

High Pressure Miniature Transducer



Features

- High Pressures : up to 45000 PSI
- Fatigue Rated Sensor Design
- High Dynamic Response
- Built in Electronic, 0.5 to 4.5 output
- Supply Voltage : 5Vdc

Applications

- Oil & Gas Equipment
- Aerospace Certification
- Test benches
- Automotive Research

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

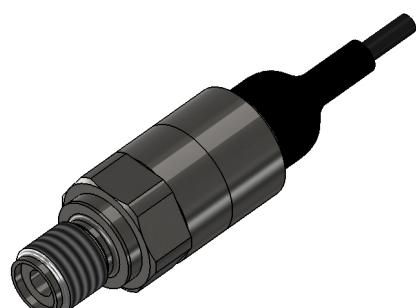
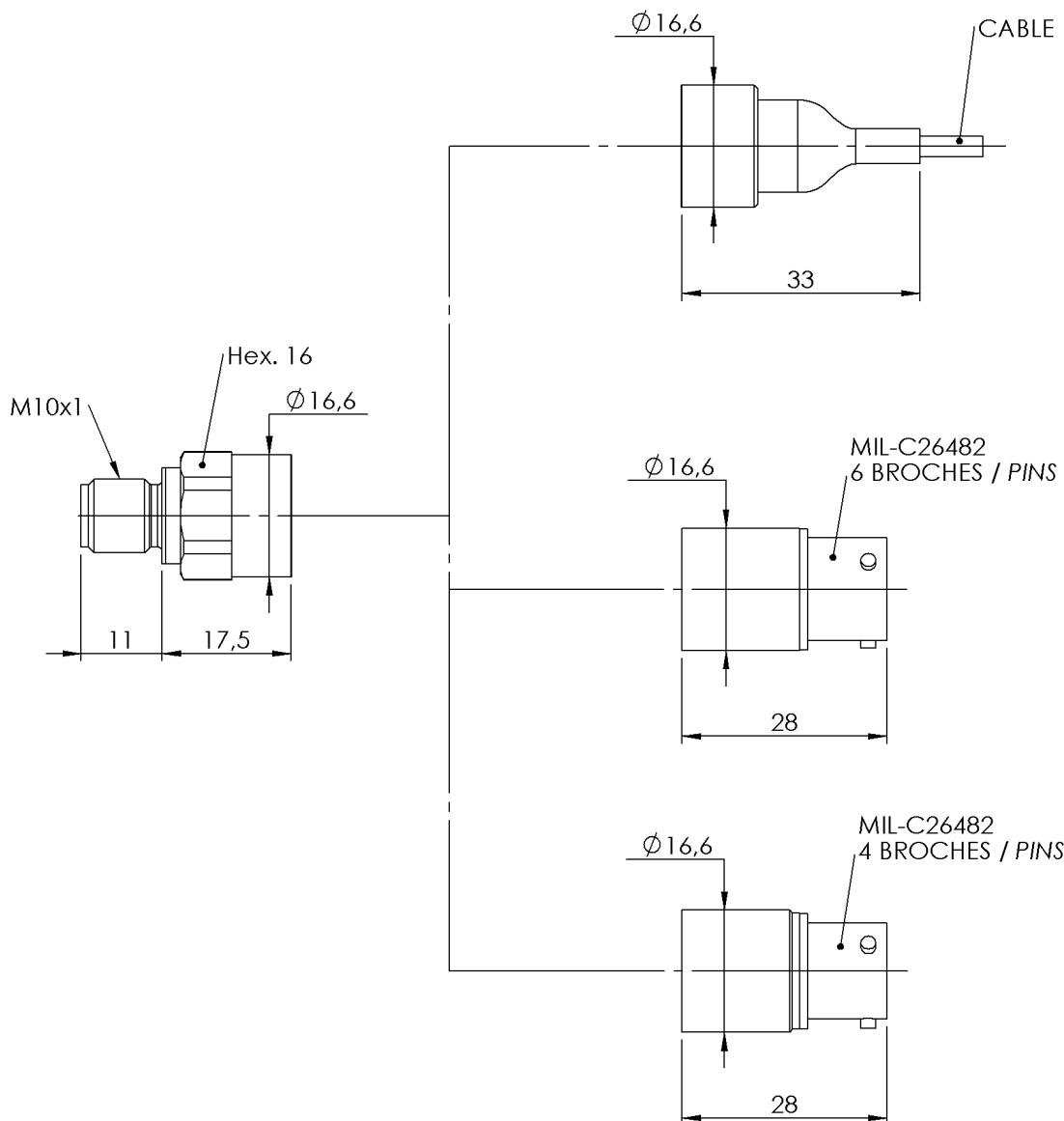
Pressure ranges (FS)	2000bar ; 2500bar ; 3000bar ; 30000PSI ; 40000PSI
Type	Gage
Safe overload	150% FS
Power supply	5Vdc ± 10mV
Consumption	< 10mA
Insulation	> 1000 MΩ under 50Vdc at ambient temperature
Output at 0%FS	0.5Vdc
Output at 100%FS	4.5Vdc
Zero and sensitivity settings tolerances	±50mV
Non linearity and hysteresis combined	±0.25% FS Option : ±0.1% FS
Non repeatability	±0.02% FS typ.
Signal bandwidth	1000Hz @ -3dB Option : Special Adjustment up to 5000Hz @ -3dB

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	3	S	2000bar	G	25	03	A	1	1	B
Output Signal	0.5-4.5Vdc regulated power supply		3								
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			
	±0.1% FS							2			
Combined thermal zero & sensitivity shifts	±0.02% FS/°C								1		
Options	Special Adjustment up to 5000Hz @ -3dB									B	

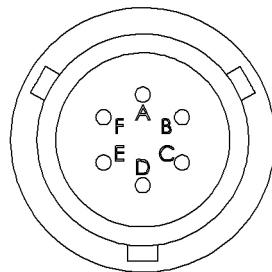


DIMENSIONS : mm



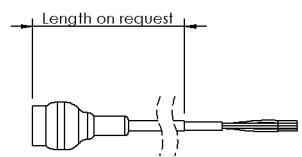
MIL-C26482 - 6 PINS

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

