Type 1500 I/P & E/P Transducers

Type 1500 Description

The T-1500 is a new series of electro-pneumatic transducers that convert an electrical signal to a proportional pressure output. It provides precision electro-pneumatic control to actuators, valves, positioners, final control elements and is ideally used for high-flow control devices. The Type 1500's compact size and accessibility to ports and adjustments allow the unit to be installed in space-constrained locations or in a manifold for multi-device control.

DIN rail and manifold assemblies are available in kits that provide three, five or ten mounting points.

An integral pneumatic volume booster is included in the Type 1500 design to provide high flow capacity. (See specifications for flow data.)

Standard Features

- · Small footprint, compact size
- Manifold mounting configurations
- · Built-in volume booster
- Electrical Connections: Conduit 1/2 NPT or BSPT, Terminal Block, Hirschmann® Connectors (DIN 43 650-A)
- · Supply and output ports on front and back of unit
- Low air consumption
- · External zero and span adjustments
- Low cost
- · Field accessible orifice
- Electrical conduit connection meets CE requirements

Applications

The T-1500 transducer can be used as an electro-pneumatic control device to operate:

- Valve actuators
- · Valve positioners
- HVAC systems
- Material handling systems
- · Paper handling controls
- Automation systems
- · Liquid and gas processing systems



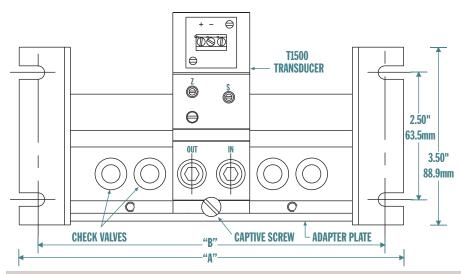
Type 1500
Transducers

| Type 1500 Transducers | | |
|-----------------------------|--|--|
| | Standard Range | Zero Based |
| Hysteresis | <0.75% of span | <1.0% of span |
| Repeatability | <0.5% of span | <0.5% of span |
| Linearity (Independent) | <0.75% of span <1.0% of span for fluorocarbon units | <1.0% of span |
| Flow @ Mid Range | 6.5 SCFM (Minimum) @ 15.0 PSIG / 1.0 BAR output pressure, 120 PSIG / 8.3 BAR supply pressure | 9.0 SCFM (Minimum) @ 15.0 PSIG / 1.0 Bar output pressure, 150 PSIG / 10.3 BAR supply pressure |
| Maximum Air Consumption | 3 SCFH @ 15 PSI / 1.0 BAR output pressure | 18 SCFH @ Maximum output pressure |
| Exhaust Capacity | >1.0 SCFM @ 5 PSI / 0.4 BAR above set point | >1.0 SCFM @ 5 PSI / 0.4 BAR above set point |
| Supply Pressure Range | 5 psi above maximum output up to 120 psig / 8.3 BAR maximum | 0-15 units: 25-150 PSIG / 1.7-10.3 BAR 0-30 units: 40-150 PSIG / 2.8-10.3 BAR 0-60 units: 70-150 PSIG / 4.8-10.3 BAR 0-120 units: 125-150 PSIG / 8.6-10.3 BAR |
| Weight | 1.3 lbs. | 1.63 lbs. |
| Port Size | 1/4 NPT, BSPT, BSPP | 1/4 NPT, BSPT, BSPP |
| Supply Pressure Sensitivity | <2.5% of span for a supply pressure change of 15 PSIG / 1.0 BAR | <1.7% of span change in output pressure over full supply pressure range (0-120 units) |
| Temperature Range | -20°F to +150°F | -20°F to +150°F |
| Input Signal | 4-20 mA DC, 0-5 VDC, 1-5 VDC, 1-9 VDC, 0-10 VDC, 1-10 VDC | 4-20 mA DC, 0-5 VDC, 1-5 VDC, 1-9 VDC, 0-10 VDC, 1-10 VD |
| Output Range | 3-15, 3-27, 6-30 PSIG 0.2-1.0, 0.2-1.9, 0.4-2.1 BAR | 0-15, 0-30, 0-60, 0-120 PSIG 0-1.0, 0-2.1, 0-4.1, 0-8.3 BAR |

Electrical Connections: Both the I/P & E/P versions are two-wire devices, plus a safety ground. The E/P requires a DC voltage input signal; example: 1 to 9 VDC. The I/P models require an input current of 4 to 20 mA.



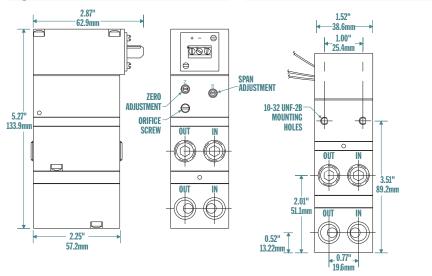
Figure 1 - Manifold Front View



Type 1500 Extended Range Dimensions



Back Dimensions



Type 1500 Standard Range Dimensions

Back Dimensions

1.52"
38.6mm

- 1.00"
25.4mm

10.32 UNF-2B
MOUNTING HOLES

2.01"
51.1mm
0.52"
13.2mm

- 0.7"

- 0.7"



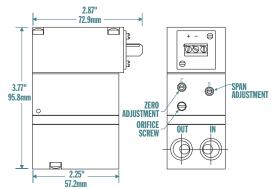


Figure 7: Terminal Block