



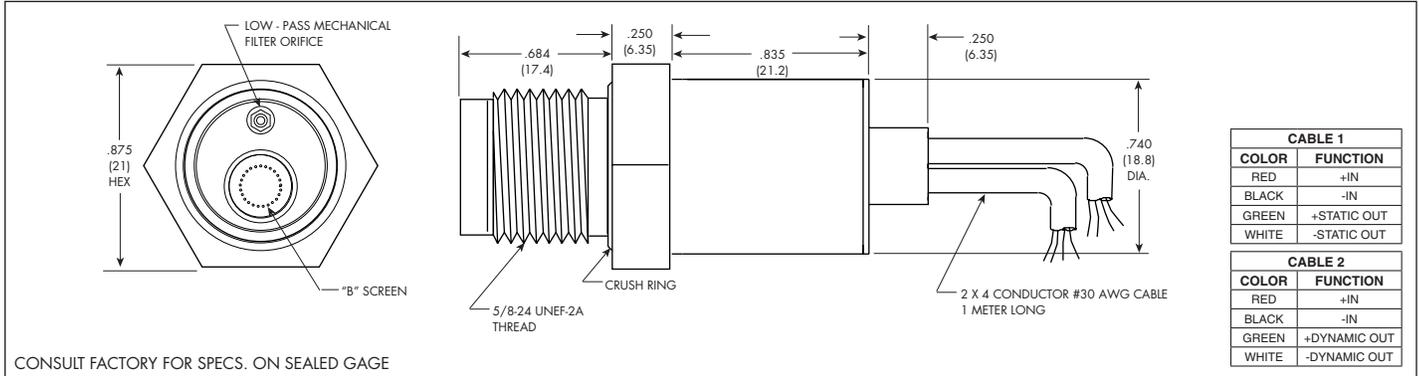
# HIGH TEMPERATURE STATIC-DYNAMIC IS® PRESSURE TRANSDUCER

## XTEL-SD-625 SERIES

- Superior Signal to Noise Ratio of Dynamic Sensor
- Innovative Mechanical Filtering System
- Miniature, Robust Construction
- Ultra High Temperature
- Patented Leadless Technology
- Separated Static-Dynamic Output
- Dual SOI Sensor on a Single Structure
- Excellent Long Term Stability
- High Accuracy
- -65°F to +930°F (-55°C to +500°C) Front End\*



The XTEL-SD-625 Series are high temperature extremely rugged pressure transducers which are ideal for the measurement of flow instabilities and steady pressures in gas turbine combustors and compressors. The XTEL-SD-625 uses an innovative low-pass mechanical filter to enable the measurement of low-level dynamic pressures in high pressure environments with superior signal to noise ratios.



<b>INPUT</b>	1.0/14	1.7/21	2.8/35 BAR
Dynamic/Static Sensor Pressure Range	15/200	25/300	40/500 PSI
Operational Mode of Dynamic Sensor	Differential by Design		
Operational Mode of Static Sensor	Sealed Gage or Absolute		
Over Pressure	400	600	1000 PSI
Burst Pressure	600	900	1250 PSI
Pressure Media	Air (Consult Factory For Details)		
Rated Electrical Excitation	10 VDC		
Maximum Electrical Excitation	15 VDC		
Input Impedance	1000 Ohms (Min.)		
<b>OUTPUT</b>	1000 Ohms (Nom.)		
Output Impedance	Infinitesimal		
Resolution	75 mV/100 mV (Nom.)		
Full Scale Output (FSO) of Dynamic/Static Sensor	± 5 mV (Typ.)		
Residual Unbalance	15 ± 5 Hz to >10 kHz		
Bandwidth of Dynamic Sensor (-6dB)	DC to >10 kHz		
Bandwidth of Static Sensor (Flat ± 1dB)	± 0.1% FSO BFSL (Typ.) ± 0.5% FSO (Max.)		
Combined Non-Linearity, Hysteresis and Repeatability	5.1x10 <sup>-4</sup>	3.2x10 <sup>-4</sup>	2.2x10 <sup>-4</sup>
Acceleration Sensitivity Dynamic Sensor % FS/g Perpendicular	5.0x10 <sup>-5</sup>	3.5x10 <sup>-5</sup>	2.0x10 <sup>-5</sup>
Acceleration Sensitivity Dynamic Sensor % FS/g Transverse			
Acceleration Sensitivity Static Sensor % FS/g Perpendicular	3.3x10 <sup>-5</sup>	2.3x10 <sup>-5</sup>	1.6x10 <sup>-5</sup>
Acceleration Sensitivity Static Sensor % FS/g Transverse	3.5x10 <sup>-6</sup>	2.4x10 <sup>-6</sup>	1.7x10 <sup>-6</sup>
<b>ENVIRONMENTAL</b>	-65°F to +930°F (-55°C to +500°C) - Front End Only		
Operating Temperature Range	-65°F to +662°F (-55°C to +350°C) - Cable		
Compensated Temperature Range	+80°F to +840°F (+25°C to +430°C) - Front End Only		
Thermal Zero Shift	-65°F to +662°F (-55°C to +350°C) - Cable		
Thermal Sensitivity Shift	± 1.5% FS/100°F (Typ.)		
<b>PHYSICAL</b>	± 1.5% /100°F (Typ.)		
Electrical Connection	2 x 4 Conductor 30 AWG Shielded Cable 30" Long		
Sensing Principle	Fully Active Four Arm Wheatstone Bridge Dielectrically Isolated Silicon on Silicon Patented Leadless Technology		
Weight	75 Grams (Nom.) Excluding Module and Leads		
Mounting Torque	100 Inch-Pounds (Max.) 11.3 N-m		

\* Limited life above 850°F (455°C), dependent on operating conditions.  
 Note: Custom pressure ranges, accuracies and mechanical configurations available. Dimensions are in inches. Dimensions in parenthesis are in millimeters.  
 Continuous development and refinement of our products may result in specification changes without notice - all dimensions nominal. (A)  
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