Melt pressure transducer for pressure measurement in hot media Series PT4X2

Model
PT422
PT462

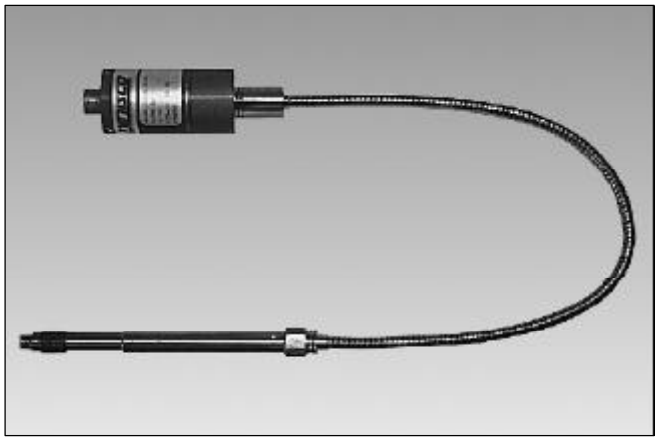
CE

Description

The models PT422 and PT462 have an additonal 457mm long flexible tubing between the strain gauge housing and the rigid stem. They are designed for applications where proximity of the strain gauge element to the process is prohibited because of extreme temperature. They are also designed for applications where flexibility is required.

Features

- Installation for media temperature up to 400 °C
- Flexible capillary between rigid stem and housing
- Liquid-filled transmission system
- Electrical built-in calibration



Technical Data / Operating Data

Pressure range	0 - 250 psi to 0 - 30,000 psi	Maximum overload (without influencing operating data)	2 x pressure range or for 15,000 and 20,000 psi range max. 30,000 psi, for 30,000 psi range max. 35,000 psi
Accuracy	PT422 ± 0.5 % f.s.v. - up to 750 psi ± 1 % f.s.v. PT462 ± 1 % f.s.v.	Burst pressure	6 x pressure range max. 45,000 psi
Repeatability	PT422 ± 0.1 % f.s.v. - up to 750 psi ± 0.2 % f.s.v. PT462 ± 0.2 % f.s.v.	Material in contact with media	15-5 Mat. No. 1.4545
Resolution	infinite		

Electrical Characteristics

Configuration	4-arm Wheatstone bridge strain gauge (DMS)	Supply voltage	10 V DC, max. 12 V DC
Strain resistance	350 Ω	Internal Shunt-Calibration	80 % f.s.v. ± 0.5 %
Output signal	3.33 mV/V	Leakage resistance	1000 MΩ at 50 V DC
Zero balance	± 5 % f.s.v., adjustable		

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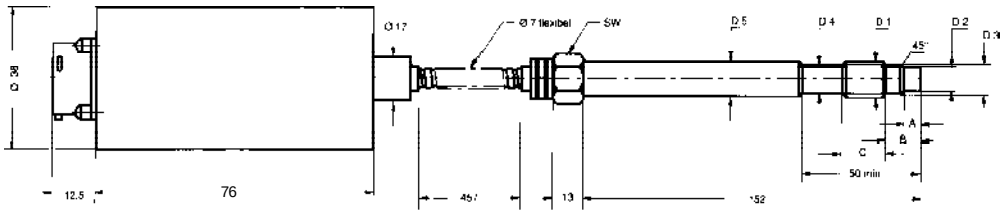
Temperature influence

Diaphragm		**Housing**	
Max. Temperature	400 °C	Max. Temperature	120 °C
Zero shift due to temperature change	PT422 < 27 psi / 10 °C PT462 < 45 psi / 10 °C	Zero shift due to temperature change	PT422 ± 0.2% f.s.v./10 °C PT462 ±1.0 % f.s.v./10 °C
		Sensitivity shift due to temperature change	PT422 ± 0.1% f.s.v./10°C -up to 750 psi ± 0.2% f.s.v./10°C PT462 ± 0.4% f.s.v./10°C

Dimensions

PT422 / PT462



D1	D2	D3	D4	D5	A	B	C	SW
1/2"-20UNF-2A	$7{,}8^{-0{,}05}$	$10{,}5^{-0{,}05}$	$11^{-0{,}5}$	12,5	$5{,}3^{+0{,}25}$	11	16	16
M18 x 1,5	$10^{-0{,}05}$	$16^{-0{,}1}$	$16^{-0{,}5}$	18	$6^{-0{,}25}$	14	20	19

Accessories

Indicator 1290, Process Readout UPR700, Process Controller ATC770, Cleaning Tool Kit, Machining Tool Kit

Order specifications

PT4X2 - XXX - XXX - XX - XXX

Model
PT422 = 0.5% Accuracy
PT462 = 1.0% Accuracy

Mounting Thread
- = Thread 1/2“ 20 UNF 2A
M18 = Thread M18 x 1,5

Pressure range

2,5C[1) 2)] = 0 - 250 psi	**1,5M** = 0 - 1,500 psi	**10M** = 0 - 10,000 psi
5C[1)] = 0 - 500 psi	**3M** = 0 - 3,000 psi	**15M** = 0 - 15,000 psi
7,5C[1)] = 0 - 750 psi	**5M** = 0 - 5,000 psi	**20M** = 0 - 20,000 psi
1M = 0 - 1,000 psi	**7,5M** = 0 - 7,500 psi	**30M** = 0 - 30,000 psi

[1)] only PT422 [2)] only M18

Option

Rigid stem / flexible stem
6/18 = Stem length 6“ and flexible length 18“ between rigid stem and housing

Conversion table psi/bar and inch/mm on page 181.

Options on page 183.

Instruments
Extrusion
Polymer Test

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