

Flush Diaphragm Miniature Pressure Sensor



Features

- ➔ Sub miniature pressure transducer
- ➔ Flush diaphragm sensor
- ➔ High natural frequency
- ➔ Operating from -40 to +90°C

Applications

- ➔ Military
- ➔ Chimie
- ➔ Instrumentation
- ➔ Pharmaceuticals applications

Model PFD121 pressure sensor is designed with a flush stainless steel diaphragm, in direct contact with process media and without dead volume. It is equipped with four active bonded strain gages arranged in a Wheatstone-bridge configuration. The PFD121, available on standard with unamplified output (mV/V), is able to measure dynamic pressure spikes. On option, it can be set up with a remote amplifier (AMP310). Available pressure ranges span from 15 to 700 bar. The PFD121 can be used in corrosive fluid environments.

Technical specifications

Pressure ranges (FS)	15bar ; 20bar ; 35bar ; 70bar ; 250bar ; 500bar ; 700bar ; 200PSI ; 300PSI ; 500PSI ; 1000PSI ; 3000PSI ; 7000PSI ; 10000PSI
Type	Gage
Safe overload	150% FS
Burst pressure	300% FS
Output impedance	350 Ohms $\pm 5\%$
Input impedance	370 Ohms $\pm 5\%$
Power supply	10Vdc
Consumption	< 30mA
Insulation	> 1000 MOhms under 50Vdc at ambient temperature
Output at 0%FS	0mV/V
Output at 100%FS	1.5mV/V nom.
Zero and sensitivity settings tolerances	$\pm 3\%$ FS
Non linearity and hysteresis combined	$\pm 0.50\%$ FS
Non repeatability	$\pm 0.02\%$ FS typ.

Technical Specifications

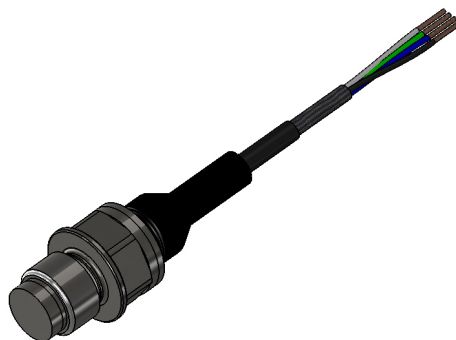
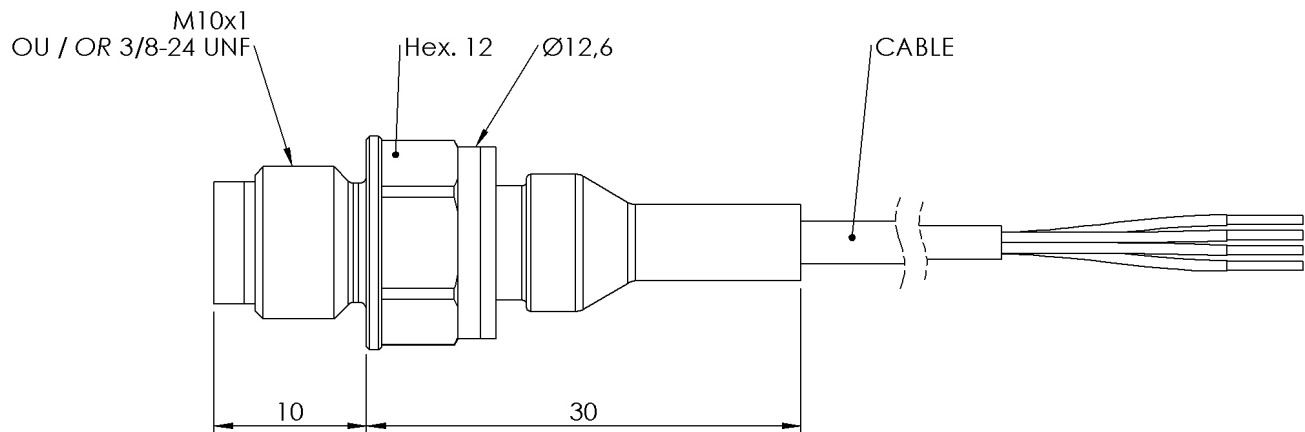
Compensated temperature range	0 to +60°C Option : -25 to +85°C
Operating temperature range	-40 to +90°C
Combined thermal zero & sensitivity shifts	±0.02% FS/°C
Constant acceleration in linear vibrations	± 0.02% FS/g (frequency 20-2000Hz, 50g max.)
Mechanical shock	100g ½ sinus 1ms
EMC protection	Compliant 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 17-4PH
Weight	10g without cable
Enclosure protection	IP65



Codification

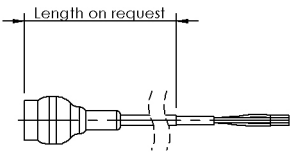
Flush Diaphragm Miniature Pressure Sensor	PFD12	1	S	10000PSI	G	02	09/1m	A	6	1	
Output Signal											
mV/V		1									
Material											
Stainless Steels			S								
Range											
Example				10000PSI							
Type											
Gage					G						
Mechanical connection											
M10x1-4h male						02					
3/8-24 UNF-3A male						11					
Electrical connection											
AWG26 Shielded Teflon Cable Ø3.4mm ±0.2, 5 wires							09/1m				
Compensated temperature range											
0 to +60°C								A			
-25 to +85°C								B			
Non linearity and hysteresis combined											
±0.50% FS									6		
Combined thermal zero & sensitivity shifts											
±0.02% FS/°C										1	





DIMENSIONS : mm



	5 CONDUCTOR TEFLON CABLE		
	mV/V OUTPUT	CONDUCTOR	
	+ EXCITATION	RED	
	+ SIGNAL	GREEN	
	- SIGNAL	WHITE	
	- EXCITATION	BLACK	
	NC	BLUE	
	SENSOR HOUSING	SHIELD	



Presented by: Absolute Gauge Technologies
sales@absolute-gauge.com;
www.absolute-gauge.com,

Toronto: 416 754 3168, Montreal: 514 695
5147, Toll Free: 1 888 754 7008