SIGMA-NETICS
Innovation in Sensing

HIGH-PRESSURE, FATIGUE-RATED PRESSURE TRANSDUCER

The **Series SST 144 High-Pressure Transducer** was developed for applications where high pressures and high cycle life meet. Typical high pressure systems in excess of 30,000 psi tend to create high fatigue conditions in sensing elements. Our **Series SST 144** is suited for these conditions.

Coupled with high vibe/shock resistance, tight accuracy, and superior thermal performance, the **SST 144 Series** can meet the demands of the harshest high pressure systems. Let our applications engineers configure or customize the **Series SST 144** to your specific needs.

STANDARD FEATURES

- Pressure ranges to 100,000 psi
- Fatigue-rated
- High level output (analog & digital)
- ±0.25% FSO accuracy
- Zero pot adjustment
- Isolated voltage output
- Stainless steel construction
- Shock and vibration resistant

APPLICATIONS

- Fuel injection testing
- Water jet cutting
- Isostatic powder presses
- Metal injection molding
- Homogenizing

MECHANICAL CHARACTERISTICS

Standard Ranges	30000, 40000, 50000, 60000, 75000, 100000 PSIA / PSIG
Proof Pressure	1.5x range or 120,000 PSIG (whichever is less)
Burst Pressure	2.0x range or 150,000 PSIG (whichever is less)
Operating Media	Liquids and gases compatible with stainless steel
Enclosure	Body of stainless steel
Pressure Fitting	*(For ranges 20,000 psi through 60,000 psi)* AE F250-C, 9/16"-18 UNF, or equivalent (standard)
	(For ranges 75,000 psi through 100,000 psi) AE F312-C150, 5/8"-18 UNF, or equivalent (female) (standard)
	For additional pressure fittings, please consult factory
Mass	Approximately 12 oz.

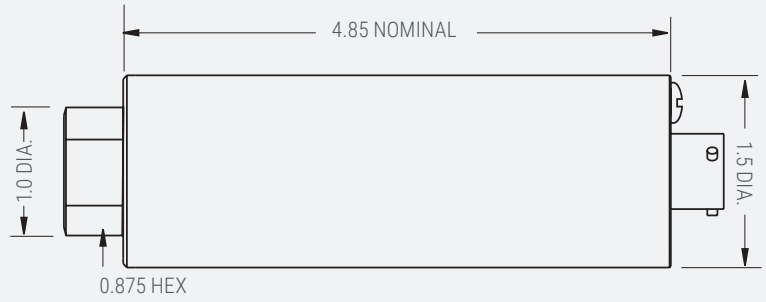
ENVIRONMENTAL CHARACTERISTICS

Compensated Temperature Range	-30°F to +170°F (Options available)
Operating Temperature Range	-65°F to +250°F (Process Temperature at sensor)
	-40°F to +185°F (Ambient Temperature)

ELECTRICAL CHARACTERISTICS

ANALOG OUTPUTS		
Excitation	4-20mA Current Loop:	9-36 Vdc for 2-wire
		9-36 Vdc for 3-wire
	Isolated Voltage Output (0-5 Vdc, 0-10 Vdc):	14-32 Vdc (standard)
		8-18 Vdc (no charge option)
	Non-Isolated Voltage Output:	8-40 Vdc for 1-5 Vdc, 3-wire (standard)
		8-40 Vdc for 1-6 Vdc, 3-wire (no charge option)
		8-40 Vdc for 0-5 Vdc, 4-wire (no charge option)
	Additional outputs and related excitations available	
DIGITAL OUTPUTS		
Excitation	RS-232, 8-30 Vdc	
Programming	PC *(there is no zero pot, zero adjustment can be made using software)*	
DUAL OUTPUTS (Analog & Digital)		
Excitation	Isolated Voltage plus Digital:	14-32 Vdc
	Non-Isolated Voltage plus Digital:	8-30 Vdc
COMMON		
Insulation Resistance	> 100 megohms at 50 Vdc at 70°F	
Electrical Termination	PTIH-10-6P stainless steel connector mates with MS3116-10-6S or equivalent	
	Optional electrical terminations available	
Electrical Protection	EMI protected (optional for Isolated Voltage)	
	Surge protection to 500 Vdc (optional for Isolated Voltage)	
	Reverse polarity protected	
	Short circuit protected	

DIMENSIONS (INCHES)



PERFORMANCE

STATIC ACCURACY
±0.25% FSO by BFSL
(±0.5% FSO by BFSL for 100,000 PSIA / PSIG)

RESOLUTION
Analog: Infinite
Digital: 0.025% FSO

THERMAL ERROR
< ±0.020% FSO/°F (typical)

ZERO BALANCE
±1.0% FSO at 70°F
Zero adjustment: ±5.0% FSO

SPAN
±1.0% FSO at 70°F

OPTIONAL FEATURES
- Customer specified electrical connections
- Span adjustment pot
- Extended temperature compensation ranges
- Special calibrations
- Additional shock and vibration protection

10/21/19

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