

Miniature Pressure Sensor



Features

- ➔ Large choice of connectors & threads
- ➔ All Stainless steel
- ➔ Operating from -40 to +125°C
- ➔ Outputs : 0-5V, 4-20mA, 0,5-4,5V

Applications

- ➔ Automotive - on vehicle
- ➔ Aerospace
- ➔ Instrumentation
- ➔ Machine construction

The PST160 series is a miniature pressure sensor. Operating from -40 up to +125°C, three compensated temperature ranges are available to best suit your application's environment. Its wetted parts being all stainless steel, it is compatible with most media, including corrosive fluids used in automotive and aerospace industries. High performances and stability over temperature are achieved thanks to EFE proprietary sensing technologies. The robust and proven design of the sensor ensures reliability in your application. The PST160 series is available with unamplified (mV/V) and amplified outputs (voltage or current), integrating a high performance and ruggedized electronic module.

Technical specifications

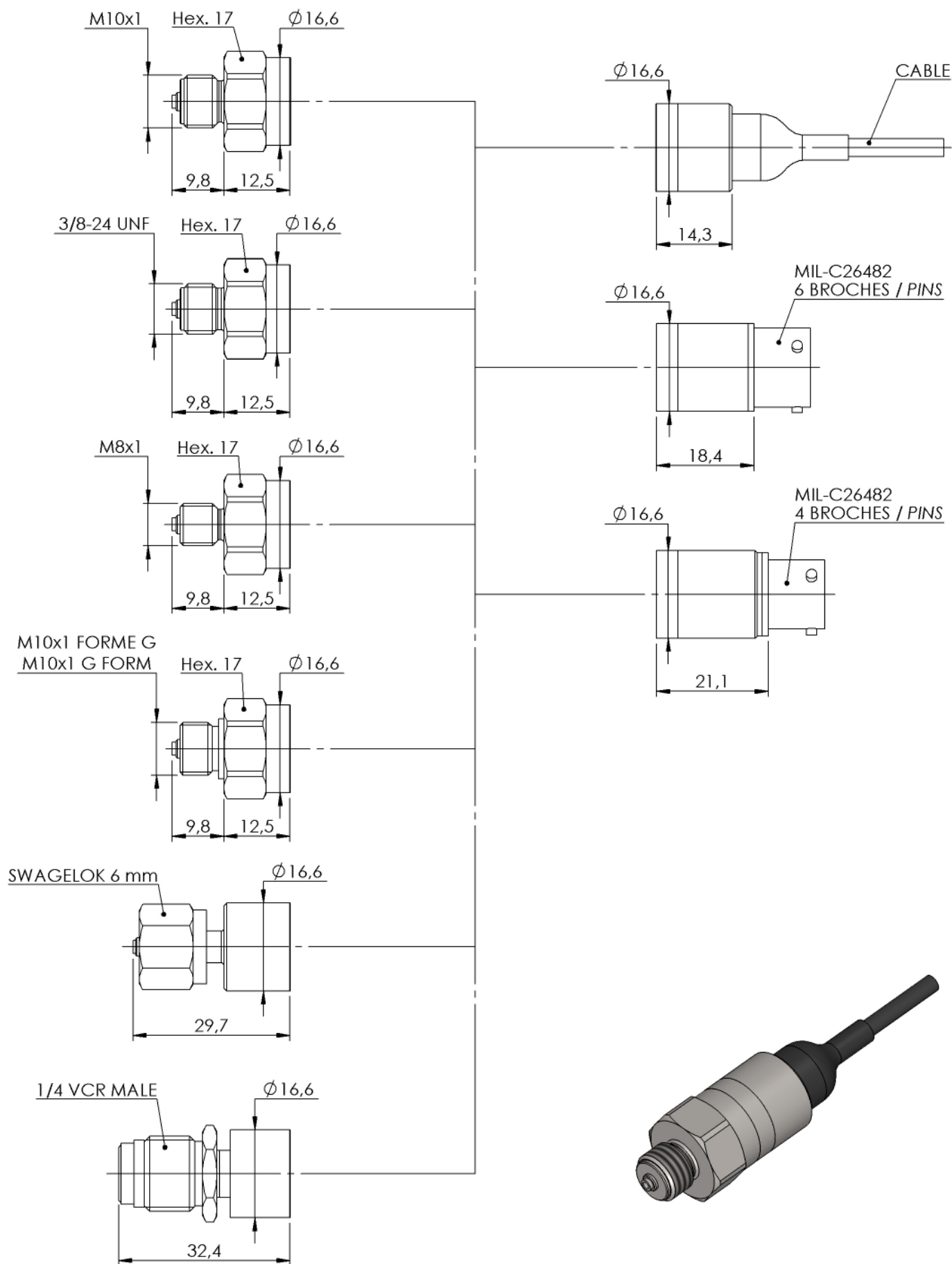
Pressure ranges (FS)	700/1200mbar ; -1/+2bar ; -1/+3bar ; -1/+5bar ; 1bar ; 2bar ; 3bar ; 5bar ; 10bar ; 20bar ; 40bar ; 100bar ; 250bar ; 400bar ; 600bar ; -14.5/+30PSI ; -14.5/+40PSI ; -14.5/+70PSI ; 8000PSI ; 15PSI ; 30PSI ; 70PSI ; 150PSI ; 300PSI ; 500PSI ; 1500PSI ; 3000PSI ; 5000PSI
Type	Absolute ; Gage
Type (for ranges > 40 bar)	Sealed Gage
Safe overload	150% FS
Burst pressure	300% FS
Power supply	5Vdc ± 10mV
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

Technical Specifications

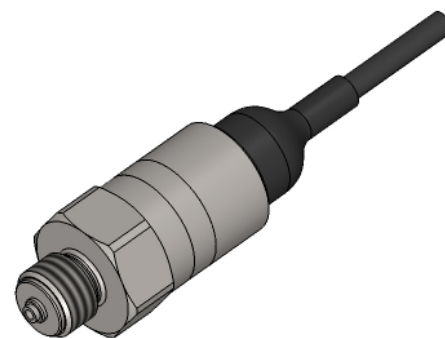
Zero and sensitivity settings tolerances	±50mV
Non linearity and hysteresis combined	±0.25% FS Option : ±0.1% FS
Non repeatability	±0.02% FS typ.
Signal bandwidth	1000Hz @ -3dB
Compensated temperature range	0 to +60°C Option : -25 to +85°C ; -25 to +125°C
Operating temperature range	-40 to +125°C
Combined 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	AWG26, Viton Jacketed Shielded Cable Ø3mm, 4 wires Option : Hermetic MIL-C-26482 - 6 pins Receptacle ; Hermetic MIL-C-26482 - 4 pins Receptacle
Mechanical connection	3/8-24 UNF-3A male ; M10x1-4h male Option : 1/4" VCR male ; M10x1 male form G Minimesse® ; 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 ; Additionnal Internal Viton O-ring for 700-1200mbar range
Weight	30g without cable
Enclosure protection	IP65 for absolute & sealed gage version

Codification

Miniature Pressure Sensor	PST16	3	S	1bar	A	02	03	A	1	1	
Output Signal											
0.5-4.5Vdc regulated power supply		3									
Material											
Stainless Steels			S								
Range											
Example				1bar							
Type											
Absolute					A						
Gage					G						
Sealed Gage					SG						
Mechanical connection											
M10x1-4h male						02					
M8x1-6g male						03					
3/8-24 UNF-3A male						11					
Swagelok nut SS-6M2-1 for OD 6mm pipe						15					
M10x1 male form G Minimesse®						16					
1/4" VCR male						22					
Electrical connection											
Hermetic MIL-C-26482 - 6 pins Receptacle							03				
AWG26, Viton Jacketed Shielded Cable Ø3mm, 4 wires							08/1m				
Hermetic MIL-C-26482 - 4 pins Receptacle							14				
Compensated temperature range											
0 to +60°C								A			
-25 to +85°C								B			
-25 to +125°C								C			
Non linearity and hysteresis combined											
±0.25% FS									1		
±0.1% FS									2		
Combined thermal zero & sensitivity shifts											
±0.02% FS/°C										1	

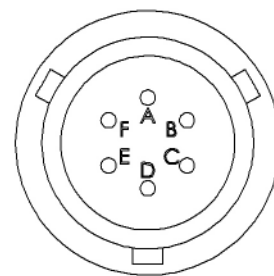


DIMENSIONS : mm

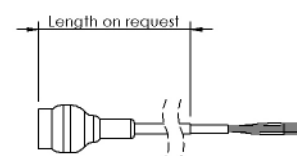


**MIL-C26482 - 6 PINS**

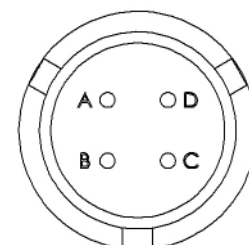
VOLTAGE OUTPUT	PIN
+ EXCITATION	PIN A
+ SIGNAL	PIN B
0 VOLT	PIN C
0 VOLT	PIN D
SENSOR HOUSING	PINS E & F

**#26 AWG, 4 CONDUCTOR SHIELDED VITON CABLE**

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

**MIL-C26482 - 4 PINS**

VOLTAGE OUTPUT	PIN
+ EXCITATION	PIN A
+ SIGNAL	PIN C
NC	PIN D
0 VOLT	PIN B
SENSOR HOUSING	CONNECTOR HOUSING



Agent :



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.efc-sensor.com - infos@efc-sensor.com