



bar

AHI2200

High Temperature Pressure Transducer

FEATURES

- High operating and ambient temperatures of up to 200°C
- Pressure ranges to 1,500 bar
- High Accuracy
- Temperature compensated option
- Good chemical compatibility for a range of applications
- A range of electrical and process



The advanced sensor design consists of a piezoresistive silicon strain gauge circuit, which is epitaxially grown onto the surface of a sapphire diaphragm to form a single crystalline structure. The sapphire sensor element is then molecularly bonded to a titanium alloy sub-diaphragm.

This enables the sensor to endure higher over-pressures and provides superb corrosion resistance. The sensor exhibits virtually no hysteresis and excellent longterm stability over wide temperature ranges.

SPECIFICATIONS

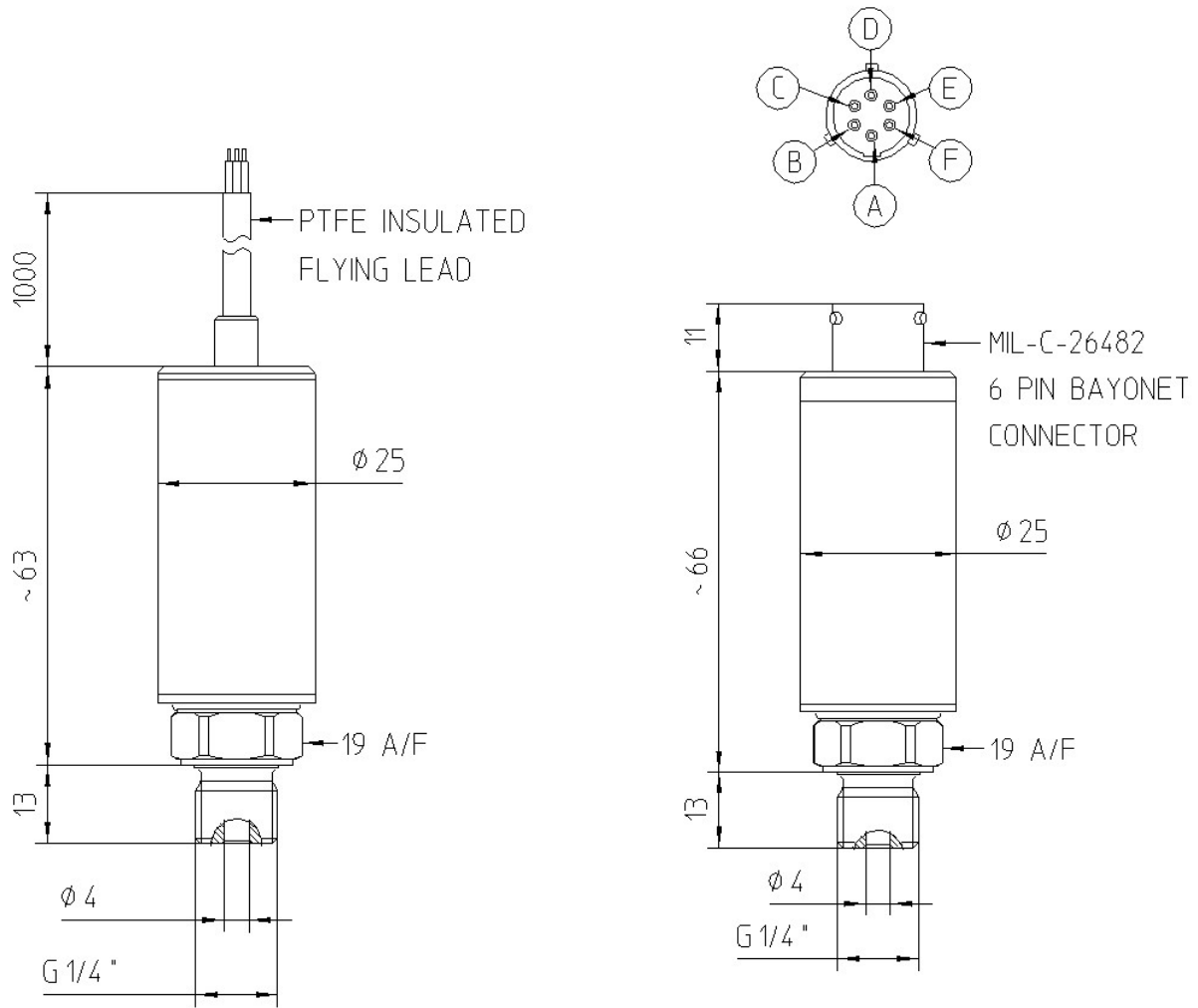
The AHI2200/2300 series of high temperature pressure transducers with state-of-the-art SOS sensor technology offer levels of accuracy and performance previously unobtainable or prohibitively expensive. It is capable of operating consistently at 200°C both media and ambient at a pressure range up to 1500 bar.

Typical applications include:

- Industrial
- High temperature laboratory and test
- Aerospace



DIMENSIONS (in mm)



ELECTRICAL CONNECTIONS

Cable Outlet	
Wire Colour	Designation
Red	+supply
Green	+output
Yellow	-output
Blue	-supply

MIL-C-26482 Outlet	
PIN	Designation
A	+supply
B	+output
C	-output
D	-supply
E	N/C
F	N/C



TECHNICAL DATA

Type	AHI2200 / AHI2210	AHI2300 / A-HI2310
Sensor Technology:	Silicon-on-Sapphire (SOS)	
Output Signal:	10 to 20 mV/V (un-rationalised and un-compensated)	10 mV/V (rationalised and compensated)
Supply Voltage:	10 VDC (5-15V)	
Pressure Reference:	Gauge	
Standard Pressure Ranges (bar):	0-1 bar Vac; 0-1 bar; 0-1.6 bar; 0-2.5 bar; 0-6 bar; 0-10 bar; 0-16 bar; 0-25 bar; 0-60 bar; 0-100 bar; 0-250 bar; 0-400 bar; 0-600 bar; 0-1000 bar; 0-1500 bar (other ranges available)	
Standard Pressure Ranges (psi):	0-30 inHg; 0-15 psi; 0-30 psi; 0-100 psi; 0-150 psi; 0-300 psi; 0-1000 psi; 0-1500 psi; 0-3000 psi; 0-6000 psi; 0-9000 psi; 0-15000 psi; 0-21750 psi (other ranges available)	
Overpressure Safety:	2x for ranges 1 bar Vac to 600 bar; 1.5x for 1000 bar range; 1.1x for 1500 bar range	
Accuracy NLHR:	$\leq \pm 0.1\%$ of span BFSL for pressure ranges $\geq 0-16$ bar $\leq \pm 0.15\%$ of span BFSL for pressure ranges $< 0-16$ bar	
Zero Offset and Span Tolerance:	Zero offset: ± 1 mV/V Span tolerance: 10-20 mV/V	Zero/Span tolerance: $\pm 1\%$ FS
Operating Ambient Temperature:	-40°C to $+200^{\circ}\text{C}$ (-40°F to $+392^{\circ}\text{F}$)	
Operating Media Temperature:	-50°C to $+200^{\circ}\text{C}$ (-58°F to $+392^{\circ}\text{F}$)	
Storage Temperature:	$+5^{\circ}\text{C}$ to $+40^{\circ}\text{C}$ ($+41^{\circ}\text{F}$ to $+104^{\circ}\text{F}$) Recommended best practice	
Temperature Effects:	Typical thermal zero and span coefficients compensated $\pm 0.05\%$ FS/ $^{\circ}\text{C}$	$\pm 2.0\%$ FS Total Error Band -20°C to $+150^{\circ}\text{C}$; typical thermal zero and span coefficients $\pm 0.005\%$ FS/ $^{\circ}\text{C}$
Insulating Resistance:	$\geq 100\text{ M}\Omega$ @ 50 VDC	
Response Time 10-90%:	1 mS	
Wetted Parts:	Titanium alloy	
Pressure Media:	All fluids compatible with Titanium alloy	
Pressure Connection:	1/4" BSP male (G1/4) or 1/4" NPT male (other options available)	
Electrical Connection:	HI2x00: PTFE insulated flying lead, conductor size 7/0.1 mm. HI2x10: MIL-C-26482 6 pin bayonet connector (Accessory not included: mating connector type MS3116F10-6S)	
Ingress Protection:	IP66	
Net Weight:	0.1 Kg (approx.)	



ORDER MATRIX

Output	Electrical Connection	Wires	Type	Options	Pressure Range	Process Connection		
10-20mV/V	1m PTFE insulated flying lead	4	AHI2200					
	MIL-C-26482 6 pin bayonet	4	AHI2210					
10mV/V	1m PTFE insulated flying lead	4	AHI2300					
	MIL-C-26482 6 pin bayonet	4	AHI2310					
Options								
No special options								
Pressure Range in barg								
0-1 bar Vac				V001				
0-1 bar				0001				
0-1.6 bar				01.6				
0-2.5 bar				02.5				
0-6 bar				0006				
0-10 bar				0010				
0-16 bar				0016				
0-25 bar				0025				
0-60 bar				0060				
0-100 bar				0100				
0-250 bar				0250				
0-400 bar				0400				
0-600 bar				0600				
0-1000 bar				1000				
0-1500 bar				1500				
Process Connection								
1/4" BSP male (G1/4)						AB		
1/4" NPT male						AM		
Order Number Example		AHI2200-0600AB						
For options not listed please contact the sales team								

DISCLAIMER: We reserve the right to change specifications without prior notice. specifications without prior notice. All manufactured products are calibrated with precision calibration equipment that is traceable to national measurement standards.