

OVERVIEW

ST6900 Series case mounted transmitters interface directly with PLC, DCS, and 4-20 mA input monitors. The compact size allows for installation in tight places. **Model ST6911** is 4-20 mA proportional to acceleration while **Model ST6917** is proportional to velocity.

These units feature Metrix proprietary Independent Polarity Terminal (IPT®)¹, which allows for error-free wiring. Each ST6900 Series transmitter has the most stable detection circuit available due to built-in protection against temperature shock, and high accuracy at low frequencies by preventing the “ski slope” problem.

FEATURES AND BENEFITS

- Loop-powered
- 4-20 mA output proportional to acceleration (ST6911) or velocity (ST6917)
- Loop terminals with Independent Polarity (IPT®) to prevent incorrect wiring
- Interfaces directly with PLC, DCS, 4-20 mA monitors, etc
- M6 x 1 or 1/4- 28” mounting studs
- MIL style connector standard
- Widest operating temperature in its class
- Most stable detection circuit available
- Temperature shock protected
- “Ski slope” problem protected for high accuracy at low frequencies
- Hermetically sealed

APPLICATIONS

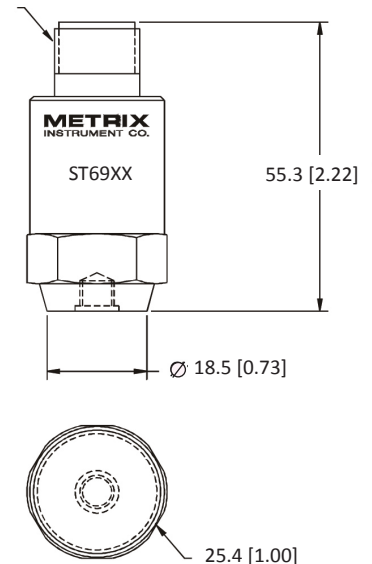
- Blowers
- Centrifuges
- Compressors
- Engines
- Fans
- Generators
- Motors
- Pumps
- Steam Turbines
- Turbochargers



WEIGHT & DIMENSIONS

ELECTRICAL CONNECTOR
5/8-24 UNEF-2A
2 PIN (MIL-C-5015)

Units: mm [in]
Weight: 91 gm (3.1 oz.)



SPECIFICATIONS

Vibration Range:

- 4 to 20 mA output proportional to acceleration (ST6911) and velocity (ST6917), see "Ordering Option A"
- Non standard ranges available

Frequency Response:

- Velocity: 2 - 1000 Hz
- Acceleration: 3- 10000 Hz

Accuracy: 2% (Repeatability)

Axis Orientation: Any

Supply Voltage (Vs): 11 to 30 VDC, Non-polarity sensitive, IPT®

Isolation: 500 Vrms, circuit to case

Electrical Connection: MIL style 2-pin connector

Maximum Load Resistance (R_L): R_L = 50 x (Vsupply-11) W

Service Temperature Rating: -40°F to 100°C (-40°F to 212°F)

Enclosure Materials: 316 SS

Enclosure Environmental Rating: NEMA 4X, IP 67

Approvals: CE marked

HOW TO ORDER

ST6911 - **A A A** - **B** - **C**

Example: ST6911-050-1-0 = 50 g (490 m/s²) pk, M6 x 1.0, No Hazardous Area Approval

A	A	A	Full Scale
0	1	0	10 g (98.1 m/s ²) pk
0	2	0	20 g (196 m/s ²) pk
0	5	0	50 g (490 m/s ²) pk
5	1	0	10 g (98.1 m/s ²) RMS
5	2	0	20 g (196 m/s ²) RMS
5	5	0	50 g (490 m/s ²) RMS

B	Mounting
0	1/4-28 UNF
1	M6 x 1.0

C	Agency Certification
0	No Hazardous Area Approval, CE
1	No Hazardous Area Approval

ST6917 - **A A A** - **B** - **C**

Example: ST6917-151-1-0 = 1.0 in/s (25.4mm/s) RMS, M6 x 1.0, No Hazardous Area Approval

A	A	A	Full Scale
1	2	1	1.0 ips (25.4 mm/s) pk
1	2	2	0.5 ips (12.7 mm/s) p
1	2	3	2.0 ips (50.8 mm/s)pk
1	2	4	1.6 ips (40.6 mm/s) pk
1	2	6	0.8 ips (20.3 mm/s) pk
1	5	1	1.0 ips (25.4 mm/s) RMS
1	5	2	0.5 ips (12.7 mm/s) RMS
1	5	3	2.0 ips (50.8 mm/s) RMS
1	5	4	1.6 ips (40.6 mm/s) RMS
1	5	6	0.8 ips (20.3 mm/s) RMS

B	Mounting
0	1/4-28 UNF
1	M6 x 1.0

C	Agency Certification
0	No Hazardous Area Approval, CE
1	No Hazardous Area Approval

Optional mounting stud:
Metrix P/N 3719-007
(1/4 - 28 UNF to M6 x 1.0)

Notes:

1. IPT® (Independent Polarity Terminal) is a registered trademark of Metrix Instrument Co
2. Metrix is continuously improving our products. Please refer to our website to download the latest version of this datasheet.