SIGMA-NETICS
Innovation in Sensing

RUGGEDIZED MULTI-PURPOSE AEROSPACE PRESSURE TRANSDUCER

Designed with the extreme requirements of space flight and ground service in mind, ruggedized, all welded, customizable **Series SST 44X** pressure transducer is ideal for all applications. Whether used to measure and control launch vehicle propulsion systems or supply and storage systems for vehicle fluids on ground service equipment, these high accuracy pressure transducers will meet all the demands the aerospace industry throws at it. The **SST 44X** resistance to vibration and shock, moisture ingress, and EMI/RFI along with media compatibility and higher than standard overpressure performance make it the ideal choice for all pressure sensing.

All standard features of the **Series SST 44X** can be customized to fit any application. Let our applications engineers help tailor this sensor to your specific needs.

FEATURES

- All welded SS construction
- Vibration and shock resistant
- Cryogenic options
- Digital and analog outputs
- Fully customizable
- Light weight designs
- LOX cleaning capable
- High pressure secondary containment

APPLICATIONS

- Fuel storage and dispensing
- On vehicle propulsion
- Test stands
- ECLSS
- Bleed air systems

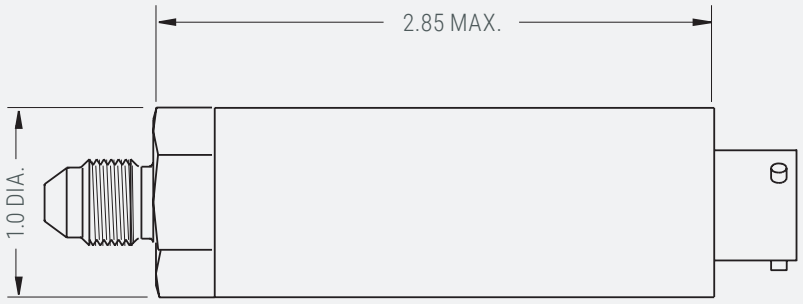
MECHANICAL CHARACTERISTICS

Standard Ranges	50, 75, 100, 200, 500, 750, 1000, 1500, 2000, 3000, 5000, 7500, 10000, 15000, 20000, 25000, 30000, 40000 PSIA / PSIG / PSIS
Proof Pressure	1.8x range
Burst Pressure	2.5x range
Operating Media	Fluids and gases compatible with 15-5 stainless steel (Inconel and other materials optional)
Enclosure	Body of stainless steel
Pressure Fitting	7/16"-20 per AS4395E4 / MS33656-4 (Male)-(standard)
	7/16"-20 per AS5202E4 / MS33649-4 (Female)-(no charge option)
	(For ranges 15,000 psi through 40,000 psi) AE F250-C, 9/16"-18 UNF, or equivalent (standard)
	For additional pressure fittings, please consult factory
Natural Frequency of Sensing Diaphragm	2 kHz at 50 psi to 347 kHz at 40,000 psi
Acceleration Response	Less than ±0.15% FS/G at 50 psi to ±0.0015% FS/G at 40,000 psi
Mass	Approximately 4.5 oz.

ELECTRICAL CHARACTERISTICS

ANALOG OUTPUTS		
Excitation	4-20mA Current Loop:	9-36 Vdc for 2-wire
	Isolated Voltage Output (0-5 Vdc, 0-10 Vdc):	25-35 Vdc (standard)
		14-32 Vdc (no charge option)
		8-18 Vdc (no charge option)
	Non-Isolated Voltage Output:	8-40 Vdc, 3-or 4-wire (standard)
	Additional outputs and related excitations available	
COMMON		
Insulation Resistance	> 100 megohms at 50 Vdc at 70°F	
Electrical Termination	MIL-C-26482 Class, No. 3113H-10-6P, or 18" integral cable	
	Optional electrical terminations available	
Electrical Protection	EMI protected (2-wire only) (optional for Isolated Voltage)	
	Surge protection to 500 Vdc (optional for Isolated Voltage)	
	Reverse polarity protected	
	Short circuit protected	

DIMENSIONS (INCHES)



ENVIRONMENTAL CHARACTERISTICS

Compensated Temperature Range	-65°F to +250°F (Process Temperature)
Operating Temperature Range	-65°F to +250°F (Ambient and Process Temperature)
	Note: Maximum Operating Temperature for digital output is +185°F

PERFORMANCE

STATIC ACCURACY
Linearity: ±0.20% FSO
Hysteresis: ±0.20% FSO
Repeatability: ±0.10% FSO

RESOLUTION
Analog: Infinite
Digital: Options available

THERMAL ZERO SHIFT
< ±0.005% FSO/°F (standard)
Low cost options available

THERMAL SPAN SHIFT
< ±0.005% FSO/°F (standard)
Low cost options available

ZERO BALANCE
±0.25% FSO

SPAN
±1.0% FSO at 70°F < ±0.25% FSO

AVAILABLE OPTIONS
- Shunt calibration
- Multi-temperature thermal sensor characterization
- Custom ATP
- Program management
- Dual output (temperature & pressure)
- Optional alarm setting
- EEE high reliability electronics packages available

Technical specifications are subject to change. Please visit sigmanetics.com for more information.

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