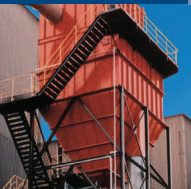




Pressure Transmitters

Model DP 20T and SP 20T



Features

- Non-Clogging Design
- Durable Ceramic Diaphragm
- Tri-Clamp Mounting
- 2-Wire Loop Power

Applications

- Baghouses & Cartridge Filters
- Process Control & EPA Compliance
- Scrubbers & Mist Eliminators
- Process Ventilation
- Powder Processing



Made in USA

Overview

The DP 20T and SP 20T Pressure Transmitters are heavy-duty, low pressure sensors for monitoring and controlling fabric filters, VOC abatement filters, powder processing applications, ventilation systems and any process with high particulate. The ability to transmit accurate measurements below 10" W.C., over a broad temperature range while preventing clogging, make these transmitters ideal replacements for mechanical gauges and electronic sensors that use small tubes that can easily clog.

For differential measurements the flush diaphragm is mounted to the dirty or wet side of a process, such as below the tube sheet on a baghouse chamber or the dirty side of a wet scrubber. The reference port is routed to the clean side of the process. A static version is available for applications where measuring static pressure is required such as monitoring static pressure at a process vent hood for VFD control.

Standard output is a 4-20mA signal for connection to a PLC, DCS or chart recorder. A remote control unit is available for local display, PID loop control, relay alarming and fieldbus communications. The DP 20T can also be wired directly to FilterSense's Baghouse Control Systems (B-PAC Controls) and IntelliPULSE timer.

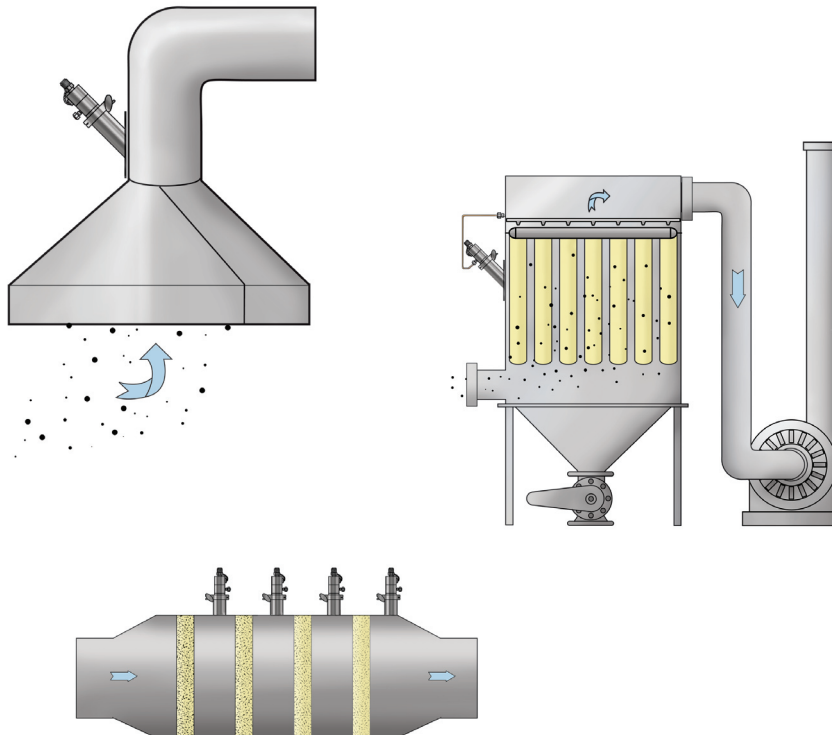
Principle of Operation

The DP 20T employs a state-of-the-art capacitive sensing element with temperature compensation. Changes in process pressure or vacuum applied to the diaphragm cause deflection in the ceramic sensing element. A precise, linear 4-20mA output signal proportional to the pressure or vacuum is produced by the circuitry.

Specifications

Transmitter

Configuration:	Differential Pressure (Model DP 20T), Static Pressure (Model SP 20T)
Supply Voltage:	+15 to 40VDC
Output:	4-20mA, 2-wire
Range:	0 - 10" WC Std, 0-20", -10 to +10"WC and other ranges Opt
Accuracy:	Total Error <1.5% FS Based on zeroing at ambient. Zeroing at temperature reduces error.
Response Time:	500 microseconds
Resolution:	Infinite
Action:	Positive at diaphragm Std, negative at diaphragm & bidirectional Opt
Proof Pressure:	100" WC for 0-10" WC range, higher consult factory
Process Temperature:	-13F (-25C) to 250F (120C), Std -13F (-25C) to 450F (232C), Opt Process temperatures over 250F require thermal isolation mount
Housing:	316SS NEMA 4X equivalent Std
Diaphragm:	Ceramic, Other Opt
Process Mount:	Tri-Clamp, 2" Std Tri-Clamp, 2" with thermal isolation mounting extension, Opt
Process Media:	Compatible with most gases and particulate
Area Classification:	Ordinary locations, Std Class I, II, III, Div I, II All groups, CSA Approved Opt



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Specifications Subject to Change