

High Pressure Miniature Transducer



Features

- ➔ Available with Built in Electronic
- ➔ High pressure : up to 3000bar
- ➔ Fatigue Rated Pressure Sensor
- ➔ Monolithic Design

Applications

- ➔ Oil & gas
- ➔ Aerospace
- ➔ Test benches
- ➔ Automotive

The PHP160 series is designed for high pressure measurements up to 3000bar. Its monolithic construction makes it well adapted to endurance tests and applications with high frequency pulsations. Being all stainless steel, it is compatible with most media including corrosive fluids used in industry. Unamplified (mV/V output) or equipped with the latest signal conditioning technologies from EFE (0-5 and 0.5-4.5Vdc outputs), it is able to measure very dynamic phenomenon. Its thin film sensitive element ensures high performances and stability over wide temperature range. Models with Vdc built-in electronics (power supply : 8-30Vdc), being low consumption (< 10mA) and with high bandwidth capabilities are particularly adapted to embedded applications.

Technical specifications

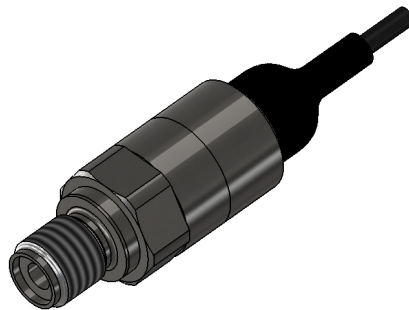
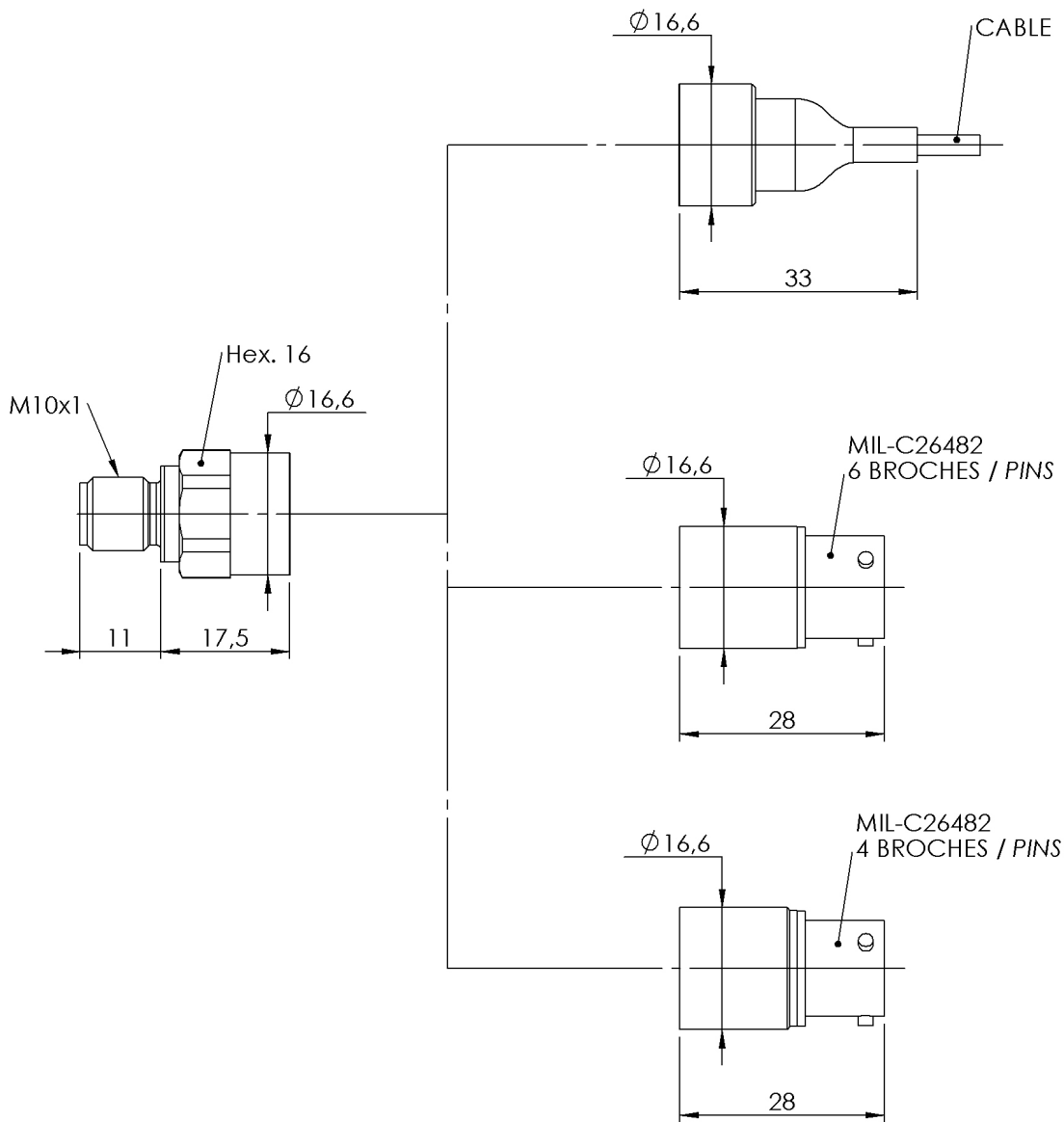
Pressure ranges (FS)	2000bar ; 2500bar ; 3000bar ; 30000PSI ; 40000PSI
Type	Gage
Safe overload	150% FS
Output impedance	> 3000 Ohms typ.
Input impedance	> 3500 Ohms typ.
Power supply	5 to 15Vdc
Consumption	< 10mA
Insulation	> 1000 MOhms under 50Vdc at ambient temperature
Output at 0%FS	0mV/V
Output at 100%FS	0.6mV/V/1000bar
Zero and sensitivity settings tolerances	±3% FS
Non linearity and hysteresis combined	±0.25% FS Option : ±0.15% FS
Non repeatability	±0.02% FS typ.

Technical Specifications


Compensated temperature range	0 to +60°C Option : -25 to +85°C ; -25 to +125°C ; -40 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	M10x1 male high pressure
Material(s) of wetted parts	Stainless steel 15-5PH

Codification

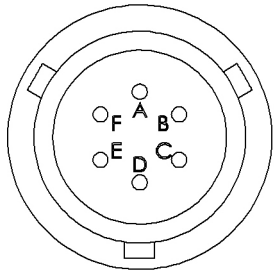

High Pressure Miniature Transducer	PHP16	1	S	2000bar	G	25	03	A	1	1
Output Signal										
mV/V		1								
Material										
Stainless Steels			S							
Range										
Example				2000bar						
Type										
Gage					G					
Mechanical connection										
M10x1 male high pressure						25				
Electrical 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		
-40 to +125°C								D		
Non linearity and hysteresis combined										
±0.25% FS									1	
±0.15% FS									5	
Combined thermal zero & sensitivity shifts										
±0.02% FS/°C										1



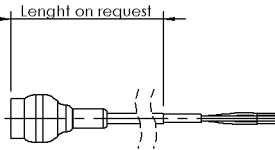

DIMENSIONS : mm



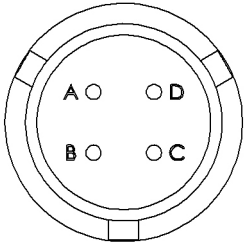
MIL-C26482 - 6 PINS	
mV/V OUTPUT	PIN
+ EXCITATION	PIN A
+ SIGNAL	PIN B
- SIGNAL	PIN C
- EXCITATION	PIN D
SENSOR HOUSING	PINS E & F


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



Agent :




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