

Sub Miniature Pressure Transducer for High Temperature



Features

- ➔ Available with 0,5-4,5Vdc output
- ➔ Designed for harsh environment
- ➔ Operating from -40 to +175°C
- ➔ Ultra light : < 5 grams

Applications

- ➔ Automotive - on vehicle
- ➔ Oil & gas
- ➔ Energy / Nuclear
- ➔ Motorsport

Operating from -40 up to +175°C, the PHT100 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 PHT100 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.

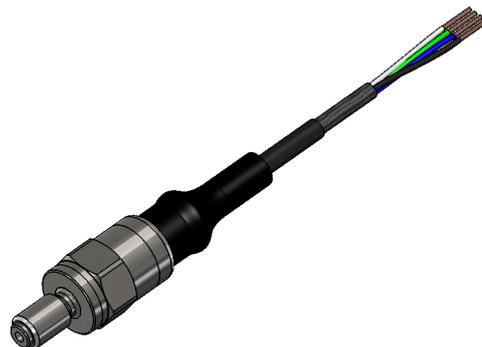
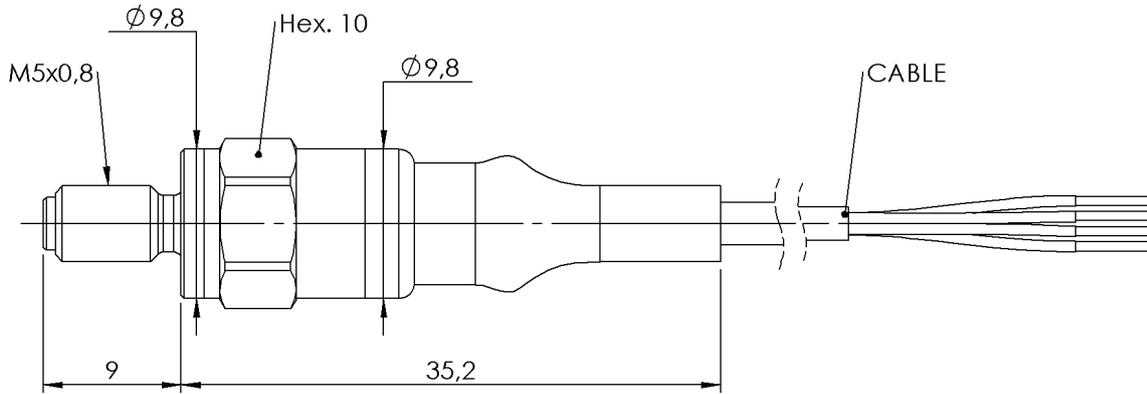
Technical specifications

Pressure ranges (FS)	-1/+4bar ; -1/+5bar ; 5bar ; 10bar ; 20bar ; 40bar ; 70bar ; 250bar ; -14.5/+60PSI ; -14.5/+70PSI ; 70PSI ; 150PSI ; 300PSI ; 500PSI ; 1000PSI ; 3000PSI
Type	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 ± range)	Proportional to +100%FS
Output at 0%FS	0mV/V

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 up to 150°C	AWG26, Viton Jacketed Shielded Cable Ø3mm, 4 wires
Electrical connection above 150°C	AWG26 Shielded Teflon Cable Ø3.4mm ±0.2, 5 wires
Mechanical connection	M5x0.8-6g male
Material(s) of wetted parts	Stainless Steel 316L ; Stainless Steel 17-4PH ; Stainless steel 15-5PH
Weight	< 5g without cable
Enclosure protection	IP65 for absolute & sealed gage version

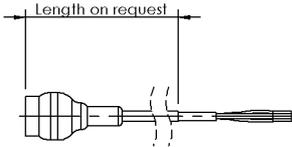
Codification	
Sub Miniature Pressure Transducer for High Temperature	PHT10 1 S 10bar G 05 08/1m F 3 1
Output Signal	mV/V 1
Material	Stainless Steels S
Range	Example 10bar
Type	Gage G Sealed Gage SG
Mechanical connection	M5x0.8-6g male 05
Electrical connection	AWG26, Viton Jacketed Shielded Cable Ø3mm, 4 wires 08/1m AWG26 Shielded Teflon Cable Ø3.4mm ±0.2, 5 wires 09/1m
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



DIMENSIONS : mm



5 CONDUCTOR TEFLON CABLE	
mV/V OUTPUT	CONDUCTOR
+ EXCITATION	RED
+ SIGNAL	GREEN
- SIGNAL	WHITE
- EXCITATION	BLACK
NC	BLUE
SENSOR HOUSING	SHIELD




#26 AWG, 4 CONDUCTOR SHIELDED VITON CABLE	
mV/V OUTPUT	CONDUCTOR
+ EXCITATION	RED
+ SIGNAL	GREEN / YELLOW
- SIGNAL	WHITE
- EXCITATION	BLUE / BLACK
SENSOR HOUSING	SHIELD

