

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

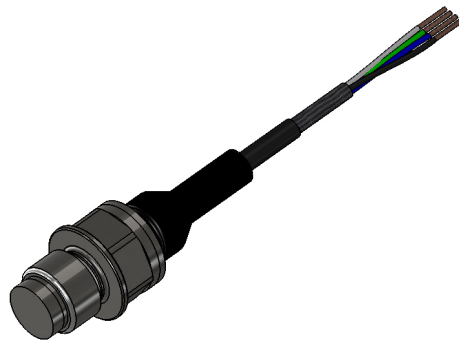
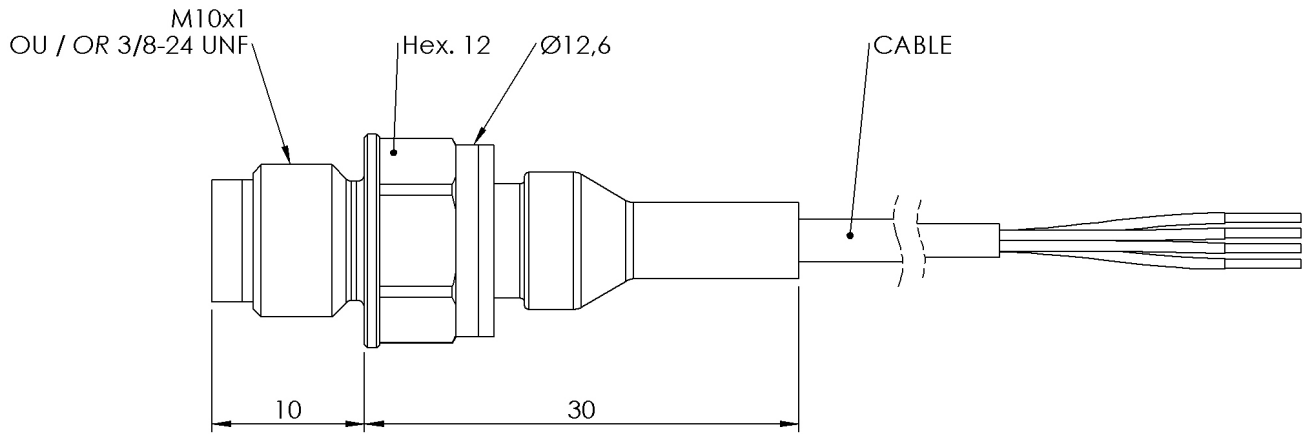
Pressure ranges (FS)	15bar ; 20bar ; 35bar ; 70bar ; 250bar ; 500bar ; 700bar ; 200PSI ; 300PSI ; 500PSI ; 1000PSI ; 3000PSI ; 7000PSI ; 10000PSI
Type	Gage
Safe overload	150% FS
Burst pressure	300% FS
Output impedance	350 Ohms ±5%
Input impedance	370 Ohms ±5%
Power supply	10Vdc
Consumption	< 30mA
Insulation	> 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	±3% FS
Non linearity and hysteresis combined	±0.50% FS
Non repeatability	±0.02% FS typ.

Technical Specifications

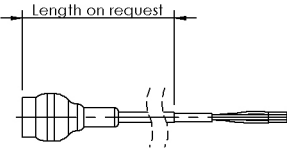
Compensated temperature range	0 to +60°C Option : -25 to +85°C
Operating temperature range	-40 to +90°C
Combined thermal zero & sensitivity shifts	±0.02% FS/°C
Constant acceleration in linear vibrations	± 0.02% FS/g (frequency 20-2000Hz, 50g max.)
Mechanical shock	100g ½ sinus 1ms
EMC protection	Compliant 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	



Agent :



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