



bar

AHI3000 TEDS

High Specification TEDS Pressure Transducer

The AHI3000 TEDS Ready (Transducer Electronic Data Sheet) contains the critical information needed by an instrument or measurement system to identify, characterize, interface, and properly use the signal from an analog sensor.

IEEE 1451.4 defines the method of encoding TEDS information for a broad range of sensor types and applications.

The unique Silicone-on-Sapphire sensor provides outstanding performance and gives excellent stability over a wide temperature range.

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 long-term stability.

With outstanding insulation properties, the sapphire substrate allows the sensor to operate over a very wide temperature range without loss of performance

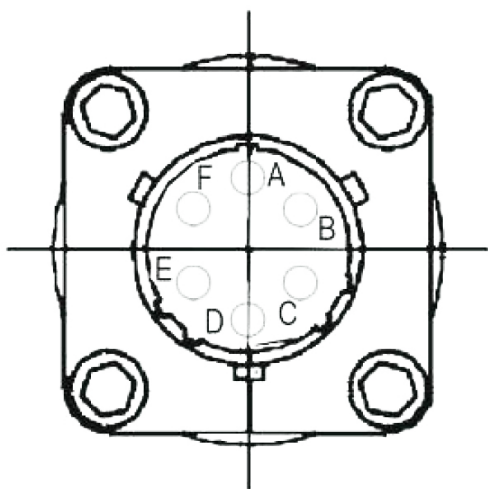


FEATURES

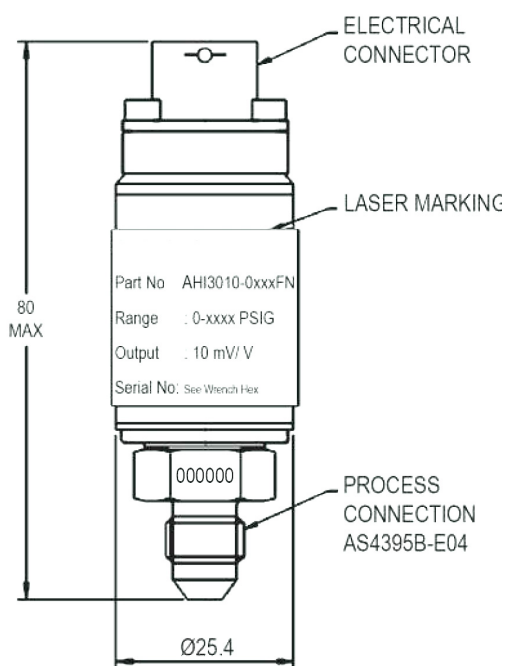
- High accuracy and performance
- Silicone-on-Sapphire sensor technology for outstanding stability
- Pressure ranges to 1,500 bar (ranges to 20,000 psi)
- 10mV/V output
- TEDS Ready, on-board 20Kbit EEPROM



DIMENSIONS (in mm)



Electrical Connection MIL-DTL-26482	
Pin.	Designation
A	+ Excitation
B	+ Signa
C	- Signa
D	- Excitation
E	TEDS+
F	TEDS-





TECHNICAL DATA

Sensor Technology:	Silicon-on-Sapphire (SoS)
Output Signal:	10mV/V
Supply Voltage:	10 VDC (5-15V)
Pressure Reference:	Gauge
Standard Pressure Ranges (bar):	0 – 1 bar Vac; 0 – 1 bar; 0 – 10 bar; 0 – 25 bar; 0 – 100 bar; 0 – 250 bar; 0 – 400 bar; 0 – 600 bar; 0 – 1,000 bar; 0 – 1,500 bar (other ranges available)
Standard Pressure Ranges (psi):	0-30 in Hg; 0-15psi, 0-150psi, 0-300psi, 0-1,500psi, 0-3,000psi, 0-6,000psi, 0-10,000psi, 0-15,000psi, 0-20,000psi (other ranges available)
Overpressure Safety:	4x for 0.5bar range; 2x for ranges 1-600bar; 1.5x for 1,000bar, 1.1x for 1,500 bar range.
Load Driving Capability:	N/A
Accuracy NLHR:	±0.15% of span
Zero Offset and Span Tolerance:	< ±1 mVN; Span Toleranca: 10 mVN
Operating Ambient Temperature:	-40°C to +85°C (-40°F to 185°F)
Operating Media Temperature:	-50°C to +125°C (-58°F to 257°F)
Storage Temperature:	+5°C to +40°C (+41°F to +104°F) Recommended Best Practice
Temperature Effects:	+1.00%FS Total Error Band -20°C to +70°C typical thermal zero and span coefficients +0.005 %FS/°c.
Insulation Resistance:	>100MΩ at 50VDC
Response Time 10-90%:	10-90%: <1mS
Wetted Parts:	Titanium Alloy
Pressure Media:	All fluids compatible with Titanium Alloy
Pressure Connection:	MS33649-4 AS4395 (7/16-20 UNJF-3A) (othar options available)
Electrical Connection:	MIL-DTL-26482, Size 10-6P, Nickel Plated
Net. Weight (Kg):	< 90 grams



ORDER MATRIX

Output	Electrical Connector	Wires	Type	Options	Pressure Range	Process Connection
10mV/V	MIL-DTL-26482 6 Pin bayonet	0	AHI3010			
Options**						
No special action required				-		
Pressure Range in bar						
0-1 barVac					V001	
0-1 bar					0001	
0-10 bar					0010	
0-25 bar					0025	
0-100 bar					0100	
0-250 bar					0250	
0-400 bar					0400	
0-600 bar					0600	
0-1,000 bar					1000	
0-1,500 bar					1500	
Process Connection						
MS33649-4 AS4395 (7/16-20 UNJF-3A)						FN
1/4" BSP Male (G1/4)						AB
1/4" NPT Male						AM
Order Number Example		AHI3010-0010FN				

****For options not listed please contact our sales team****