L'Essor Français Electronique

PET163

Extreme Temperature Pressure Sensor



Features

- All Stainless steel
- Miniature pressure sensor
- Optional remote electronic
- Operating from -20 to +250°C

Applications

- Oil & gas
- Aerospace
- Military
- Test benchs

Operating up to 250°C, PET160 is a ruggedized pressure sensor dedicated to extreme temperature. With all stainless steel wetted parts, It is compatible with most media, including corrosive fluids used in automotive and aerospace industries. Equipped with the latest thin film technology developed by EFE, its performances and stability over wide temperature range are excellent. Models are available with unamplified and voltage outputs, thanks to a remote electronic module, packaged in a miniature stainless steel housing, fitted in the cable and operating up to 125°C.

Technical specifications

Pressure ranges (FS)	20bar ; 40bar ; 100bar ; 250bar ; 400bar ; 600bar ; 300PSI ; 500PSI ; 1500PSI ; 3000PSI ; 10000PSI ; 5000PSI
Type	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 0%FS	0.5Vdc
Output at 100%FS	4.5Vdc
Zero and sensitivity settings tolerances	±50mV
Amplifier type	Remote electronic, operating from -40 to +125°C, with 1m of cable at each side (standard)
Non linearity and hysteresis combined	±0.25% FS Option : ±0.1% FS
Non repeatability	±0.02% FS typ.

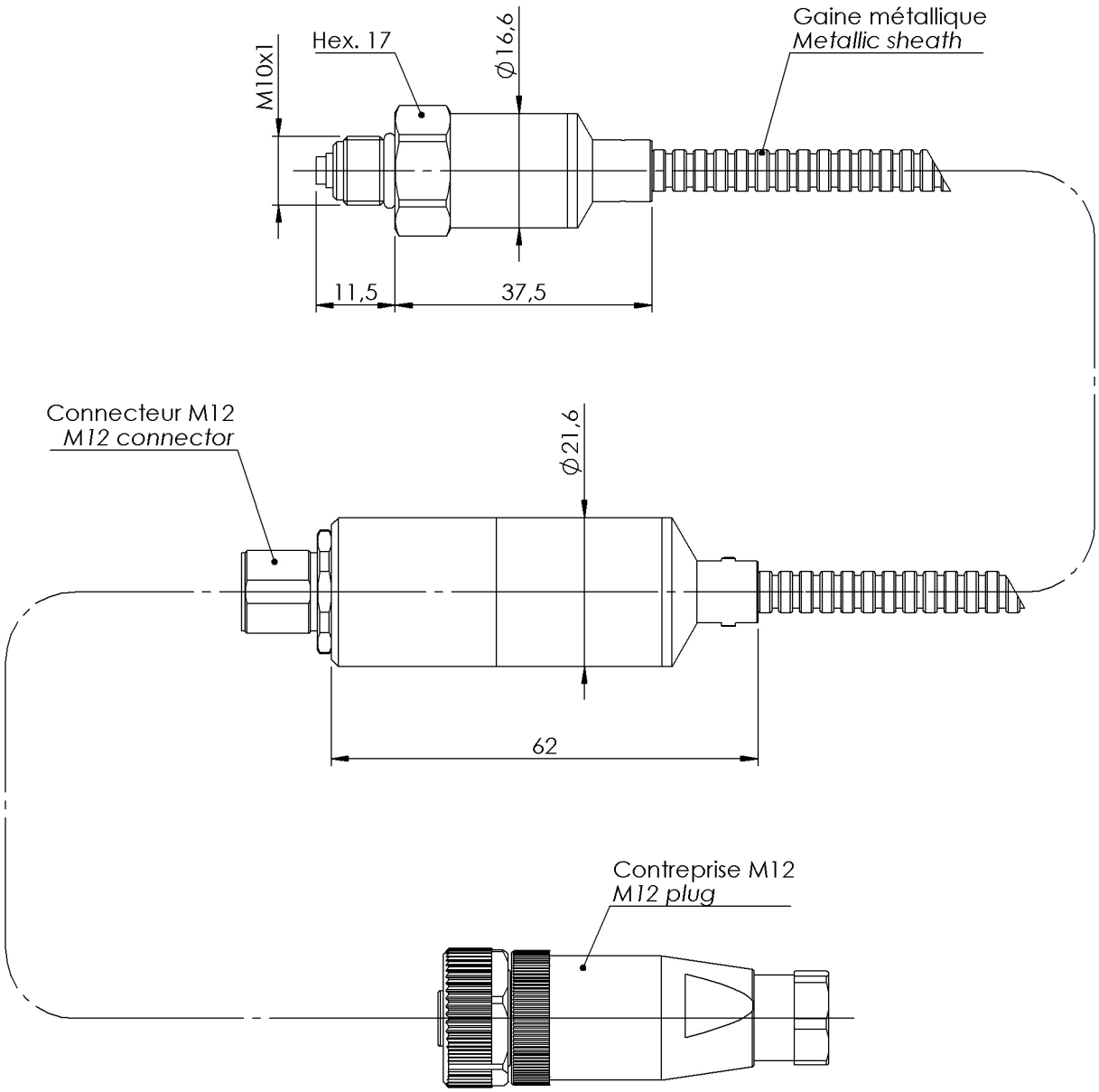
PET163

Technical Specifications

Signal bandwidth	1000Hz @ -3dB
Compensated temperature range	+20 to +250°C
Operating temperature range	-20 to +250°C
Combined thermal zero & sensitivity shifts	±0.03% 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 Shielded Teflon Cable Ø3.4mm ±0.2, 5 wires
Mechanical connection	M10x1-4h male Option : 3/8-24 UNF-3A male
Material(s) of wetted parts	Stainless Steel 316L ; Stainless Steel 17-4PH ; Stainless steel 15-5PH
Weight	< 40g without cable
Enclosure protection	IP65 for absolute & sealed gage version

Codification

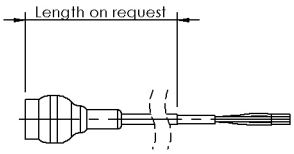
Extreme Temperature Pressure Sensor	PET16	3	S	40bar	G	02	09/1m	H	1	3
Output Signal										
0.5-4.5Vdc regulated power supply		3								
Material										
Stainless Steels			S							
Range										
Example				40bar						
Type										
Gage					G					
Mechanical connection										
M10x1-4h male						02				
3/8-24 UNF-3A male						11				
Electrical connection										
AWG26 Shielded Teflon Cable Ø3.4mm ±0.2, 5 wires							09/1m			
Compensated temperature range										
+20 to +250°C								H		
Non linearity and hysteresis combined										
±0.25% FS									1	
±0.1% FS									2	
Combined thermal zero & sensitivity shifts										
±0.03% FS/°C										3



Dimensions : mm



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



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