

Model T1750 High-Pressure Transducer

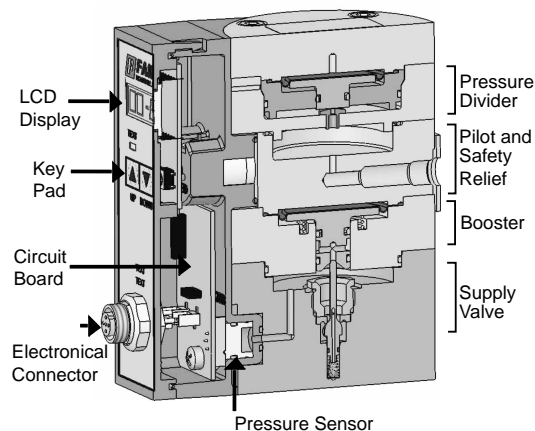
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Model T1750



Features

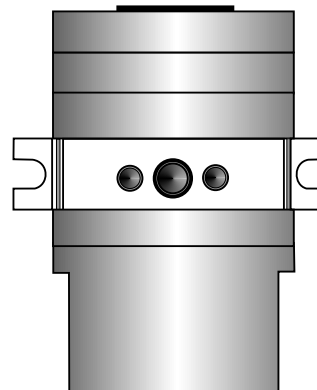
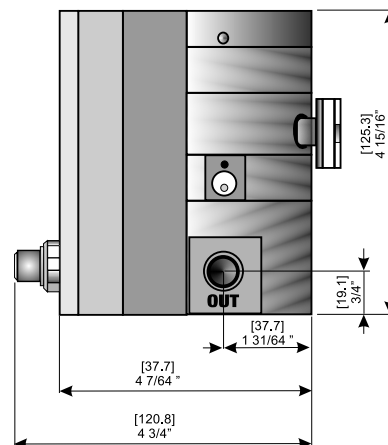
- Output pressure displays in psig, [BAR], (kPa), or user-defined pressure units.
- Reverse acting capability for analog input and output signals.
- Select Current or Voltage mode for input signal or optional analog channels using the keypad.
- Independently adjustable PID tuning coefficients.
- Fully functional keypad and display.
- Backlit Liquid Crystal display screen.



Operating Principles

The Model T1750 Transducers have a closed-loop, integrated, microprocessor control system that regulates outlet pressure. You can control the output from the Model T1750 using the keypad or from an analog control signal.

The Feed and Bleed Solenoid Valves control pressure in the Signal Chamber of the Booster Section. A pressure sensor measures the outlet pressure and provides a feedback signal to the Electronics Section. Any variation in pressure between the set-point and the outlet pressure activates the Feed and Bleed Solenoid Valves to change the output pressure.



Specifications

Supply Pressure

1000 psig, [70 BAR], (7000 kPa) Maximum

Flow Capacity

120 SCFM (203.88 m³/HR) @ 600 psig, [40 BAR], (4000 kPa) supply

Exhaust Capacity

20 SCFM (33.98 m³/HR) where downstream pressure is 5 psig, [.35 BAR], (35 kPa) above 20 psig, [1.5 BAR], (150 kPa) setpoint

Supply Pressure Effect

No Measurable Effect

Input Signal

4-20 mA, 0-10 VDC

Electrical Supply

24 VDC ± 10%

Power Consumption

Less than 5 watts

Analog Output Signal / Impedance

4-20 mA / 500 ohms Max., 0-10 VDC / 400 ohms Min.

Air Consumption

0 @ steady state output with Deadband @ 1% of Full Scale

Ambient Temperature Limits

0°F to +140°F, (-18°C to 60°C)

Accuracy / Repeatability / Linearity / Hysteresis

< +/- 0.50% of Span (per ISA S51.1)

Deadband

Adjustable from 0-10% of Full Scale

Materials of Construction

Body and HousingChromate Treated Aluminum

Cover and PintleAcetal Plastic

TrimPlated Steel

ElastomersFluorocarbon and Silicone

FinishAnodize

Catalog Information

Catalog Number T1750

Input

0-10 VDC 0
 4-20 mA 4
 DeviceNet™ D

Output

0-300 psig 04
 0-750 psig 05

 [0-20 BAR] 14
 [0-50 BAR] 15

 (0-2.0 mPa) 24
 (0-5.0 mPa) 25

Port Size

1/4" 02
 3/8" 03
 1/2" 04

Pipe Thread Type

NPT Thread O
 BSPT Thread U
 BSPP Thread H

Option Type

No Option Board N
 0-10 VDC Analog Output 0
 4-20 mA Analog Output 4

B
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T1750 Cables and Connectors (Sold Separately)

Part Number	Description
055-IPI-089-M	Male Connector (Feedback Output)
055-IPI-089-F	Female Connector (Control Input)
032-IPI-009-3M	Male cable with one connector (3 meter)
032-IPC-009-3F	Female cable with one connector (3 meter)