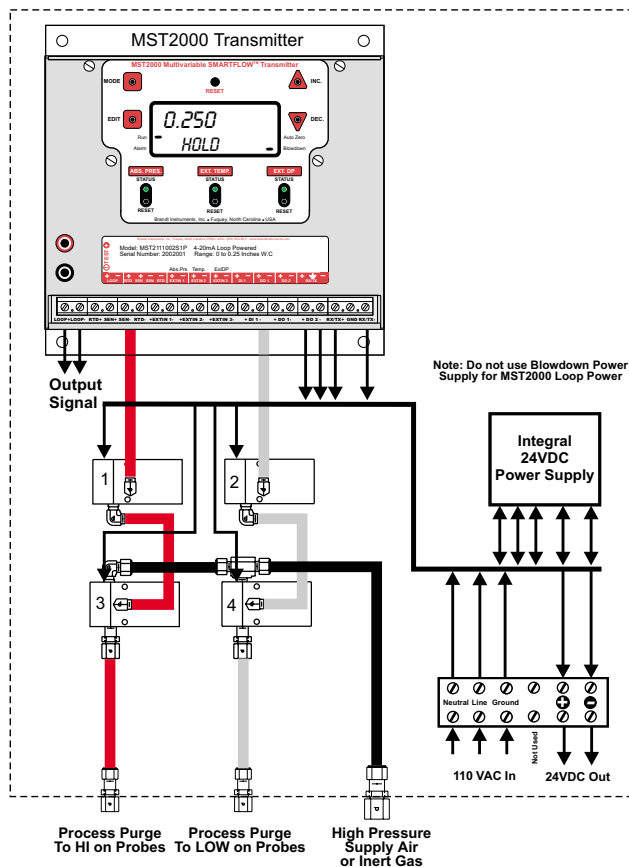


Integral High Pressure Blowdown System

For the MST2400 Series



MST2400 with Integral Blowdown System

Features

- Provides a High Pressure Purge Blast through a Pitot Array to clear ports of particulate.
- Integrated in a single enclosure with the MST2400 Multivariable SMARTFLOW Transmitter for simple, easy installation.
- MST2400 “Holds” the last signal before the “Purge Blast” so as not to disrupt the process.
- Blowdown Sequence is controlled by the MST2400 and can be programmed from once every 2 minutes to once every 24 hours or can be activated by a pulse signal from a DCS or controller.
- NEMA 4X Enclosure.
- 80-100 PSIG Supply Air Required.
- Low Cost.

Available with the MST2400 Series Only. Other Standalone Blowdown Systems available. See the MST2000 Multivariable SMARTFLOW Transmitter specification sheet, or contact the factory, for further information and details

Thermo's **MST2400 Loop Powered Multivariable SMARTFLOW® Transmitter** can now be combined with an **Integral High Pressure Blowdown System** which is specifically designed to clean out Pitot Averaging Air/Gas Flow meters used in processes with heavy particulate loading. This unique combination offers the end user the most versatile, reliable, cost-effective and simplest loop powered multivariable transmitter in the industry in combination with an economical and efficient method of maintaining the process under adverse conditions all in a single enclosure.

The **MST2400** is capable of being programmed to perform a blowdown sequence from once every 2 minutes to once every 24 hours. The sequence can also be activated by a remote pulse from a DCS or other controller. During a blowdown sequence, the **MST2400** will “Hold” the last output signal so as not to disrupt the process. The **MST2400** then activates a combination of valves to first isolate the transmitter from the process lines and then send a “Purge Blast” of high pressure air through the pitot array to clear the ports of particulate. Once the “Purge Blast” is completed, the **MST2400** is re-connected to the process and the output signal “Hold” is halted.

Specifications

FUNCTIONAL SPECIFICATIONS

Purge Air Requirements:	Use plant air supply approximately 80 to 100 psig. For pressures over 100 psig, a regulator must be used. Air should be clean and dry.
Electric Power:	120 Volts AC. An internal 24VDC power supply is furnished with the blowdown system. <i>Note: The power supply furnished with the integral blowdown system can not be used to power the MST2400's Loop signal.</i>
Activation Pulse Signal:	Contact closure for 1/2 second (500 milliseconds). Will not disrupt MST2400 programmed timed sequence.
Blowdown Sequence Duration:	Approximately 30 seconds from time signal is held till signal is restored. High and Low legs of the pitot array are alternately purged for approximately 11 seconds per leg.

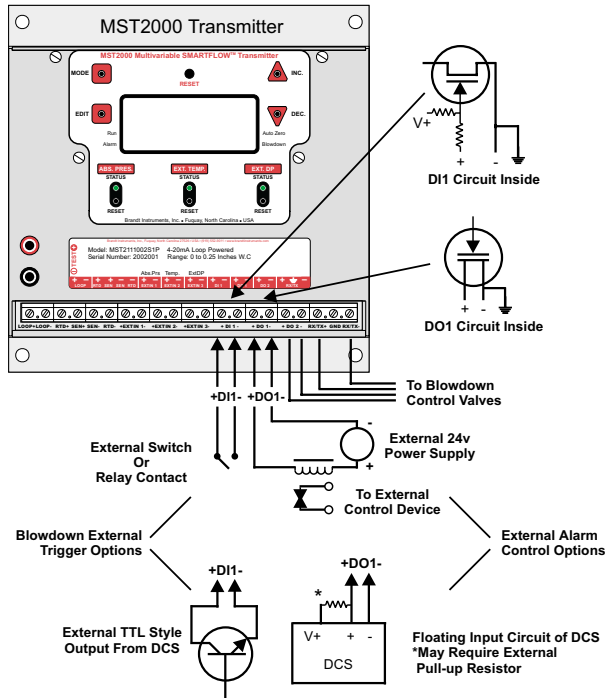
PHYSICAL SPECIFICATIONS

Enclosure:	NEMA 4X Fiberglass. MST2400 only.
Process Connections:	1/4" NPT Female. Stainless Steel.
Supply Air Connection:	1/4" NPT Female. Stainless Steel.
Electrical Connections:	1/2" conduit, Liquid Tite. <i>Other enclosure options and pneumatic / electrical connection sizes possible. Consult Factory.</i>

LINE INSTALLATION

Line Size:	High Pressure Supply: 1/2" Tube. <i>The process tubing diameter line size and lengths from Flow Station to MST2000 Transmitter depend on span of DP Transmitter. Consult factory for installation assistance.</i>
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Remote Activation Wiring

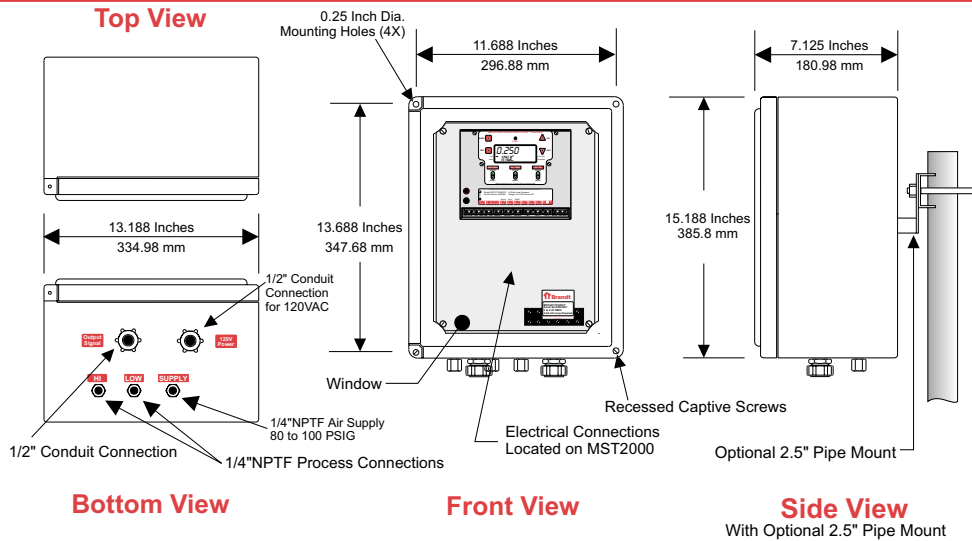


The DI1 (Digital In) connection accepts TTL level signals (isolated) or dry contact closures. If TTL signals are used, the ground connection **must** be floating and isolated from the 4-20mA loop connections.

The DO1 (Digital Out) connection is a MOSFET open drain style output. External ground connections must be floating and isolated from the 4-20mA loop connections.

The MST2000 Blowdown is supplied with an internal power supply, this power supply is isolated and can be used to provide isolated power connections to the external alarm circuit. Do not use it to supply power to the Loop Signal.

Dimensions



MST2400: NEMA 4X Fiberglass Enclosure with Integral High Pressure Blowdown System



www.themro.com
Let us point you in the right direction.

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