

Sub Miniature Pressure Transducer for High Temperature



Technical specifications

Pressure ranges (FS)

Features	Applications
Available with 0,5-4,5Vdc output	Automotive - on vehicule
Ultra light sensor : 3 grams	Aerospace
Operating from -40 to +175°C	Test benchs
Large Bandwidth	Instrumentation

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.

-1/+4bar; -1/+9bar;

4.5Vdc

±50mV

5bar; 10bar; 20bar; 40bar; 70bar; 250bar; -14.5/+60PSI; -14.5/+140PSI; 70PSI; 150PSI; 300PSI; 500PSI; 1000PSI; 3000PSI Absolute ; Gage Type Type (for ranges > 40 bar) Sealed Gage Safe overload 150% FS 300% FS Burst pressure Power supply 5Vdc ± 10mV Consumption < 10mA > 1000 MOhms under 50Vdc at ambient temperature Insulation Output at -100%FS (only for ± range) 0.5Vdc 0.5Vdc Output at 0%FS (except ranges ±)

Zero and sensitivity settings tolerances

Output at 100%FS

Technical Specifications

Non linearity and hysteresis combined $\pm 0.25\%$ FS typical ($\pm 0.35\%$ FS max.)

Non repeatability $\pm 0.02\%$ FS typ.

Signal bandwidth 1000Hz @ -3dB

Option: Special Adjustment up to 3000Hz@-3dB

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

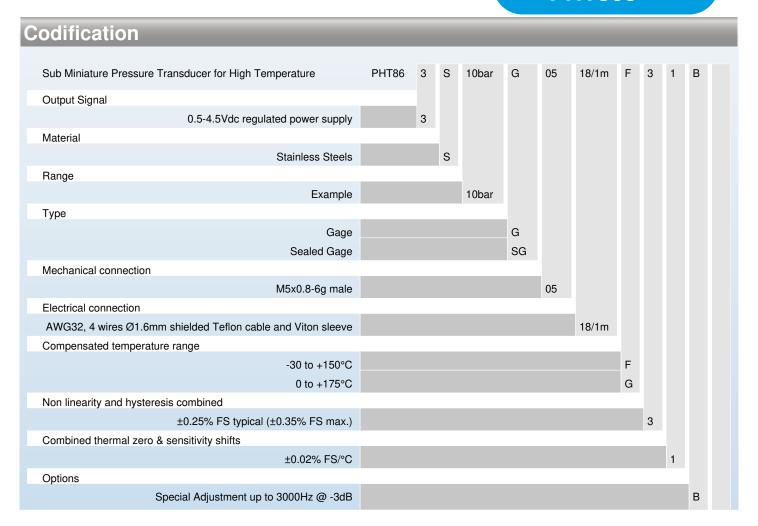
Mechanical connection M5x0.8-6g male

Material(s) of wetted parts Stainless Steel 316L; Stainless Steel 17-4PH; Stainless steel 15-5PH

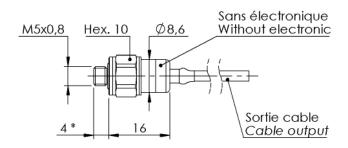
Weight 3g without cable

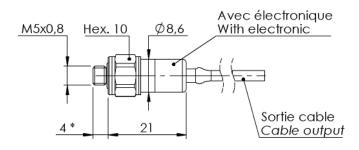
Enclosure protection IP65 for sealed gage version

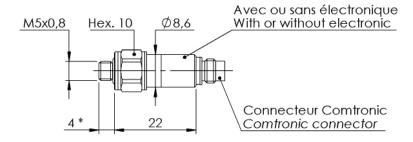
PHT863



Dimensions PHT863







* Option filetage allongé 10 mm 10 mm lengthened thread option

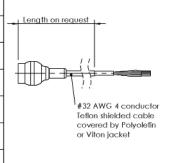


DIMENSIONS: mm



4 CONDUCTOR TEFLON CABLE

VOLTAGE OUTPUT	CONDUCTOR
+ EXCITATION	RED
+ SIGNAL	GREEN
0 VOLT	BLACK
NC	WHITE
SENSOR HOUSING	SHIELD





E.F.E.

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