

# Sub Miniature Pressure Transducer for High Temperature



Operating from -40 up to +175°C, the PHT860 series is dedicated to high temperature pressure measurements. With stainless steel wetted parts, it is compatible with most media, including corrosive fluids used in automotive, aerospace and energy industries. Equipped with the premium thin film technology developed by EFE, its performances and stability over wide temperature range are excellent. The PHT860 is available with unamplified output (mV/V), compensated in temperature to deliver the best accuracy. Amplified output (Vdc) is also standard, thanks to a high performance and ruggedized built-in electronic module.

Technical specifications					
Pressure ranges (FS)	-1/+4bar ; -1/+9bar ;				
	5bar ; 10bar ; 20bar ; 40bar ; 70bar ; 250bar ;				
	-14.5/+60PSI ; -14.5/+140PSI ;				
	70PSI ; 150PSI ; 300PSI ; 500PSI ; 1000PSI ; 3000PSI				
Туре	Absolute ; Gage				
Type (for ranges > 40 bar)	Sealed Gage				
Safe overload	150% FS				
Burst pressure	300% FS				
Output impedance	> 3000 Ohms typ.				
Input impedance	> 3500 Ohms typ.				
Power supply	5 to 15Vdc				
Consumption	< 10mA				
Insulation	> 1000 MOhms under 50Vdc at ambient temperature				
Output at -100%FS (only for $\pm$ range)	Proportional to +100%FS				
Output at 0%FS	0mV/V				

### **PHT861**

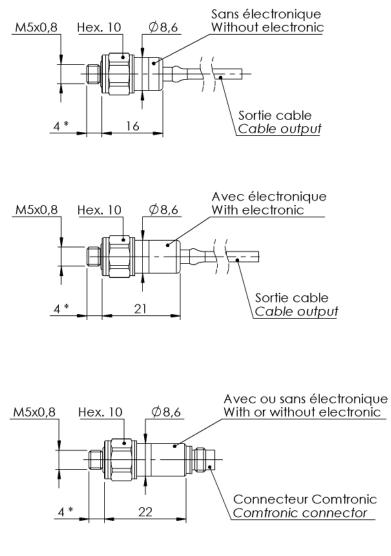
#### Technical Specifications

Output at 100%FS	1.5mV/V nom.
Zero and sensitivity settings tolerances	±3% FS
Non linearity and hysteresis combined	±0.25% FS typical (±0.35% FS max.)
Non repeatability	±0.02% FS typ.
Compensated temperature range	-30 to +150°C
	Option : 0 to +175°C
Operating temperature range	-40 to +150°C (-40 to +175°C if optional compensation up to 175°C)
Combined thermal zero & sensitivity shifts	±0.02% FS/°C
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 inversion
EMC protection	Compliant to EN61000
Electrical connection	AWG32, 4 wires Ø1.6mm shielded Teflon cable and Viton sleeve
Mechanical connection	M5x0.8-6g male
Material(s) of wetted parts	Stainless Steel 316L ; Stainless Steel 17-4PH ; Stainless steel 15-5PH
Weight	3g without cable
Enclosure protection	IP65 for sealed gage version

## **PHT861**

# Codification

Sub Miniature Pressure Transducer for High Temperature	PHT86	1	S	10bar	G	05	18/1m	F	3	1	
Output Signal											
mV/V		1									
Material											
Stainless Steels			s								
Range											
Example				10bar							
Туре											
Gage					G						
Sealed Gage					SG						
Mechanical connection											
M5x0.8-6g male						05					
Electrical connection											
AWG32, 4 wires Ø1.6mm shielded Teflon cable and Viton sleeve							18/1m				
Compensated temperature range											
-30 to +150°C								F			
0 to +175°C								G			
Non linearity and hysteresis combined											
±0.25% FS typical (±0.35% FS max.)									3		
Combined thermal zero & sensitivity shifts											
±0.02% FS/°C										1	



\* Option filetage allongé 10 mm 10 mm lengthened thread option



DIMENSIONS : mm

#### **PHT861**

	4 CONDUCTOR TE		
	mV/V OUTPUT	CONDUCTOR	Length on request
	+ EXCITATION	RED	
	+ SIGNAL	GREEN	
	- SIGNAL	WHITE	#32 AWG 4 conductor Teflon shielded cable
	- EXCITATION	BLACK	covered by Polyolefin or Viton jacket
	SENSOR HOUSING	SHIELD	



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