

High Temperature Miniature Pressure Sensor



Features	Applications
Available with 0,5-4,5Vdc output	Oil & gas
Miniature pressure sensor	Aerospace
Operating from -40 to +175°C	Military
Large Bandwidth	Test benchs

Operating from -40 up to +175°C, the PHT160 series is dedicated to high temperature pressure measurements. With all 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 PHT160 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

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Pressure ranges (FS)	-1/+4bar ; -1/+9bar ;
	5bar; 10bar; 20bar; 40bar; 100bar; 250bar; 400bar;
	-14.5/+60PSI; -14.5/+140PSI;
	30PSI; 70PSI; 150PSI; 300PSI; 500PSI; 1500PSI; 3000PSI; 5000PSI
Туре	Absolute ; Gage
Type (for ranges > 40 bar)	Sealed Gage
Safe overload	150% FS
Burst pressure	300% FS
Power supply	8 to 16Vdc
Consumption	< 10mA
Insulation	> 1000 MOhms under 50Vdc at ambient temperature
Output at -100%FS (only for ± range)	0.5Vdc
Output at 0%FS (except ranges ±)	0.5Vdc
Output at 100%FS	4.5Vdc
Zero and sensitivity settings tolerances	±50mV

Technical Specifications

Non linearity and hysteresis combined ±0.25% FS

Option: ±0.1% FS

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 Protected against polarity inversion

EMC protection Compliant to EN61000

Electrical connection up to 150°C AWG26, Viton Jacketed Shielded Cable Ø3mm, 4 wires

Option: DEUTSCH Autosport AS4H06-05-PN-HE connector

Electrical connection above 150°C AWG26 Shielded Teflon Cable Ø3.4mm ±0.2, 5 wires

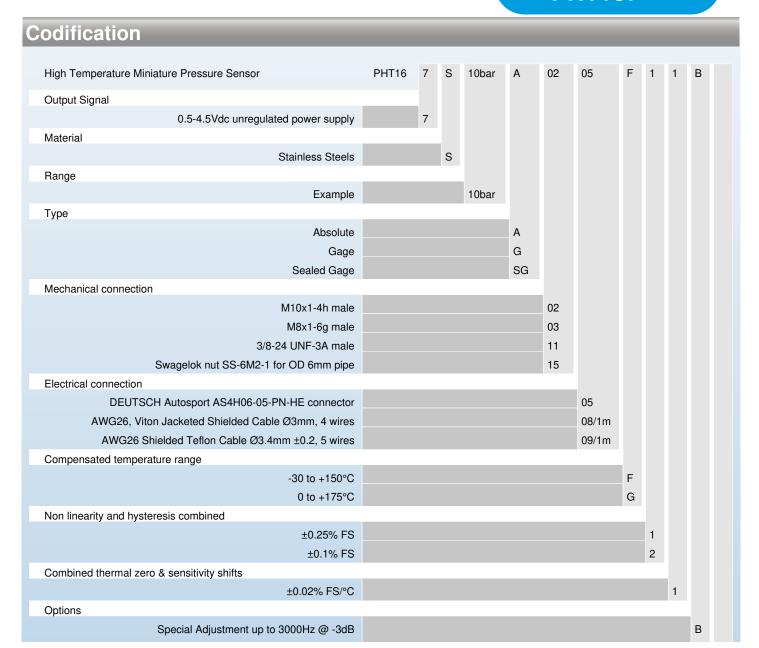
Option: DEUTSCH Autosport AS4H06-05-PN-HE connector

Mechanical connection 3/8-24 UNF-3A male ; M10x1-4h male

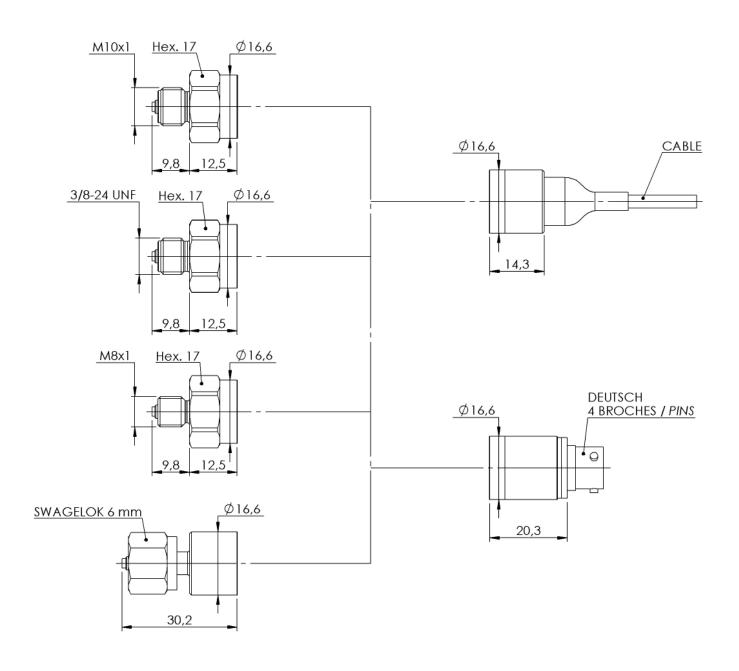
Option: M8x1-6g male; Swagelok nut SS-6M2-1 for OD 6mm pipe

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

Weight < 20g without cable



Dimensions PHT167





DIMENSIONS: mm



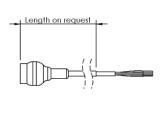
#26 AWG, 4 CONDUCTOR SHIELDED VITON CABLE VOLTAGE OUTPUT CONDUCTOR + EXCITATION RED + SIGNAL GREEN / YELLOW NC WHITE

BLUE / BLACK

SHIELD

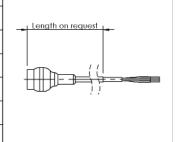
0 VOLT

SENSOR HOUSING



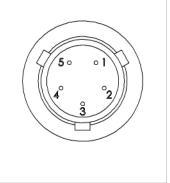


5 CONDUCTOR TEFLON CABLE		
VOLTAGE OUTPUT	CONDUCTOR	
+ EXCITATION	RED	
+ SIGNAL	GREEN	
0 VOLT	BLACK	
NC	WHITE	
NC	BLUE	
SENSOR HOUSING	SHIELD	





DEUTSCH ASH06-05PN-HE - 5 PINS		
VOLTAGE OUTPUT	PIN	
+ EXCITATION	PIN 1	
+ SIGNAL	PIN 3	
NC	PIN 4	
- EXCITATION	PIN 2	
SENSOR HOUSING	PIN 5	





E.F.E.

L'ESSOR FRANCAIS ELECTRONIQUE 16 Rue Porte a 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 - infos@efe-sensor.com

