

# Model T1750 High-Pressure Transducer

**B**

**Model T1750**



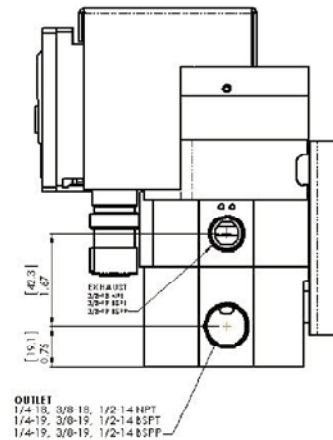
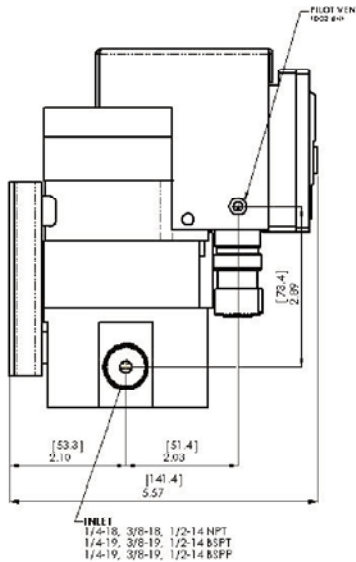
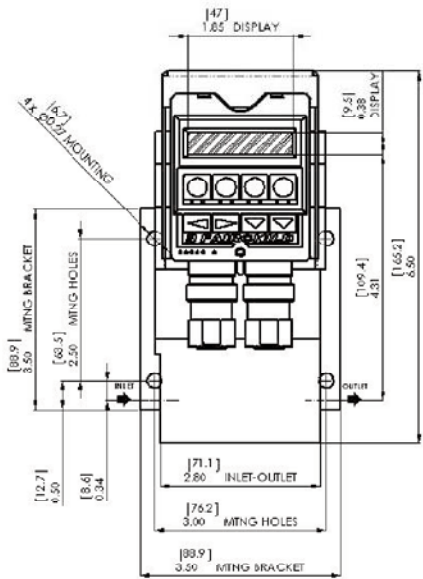
## Features

- 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.



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## Specifications

### Supply Pressure

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

### Flow Capacity

220 SCFM (373.8 m<sup>3</sup>/HR) @ 600 psig, [40 BAR], (4000 kPa) supply

1000 SCFM (1699.2 m<sup>3</sup>/HR) @ 600 psig, [40 BAR], (4000 kPa) supply (3/4" NPT Port Version only).

### Exhaust Capacity

200 SCFM (340 m<sup>3</sup>/HR) where downstream pressure is 300 psig, [21.0 BAR], (2100 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

### 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 Housing .....Anodized Aluminum

Trim .....Plated Steel

Elastomers .....Fluorocarbon

Valve .....Stainless Steel

Valve Seat .....PVDF

## Catalog Information

**Catalog Number** T1750

### Input

0-10 VDC ..... 0  
4-20 mA ..... 4  
DeviceNet™ ..... D

### Output

0-300 psig ..... 04  
0-500 psig ..... 05  
0-750 psig ..... 06  
  
[0-20 BAR] ..... 14  
[0-35 BAR] ..... 15  
[0-50 BAR] ..... 16  
  
(0-2.0 MPa) ..... 24  
(0-3.5 MPa) ..... 25  
(0-5.0 MPa) ..... 26

### Port Size

1/4" ..... 02  
3/8" ..... 03  
1/2" ..... 04  
3/4" <sup>1</sup> ..... 06

### Pipe Thread Type

NPT Thread .....  
BSPT Thread ..... O  
BSPP Thread ..... U  
H

### Option Type

No Option Board ..... N



<sup>1</sup> Required for 1000 SCFM unit

### 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-IPI-009-3F	Female cable with one connector (3 meter)