

# PABT Series

Miniature Pressure Sensor with integrated RTD

Ref : 801

Rev : C



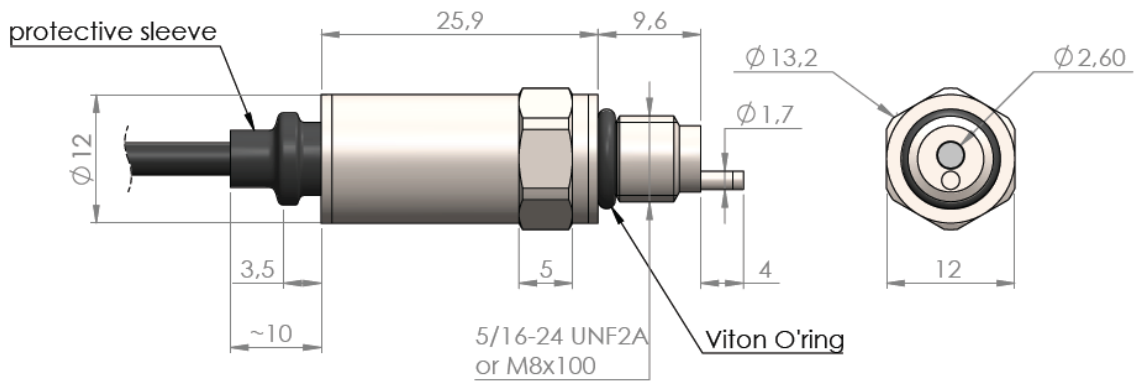
## DESCRIPTION

PABT series are miniature pressure sensors with an integrated PT1000 temperature sensing element allowing you to measure temperature and pressure simultaneously. Fully made in stainless steel, this sensor is compatible with a great number of corrosive and/or conductive fluids. The integrated electronic deliver the pressure measurement as an already amplified analog signal.

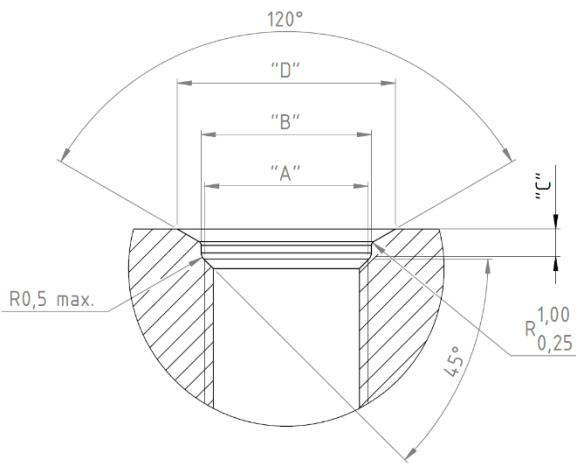
## TECHNICAL DATA

Parameters		Values									
<b>INPUT</b>	BAR	1	2	3.5	5	10	20	35	50	100	
Pressure Range	PSI	15	30	50	75	150	300	500	750	1500	
Pressure Type		Absolute									
Over Pressure		3 Times Rated Pressure or 850 bar whichever is less									
Burst Pressure		> 200 bars (2900 PSI)							> 850 bar (12325 PSI)		
Pressure Media		Any Liquid or Gas Compatible With 15-5 PH or Stainless Steel									
Electrical Input		< 10 mA									
Supply voltage		12 – 36 VDC or 1.8 – 6 VDC (see options)									
<b>OUTPUT</b>											
Full Scale Output (FS)		4 Vdc ± 50 mV (0.5 V to 4.5 V output signal)									
Output Impedance		1 kΩ									
Zero offset at 20 °C		0.5 V ± 50 mV									
Bandwidth (-3dB)		4.5 kHz									
Combined Non-Linearity & Hysteresis		± 0.25% FS (Max)									
Repeatability		± 0.2% FS									
Insulation		> 100 MΩ @ 50 Vdc									
<b>ENVIRONMENTAL</b>											
Operating Temperatures		-40°C to +85°C									
Compensated Temperatures		0 °C to 60 °C (see Options for other range)									
Thermal Zero Shift		< ± 3% FS / 50 °C									
Thermal Sensitivity Shift		< ± 2% FS / 50 °C									
<b>PHYSICAL</b>											
Electrical Connection		5 Conductors 26 AWG Teflon Insulated Shielded Cable 1m long (see Options for custom length)									
Mechanical Connection		5/16-24 UNF2A or M8x1.0 (see options)									
Index of Protection		IP65									
Pressure Sensing Principle		Fully Active Four Arm Wheatstone Bridge Dielectrically Isolated Silicon on Silicon									
Sealing		Viton O-ring (6.1 mm x 1.6 mm)									
Mounting Torque		10 Nm Max									

## DIMENSIONS



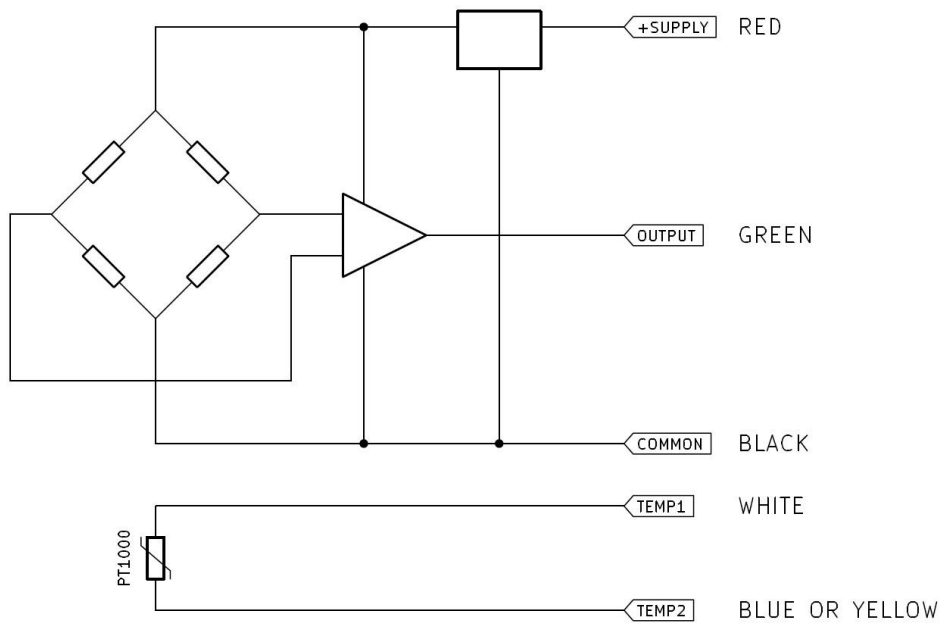
## RECOMMENDED MOUNTING PORT



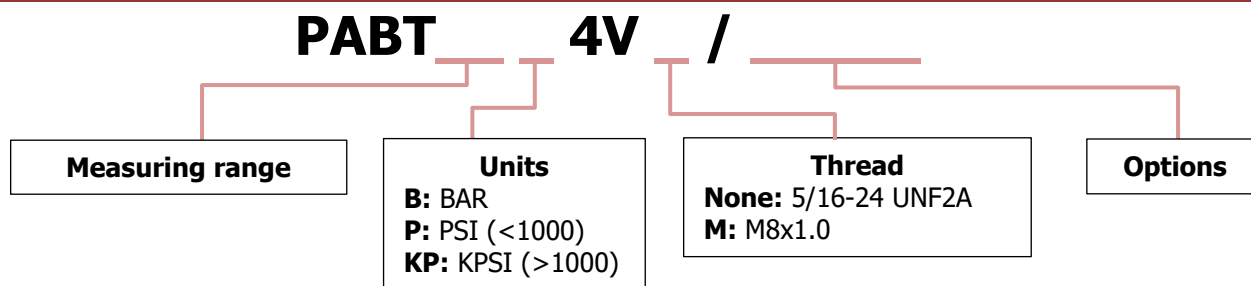
A	B	C	D
M8x1.0	8.4mm	1.6mm	11.2mm
5/16-24 UNF2A	0.328"	0.063"	0.438"

Tolerances on dimensions :  $\pm 0.05\text{mm}$  (0.002")

## WIRING



## ORDERING INFORMATION



Options	Reference	Description
Compensated temperature range	<b>None</b> <b>C1</b>	0°C to +60°C -40°C to +60°C
Cable length	<b>None</b> <b>LxxM</b> <b>LxxF</b>	1m standard length <b>xx:</b> custom length in meter <b>xx:</b> custom length in foot
Power supply	<b>None</b> <b>LV</b>	12 - 36 VDC (standard) 1.8 - 6 VDC

## Examples

**PABT1.5KP4V**

- Measuring range: 1500 PSI
- Thread: 5/16 UNF2A
- Comp. temp.: 0°C to +60°C
- Cable length: 1m (standard)

**PABT50B4VM/C1L5MLV**

- Measuring range: 50 BAR
- Thread M8x1.0
- Comp. temp.: -40°C to +60°C
- Cable length: 5m
- 1.8-6VDC Power supply range

## REVISIONS HISTORY

REVISION	DATE	DESCRIPTION
C	17/01/2025	Updated to new template Added 3.5 bar range Added LV power supply option (1.8-6VDC) Removed 200 and 350 bar range (error in previous version)

## CONTACT

**MESUREX**  
13 Rue des Corroyés  
78730 Saint Arnoult en Yvelines (France)

Tel : +33 (0) 1 30 41 23 62  
Mail : [mesurex@mesurex.fr](mailto:mesurex@mesurex.fr)  
Web : [www.mesurex.fr](http://www.mesurex.fr)