



PHT860

HIGH TEMPERATURE SENSOR

ULTRA MINIATURE



- ▶ **Smallest Pressure Transducer Available**
- ▶ **Built in Electronic : 0,5-4,5Vdc Output**
- ▶ **Large Bandwidth : up to 3kHz**
- ▶ **High Temperature Capability : up to -40 / +175°C**
- ▶ **All Titanium ultra light Sensor : 3 grams**

Technical Specifications	PHT861	PHT863	PHT867
Pressure Ranges (FS)	5 / 10 / 20 / 40 / 70 / 250bar		
	-1/+4bar; -1/+9bar		
	70 / 150 / 300 / 500 / 1000 / 3000PSI		
	-14,5/+60PSI; -14,5/+140PSI		
Type	Gage, Sealed Gage (for ranges > 40bar)		
Safe Overload / Burst Pressure	150%FS / 300%FS		
Input Impedance for PHT861	4000Ω ± 20%	-	-
Output Impedance for PHT861	3500Ω ± 20%	-	-
Power Supply	5 to 15Vdc	5Vdc ± 10mV	8 to 16Vdc
Consumption	< 10 mA		
Output at -100%FS (only for ± range)	Proportional to +100%FS	0,5Vdc	0,5Vdc
Output at 0%FS	0mV	0,5Vdc	0,5Vdc
Output at 100%FS	1,5mV/V nom.	4,5Vdc	4,5Vdc
Zero and Sensitivity settings tolerances	± 3%FS	± 50mV	± 50mV
Combined Non Linearity & Hysteresis	± 0,25%FS typ. ± 0,35%FS max.		
<i>Option</i>	-		
Non Repeatability	± 0,02%FS typ.		
Signal Bandwidth (electronic)	1000Hz @ -3dB		
<i>Option</i>	3000Hz @ -3dB		
Insulation	> 1000MΩ @ 50Vdc		
Compensated Temperature	0 to +150°C / 32 to +302°F		
<i>Option</i>	0 to +175°C / 32 to +347°F		
<i>Option</i>	-30 to +150°C / -22 to +302°F		
Operating Temperature	-40 to +150°C / -40 to +302°F		
<i>Option</i>	-40 to +175°C / -40 to +347°F		
Combined thermal zero & sensitivity shifts	± 2.10 ⁻⁴ FS/°C		
<i>Option</i>	-		
Long Term Stability	± 0,1%FS/year typ.		
Constant acceleration in linear vibrations	± 0,02%FS/g (frequency 20-2000Hz, 50g max.)		
Mechanical Shock	100g ½ sinus 1ms		
Electrical Protection	Not protected against polarity inversions		
EMC Protection	Compliant to EN61000		
Standard Electrical Connection	1m Teflon Jacketed Shielded Cable Ø1,6mm, 4 wires AWG32		
	With additionnal viton cover		
Standard Mechanical Connection	M5x0,8 male; 10-32 UNF male		
<i>Option</i>	-		
Material(s) of Wetted Parts	Titanium TA6V (1.444)		
Weight	3g without cable		
Enclosure Protection	IP65 for Sealed Gage		
Accessories delivered with the sensor	Viton O-ring 4x1,5 (standard)		
	Calibration certificate or Datas in pressure and temperature (option)		



E.F.E.

L'Essor Français Electronique

Head Office: 16 rue Porte à Bateaux – 27540 Ivry la Bataille – France

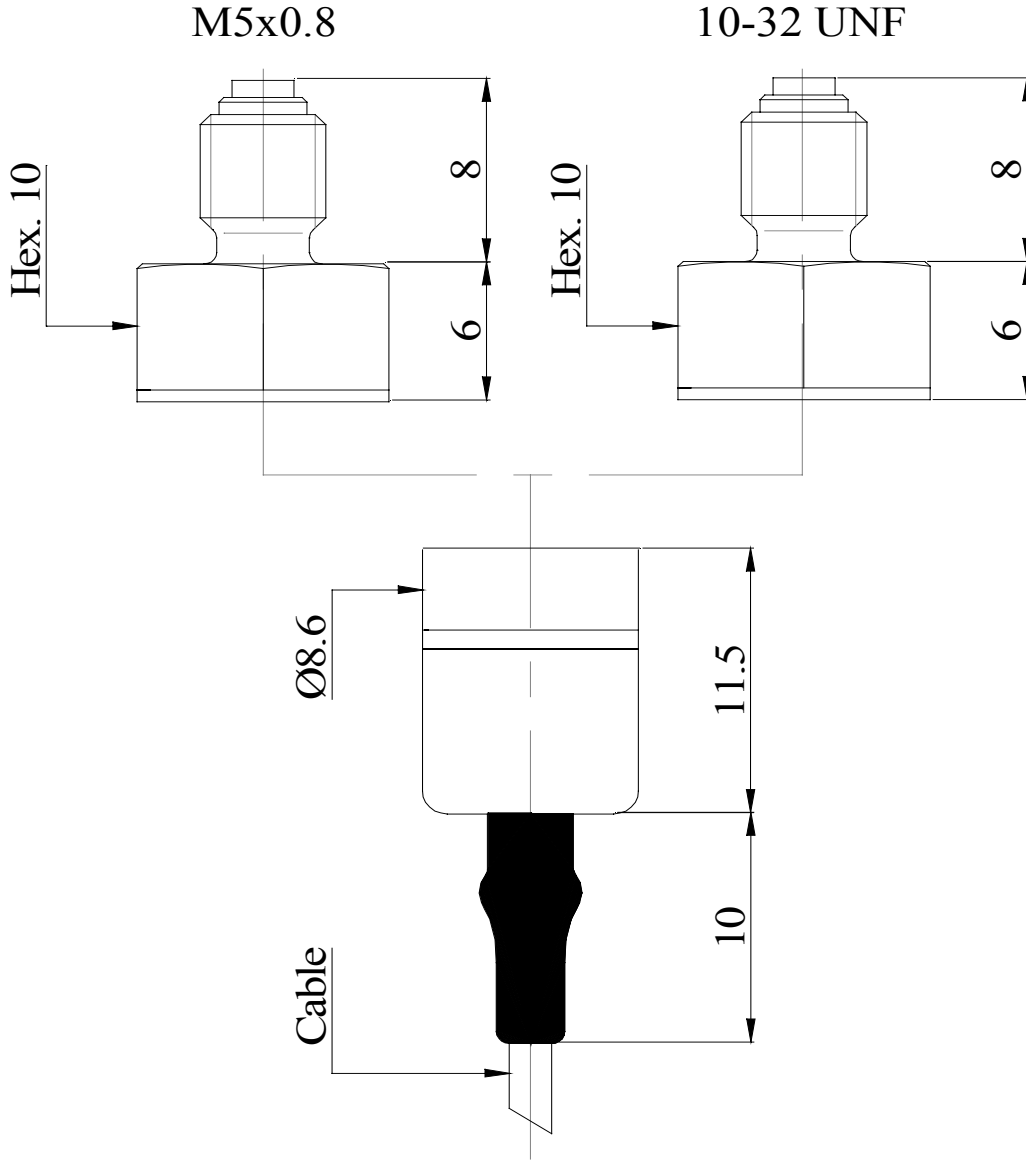
Tel: 33 (0)2.32.22.35.05 – Fax: 33 (0)2.32.36.93.08 – www.efe-sensor.com



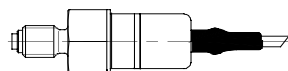
PHT860

**HIGH TEMPERATURE SENSOR
CAPTEUR HAUTE TEMPERATURE**

PLAN / DRAWING



SCALE 1:1



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PHT860		ORDER CODE										
Complete Reference		PHT86	X	X	XXX	XXX	XX	XX	XX	X	XX	XX
Model												
Pressure sensor for High Temperature	PHT											
Ø 8,6mm	86											
Output Signal												
1,5mV/V	1											
0,5-4,5Vdc (ratiometric)	3											
0,5-4,5Vdc	7											
Material of wetted parts												
Titanium		T										
Pressure Ranges												
Unidirectional example : 20bar					20							
Bidirectional example : -1/+4bar					-1/4							
Pressure Unit												
bar						bar						
PSI						PSI						
Operational Mode												
Gage						G						
Sealed Gage						SG						
Mechanical Thread												
M5x0,8 male								05				
10-32 UNF male								14				
Electrical Connection												
Teflon cable output X meter(s)									09/Xm			
Compensated Temperature												
0 to +150°C / 32 to +304°F										F		
0 to +175°C / 32 to +347°F										G		
-30 to +150°C / -22 to +304°F										H		
Accuracy												
± 0,25%FS (Standard)											0	
Thermal Shifts												
± 2.10 ⁻⁴ FS/°C (Standard)											0	
Options												
N/A												00
Filtering 3000Hz @ -3dB												B



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