

CONTROL VALVES

TA901 Series

I/P Transducer • Electropneumatic



- ▶ 4 to 20 mA Input
- ▶ 3 to 15 PSI Output
- ▶ Intrinsically Safe
- ▶ Zero and Span Adjustments

The **TA901 Electropneumatic (I/P) Transducer** converts a milliamp current signal to a linearly proportional pneumatic output pressure. This transducer is designed for control applications that require a high degree of reliability and repeatability. The TA901 is used in the control operation of valve actuators and pneumatic valve positioners in the petrochemical, HVAC, energy management, textile, paper, and food & drug industries.

The TA901 I/P Transducer is tested and approved by Factory Mutual as Intrinsic Safe Class I, II and III, Division I, Groups C, D, E, F and G when installed in accordance with the Installation, Operation and Maintenance Instructions. It should be installed in a vertical position in a vibration-free area.

The Watson McDaniel TA987 Air Filter/Regulator is recommended for filtering and regulating the pressure of plant compressed air, and for delivering clean, dry air at the proper pressure to pneumatic control devices.

Specifications

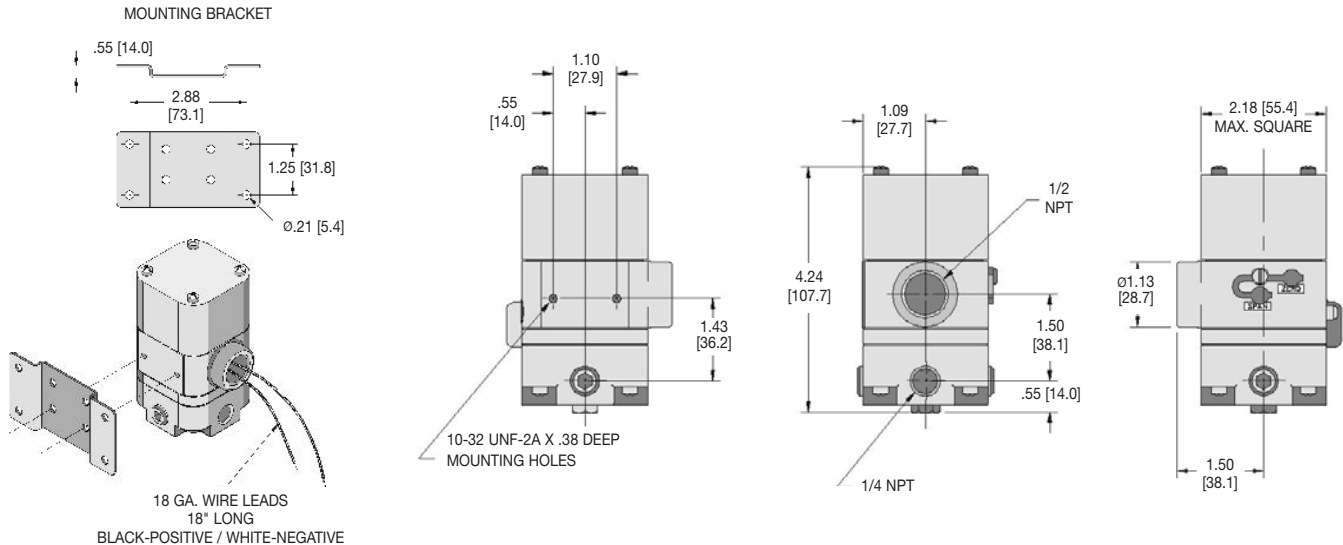
<p>Model TA901</p> <p>Input 4-20 mA</p> <p>Output 1-17 PSIG Per ANSI/FCI 87-2 (can be calibrated to provide 1-9 PSIG or 9-17 PSIG)</p> <p>Volume Booster Built-in volume booster allows flow capacity up to 20 SCFM</p> <p>Connections Pneumatic: 1/4" NPT Electric: 1/2" NPT</p>	<p>Air Requirements Clean, oil-free, dry air filtered to 40 microns</p> <p>Minimum Supply Pressure: 3 PSIG</p> <p>Maximum Supply Pressure: 100 PSIG</p> <p>Sensitivity: < ±0.1% of span per PSIG</p> <p>Air Consumption: 0.03 SCFH typical</p> <p>Flow Rate: 4.5 SCFM at 25 PSIG supply</p> <p>Relief Capacity: 2.0 SCFM at 5 PSIG above 20 PSIG setpoint</p>	<p>Mounting Pipe, panel or bracket in a vibration-free area. Field adjustment will be required if mounted in a nonvertical position.</p> <p>Adjustment Adjustable zero and span</p> <p>Accuracy Terminal Based Linearity: < ±0.75% of span Repeatability: < 0.5% of span Hysteresis: < 1.0% of span Response Time: < 0.25 sec. @ 3-15 PSIG</p>	<p>Intrinsic Safety Tested and approved by Factory Mutual as Intrinsically Safe Class I, II and III, Division I, Groups C, D, E, F and G when installed in accordance with Installation, Operation and Maintenance Instructions</p> <p>Ambient Temperature -20°F (-30°C) to 140°F (60°C)</p> <p>Approximate Shipping Weight 2.1 lbs [0.94 kg]</p>
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CONTROL VALVES

HOW TO ORDER

Please order using Item Number: **TA901**

Unit: inches [mm].



CONTROL VALVES

TA987

Air Filter/Regulator



- ▶ **Cast Aluminum Housing**
- ▶ **Removable Nylon Mesh Filter**
- ▶ **Low Air Consumption**
- ▶ **Drip Well**

The **TA987 Air Filter/Regulator** is recommended for filtering and regulating the pressure of plant compressed air, and for delivering clean, dry air at the proper pressure to pneumatic control devices. Supply air enters the inlet port, passes through the filtering element, and exits through the reducing valve to the outlet port. The filtering element removes particles as small as 40 microns. A drip well is provided for the accumulation of oil and water and a drain cock is included to allow purging of the unit. The filtering element is readily accessible for cleaning by removal of the drip well bowl.

The maximum allowable supply pressure to TA987 Air Filter/Regulator is 250 PSIG. Improper application may cause failure of the regulator, resulting in possible personal injury or property damage.

Specifications

Model TA987	Air Requirements (cont.) Flow Rate: 20 SCFM at 100 PSIG supply/20 PSIG output Relief Capacity: 0.1 SCFM at 5 PSIG above setpoint Effect of Supply Pressure Variation: < 0.2 PSIG for 25 PSIG	Filter Removes particles 40 microns or greater Port Size 1/4" NPT Housing Cast aluminum	Mounting Side, pipe, panel or through body Ambient Temperature -20°F (-30°C) to 160°F (71°C) Approximate Shipping Weight 1.9 lbs [0.86 kg]
Air Requirements Maximum Supply Pressure: 250 PSIG Output Range: 0 to 30 PSIG, adjustable Sensitivity: 0.036 PSIG Air Consumption: < 6 SCFH			

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Units: inches [mm].

