

Electric to Pneumatic Transducer and Enclosures

The AO-P transducer converts an electronic signal into a linear pneumatic signal for the accurate positioning of valve and damper actuators typically used in heating and air conditioning systems. The transducer is available in two different mounting styles: Remote Mount with its own integral enclosure and conduit connection; or Panel Mount for mounting in control cabinet applications. The transducer includes provisions for manual override, and does not require calibration.

Features

- Insensitive to vibration and mounting position to allow mounting directly on equipment and give stable performance
- Hand-Auto switch and override dial allow for manual control of output pressure for troubleshooting and emergencies
- Optional electrical connections to remotely monitor Hand-Auto switch position and output pressure
- Accurate and repeatable output pressure signal
- Easy to install, no setup or calibration is required
- The unit can be mounted directly on the wall or equipment without an additional enclosure to reduce cost
- Factory installed 0 to 30 psi (0 to 207 kPa) gauge is included
- High capacity, non-bleed device.



Figure 1. AO-P Transducer - Remote Mount.



Figure 2. AO-P Transducer - Panel Mount.

Specifications

Supply Voltage	19 to 26 Vac (24 Vac typical)
Power Consumption	1 VA
Input Signal/Impedance	0 Vdc to 10 Vdc/20 K Ω 180 Ohms for 4-20 mA
Output Signal	0 psig to 20 psig (0 kPa to 138 kPa)
Output Capacity	500 SCIM (8.2 SLPM) minimum @ 5 psi (34.5 kPa) Drop (20 psi input, 15 psi output)
Overall Dimensions:	
Remote Mount	4-1/4" H x 7-1/4" W x 3-1/16" D (108 mm x 184 mm x 78 mm)
Panel Mount	4-1/4" H x 5-3/4" W x 3-1/16" D (108 mm x 146 mm x 78 mm)
Output Accuracy	@ 77°F (25°C) ± 0.50 psig (1.72 kPa) Max. 32°F to 122°F (0°C to 50°C) ± 0.50 psig (3.45 kPa) Max. 122°F to 185°F (40°C to 85°C) ± 1.0 psig (6.90 kPa) Max.
Output Repeatability	0.1 psig (0.7 kPa) Max. (Includes Hysteresis)
Air Supply Pressure	30 psig (207 kPa) Max. Safe pressure, clean, dry, instrument air required
Air Consumption for Compressor	10 SCIM (164 SCCM)

Tubing Connection	2 ea. 1/4" (6 mm) O.D. nominal, barbed fittings
Conduit Connections	Remote mount model has 2 ea. 1/2" (12.7 mm) conduit connections
Operating Temp.	32°F to 185°F (0°C to 85°C)
Operating Humidity	95% RH maximum (non-condensing)
Storage Temperature	-40°F to 185°F (-40°C to 85°C)
Agency Listing	FCC Compliant
Override Controls	The AO-P Transducer provides a continuous variable output override (the override does not function without power).
Override Monitoring Hand Auto	The AO-P Transducer provides a dry contact to indicate the position of the Hand-Auto Switch to an external device.
Hand-Auto Override Dry Contact Rating	0.3A, Class 2 Voltage
Override Monitoring Output Pressure	The AO-P Transducer provides an optional signal to monitor output pressure. Accuracy is ± 0.25 psig (1.72 kPa) @ 77°F (25°C).
Feedback Voltage Output	0-5 VDC = 0-20 p.s.i.

Product Ordering Information

Description	Product Part Number
AO-P Transducer - Remote Mount	545-208
AO-P Transducer - Panel Mount	545-113

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