

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

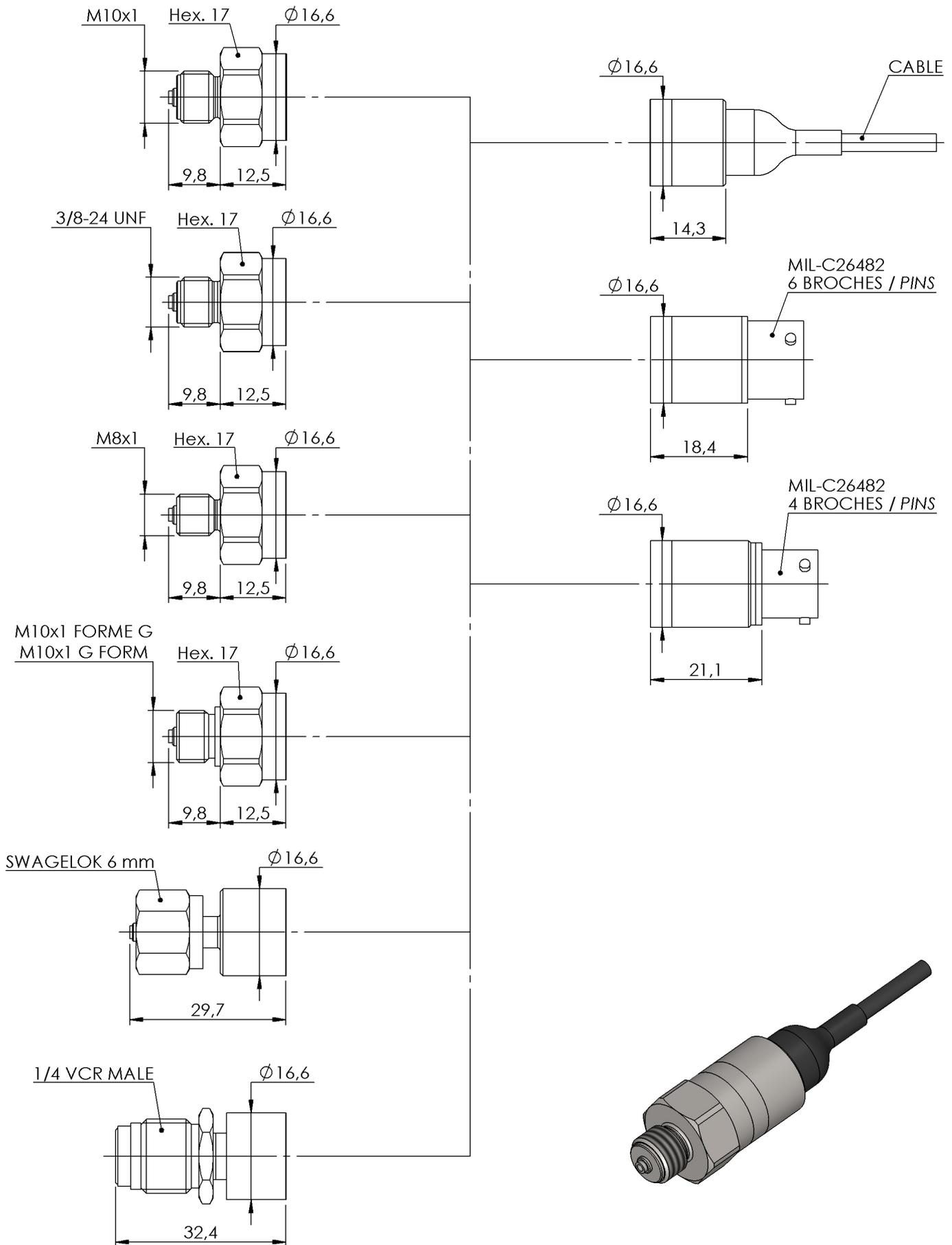
Pressure ranges (FS)	700/1200mbar ; -1/+2bar ; -1/+3bar ; -1/+5bar ; 1bar ; 2bar ; 3bar ; 5bar ; 10bar ; 20bar ; 40bar ; 100bar ; 250bar ; 400bar ; 600bar ; -14.5/+30PSI ; -14.5/+40PSI ; -14.5/+70PSI ; 8000PSI ; 15PSI ; 30PSI ; 70PSI ; 150PSI ; 300PSI ; 500PSI ; 1500PSI ; 3000PSI ; 5000PSI
Type	Absolute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

Technical Specifications

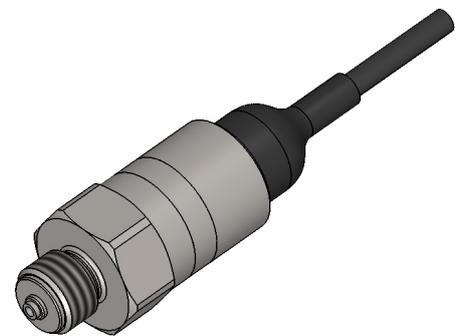
Output at 0%FS	0mV/V
Output at 100%FS (FS < 3bar)	3 to 10mV/V
Output at 100%FS (FS >= 3bar)	1.5mV/V
Zero and sensitivity settings tolerances	±3% FS
Non linearity and hysteresis combined	±0.25% FS
Non repeatability	±0.02% FS typ.
Compensated temperature range	0 to +60°C Option : -25 to +85°C ; -25 to +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 Minimes® ; 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

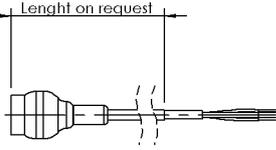
Codification

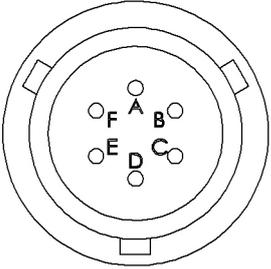
Miniature Pressure Sensor	PST16	1	S	1bar	A	02	03	A	1	1
Output Signal										
	mV/V		1							
Material										
	Stainless Steels		S							
Range										
	Example			1bar						
Type										
	Absolute				A					
	Gage				G					
	Sealed Gage				SG					
Mechanical connection										
	M10x1-4h male					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 Minimess®					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	
Combined thermal zero & sensitivity shifts										
	±0.02% FS/°C									1

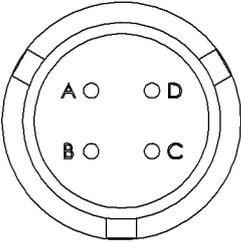


DIMENSIONS : mm



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

	MIL-C26482 - 6 PINS		
	mV/V OUTPUT	PIN	
	+ EXCITATION	PIN A	
	+ SIGNAL	PIN B	
	- SIGNAL	PIN C	
	- EXCITATION	PIN D	
SENSOR HOUSING	PINS E & F		

	MIL-C26482 - 4 PINS		
	mV/V OUTPUT	PIN	
	+ EXCITATION	PIN A	
	+ SIGNAL	PIN C	
	- SIGNAL	PIN D	
	- EXCITATION	PIN B	
SENSOR HOUSING	CONNECTOR HOUSING		



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