

PKHT Series

Miniature high temperature pressure sensor



- Absolute, sealed and gauge ranges
- 10 to 350 bar [15 psi to 5000 psi]
- Stainless steel construction
- High compensated temperature
- For static and dynamic applications
- Linearity & Hysteresis up to $\pm 0.25\%$ FSO

Description

These sensors are intended for both static and dynamic pressure measurements for temperature ranges of up to 220°C.

The APX4 (1.4418) stainless steel construction, ensures that the sensors are robust and can be used in harsh environments.

They are also insensitive to tightening torque.

Characteristics

Flush Diaphragm
M10x1
High Temperature Range
Miniature Design

Applications

Aerospace
Test Benches
Oven Monitoring Equipment
Cooling Regulation Systems

Standard Ranges

Pressure (FS in bar)	Pressure (FS in PSI)	Absolute	Gauge	Sealed	Linearity	Hysteresis	Resonant Frequency
10	150	•	•	•	$\pm 0.5\%$	$\pm 0.5\%$	34 kHz
20	300	•	•	•	$\pm 0.3\%$	$\pm 0.3\%$	50 kHz
35	500	•	•	•	$\pm 0.3\%$	$\pm 0.3\%$	70 kHz
50	750	•	•	•	$\pm 0.3\%$	$\pm 0.3\%$	80 kHz
100	1500			•	$\pm 0.3\%$	$\pm 0.3\%$	110 kHz
200	3000			•	$\pm 0.25\%$	$\pm 0.25\%$	155 kHz
350	5000			•	$\pm 0.25\%$	$\pm 0.25\%$	220 kHz

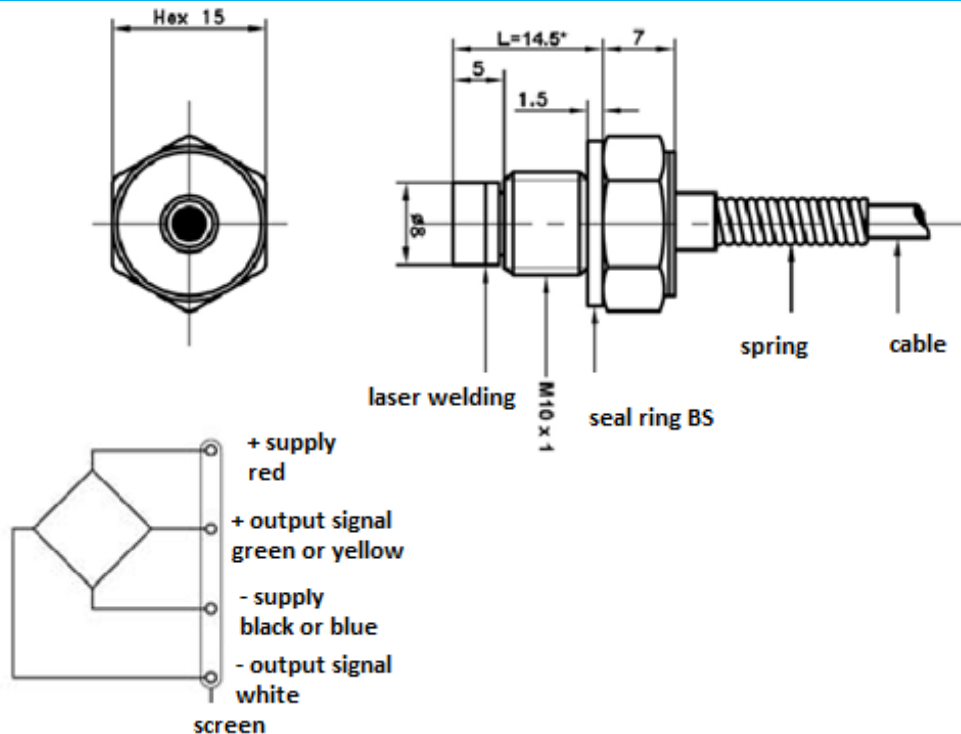
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Specification

Parameters	Value	Notes
Full Scale Output (FS)	10mV $\pm$ 200 μ V	
Over Pressure	1.5x FS	
Material	APX4 (1.4418) Stainless Steel	
Offset	0mV $\pm$ 200 μ V	At 20°C
Repeatability	$\pm$ 0.2% of F.S.	
Thermal Offset Error	< 1 % FS / 100 °C	
Thermal Sensitivity Error	< 2 % FS / 100 °C	
Operating Temperature	-50°C to 220°C	
Compensated Temperature	0°C to 150°C	
Power Supply	10Vdc regulated	
Input Impedance	520 Ω Nominal	
Output Impedance	350 Ω Nominal	
Isolation	> 1000M Ω / 50Vdc	
Electrical Connection	2m length 4 conductor AWG28 Teflon shielded cable	
Resonant Frequency	30kHz to 288kHz	
Process Connection Thread	M10x1	
Seal	British Standard High Temperature (BS H.T) Ring.	Seal included
Ingress Protection	IP 50	
Mounting Torque	10 Nm Nominal	15 Nm max.
Other Options	Please contact StrainSense	

Dimension & Wiring Schematic (mm)



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Options

XXM: special length, replace "XX" with total length in metres (2 metres standard)

Order information

PKHT	350	B	S	2M
Model	Pressure range (Bar/Psi)	Unit	Pressures reference	Options
PKHT	10/150	B: Bar	A, R, S	XXM
	20/300	P: psi	A, R, S	
	35/500		A, R, S	
	50/750		A, R, S	
	100/1500		S	
	200/3000		S	
	350/5000		S	

A: Absolute, R: Gauge (Relative), S: Sealed Gauge

Example 1: **PKHT350BS2M**

- PKHT
- 350 Bar Sealed Gauge
- 2m cable length

Example 2: **PKHT300PA5M**

- PKHT
- 300 Psi Absolute
- 5m cable length