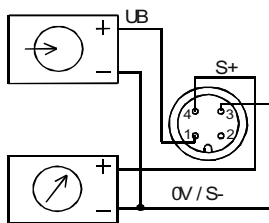
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#### Moulded cable connection with flying lead / DIN 43650 plug

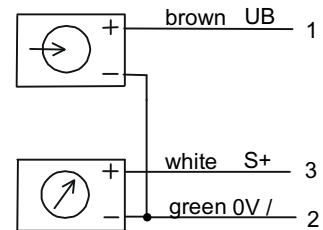


### 3- wire systems

#### Circular connector M12x1



#### Moulded cable connection with flying lead / DIN 43650 plug



### Connection table for connector or moulded cable connection with flying leads

	4...20 mA (2-wire system)				0...10VDC / 0.5...4.5VDC (3-wire system)			
	Conector M12x1	connector Metri	Flying lead	DIN 43650 Plug	connector M12x1	connector Metri	Flying lead	DIN 43650 Plug
Supply: UB+	1	B	brown	1	1	B	brown	1
Supply: 0V	3	A	green	2	3	A	green	2
Signal: S+		-	-		4	C	white	3
Signal: S-		-	-		3	A	green	2

### Ordering informations

1. Type
2. Measuring range
3. Signal output
4. Options

Modifications reserved