

Honeywell

P7635 Differential Air Pressure Sensors

SPECIFICATION DATA



APPLICATION

The P7635 Series Low Differential Pressure transmitters are designed for use in OEM or high density panel mounting applications. Key installation features include an integral 35 mm Din rail mounting foot, vertically orientated wiring and pressure connections, and a pushbutton zero function conveniently located on the front cover. The P7635 incorporates a high accuracy, piezoresistive, silicon sensing element which senses differential pressure and provides a linear 4 to 20 mA or DC voltage output equal to the specified pressure range. This technology reduces warmup shift while also reducing the effect of package stress for increased long term stability.

In addition, the unit contains a de-pluggable terminal block that can be removed for ease of installation. This unit must be ordered with a single uni or bi-directional pressure range and output signal from ± 0.1 " of water column to a maximum pressure of ± 40 " of water column depending on your application. See the DLP Series pressure transmitter for a unit with 8 field selectable pressure ranges and three field selectable output signals. All P7635 Series pressure transmitters are calibrated using NIST Certified equipment.

Applications

- Building and Duct Static Pressure
- Filter Monitoring
- Air Flow Measurement
- Process Control
- Roof Top Units
- Air Handlers
- Clean Rooms
- Isolation Rooms
- Data Centers

The P7635 Series Low Differential Pressure transmitters are covered by a Five (5) Year Limited Warranty.

SPECIFICATIONS

Supply Voltage (VDC)

0-5 VDC Output: +12-36 VDC

1-6 VDC & 0-10 VDC Output: +16-36 VDC

4-20 mA Output: +16-36 VDC (250 Ohm Load) | +21-36 VDC (500 Ohm Load)

Supply Voltage (VAC): 24 VAC $\pm 10\%$, 50/60 Hz

Supply Current mA (Power Consumption)

4-20 mA Output: 23 mA minimum (0.83 VA)

VDC Output Signals: 5 mA maximum (0.18 VA)

Output Signals

4-20 mA: 2-wire Loop Powered (output limited to 20.5 mA maximum)

4-20 mA: 3-Wire, VAC Powered (output limited to 20.5 mA maximum)

0-5 VDC, 1-6 VDC, 0-10 VDC: 3-Wire, VAC or VDC Powered (output limited to 5.25, 6.25, & 10.25 VDC)

Pressure Ranges: See Ordering Information on back of Product Data Sheet (Must Specify when ordering)

Accuracy

$\pm 0.5\%$ FSO (Standard)

NOTE: Accuracy includes Hysteresis, Linearity, and Repeatability at 71°F (21.5°C) Typical

Sensor Compensated Temperature Range: 32 to 122°F (0 to 50°C)

Thermal Effects: $\pm 0.056\%$ FSO/°F ($\pm 0.10\%$ FSO/°C)

NOTE: Shift is relative to 71°F (21.5°C)



31-00148-01

Warm Up Time: 15 Minutes

Response Time (T95): 8 seconds

Output Update Rate: 1 second intervals

Zero Function:

Pushbutton Zero Function (Recommended after 15 minutes warm up)

Proof Pressure | Burst Pressure

Ranges < 1" wc (248.84 pa): Proof: 270" wc (67.2 kPa)
|**Burst:** 415" wc (103.3 kPa)

Ranges > 1" wc (0.2488 kPa) to < 10" wc (2.488 kPa):
Proof: 350" wc (87.12 kPa) | **Burst:** 550" wc (136.9 kPa)

Operating Temperature | Humidity: 32 to 185°F (0 to 85°C) | 10 to 95% RH, non-condensing

Storage Temperature | Humidity: -40 to 176°F (-40 to 80°C) | 10 to 95% RH, non-condensing

Media Types: Dry air or inert non-conductive gases

Enclosure Material | Flammability Rating: Polycarbonate | UL 94 V-0

Enclosure Temperature Rating: -40 to 248°F (-40 to 120°C)

Din Rail Mounting: 35 mm (U.S. Patent No. 7,416,421)

Wiring Connections | Wire Size: 3 Position de-pluggable screw terminal block | 14 AWG (1.628 mm²) to 24 AWG (0.5105 mm²)

Terminal Block Torque Rating: 4.43 to 5.31 in-lbs. (0.5 to 0.6 Nm)

Pressure Fitting Material: Brass

Tubing Size Accepted: 0.250" (6.35 mm) O.D. x 0.170" (4.318 mm) I.D. Push-On Flexible Poly Tubing

Product Dimensions (L x W x D): 4.210" (106.94 mm) x 2.085" (52.96 mm) x 1.340" (34.04 mm)

Product Weight: 0.17 lbs. (0.078 kg)

Approvals: CE, RoHS2, WEEE, Reach

Accessories: 32003169-001 4 in. Duct Pressure Pick-up Probe

DIMENSIONAL DRAWING

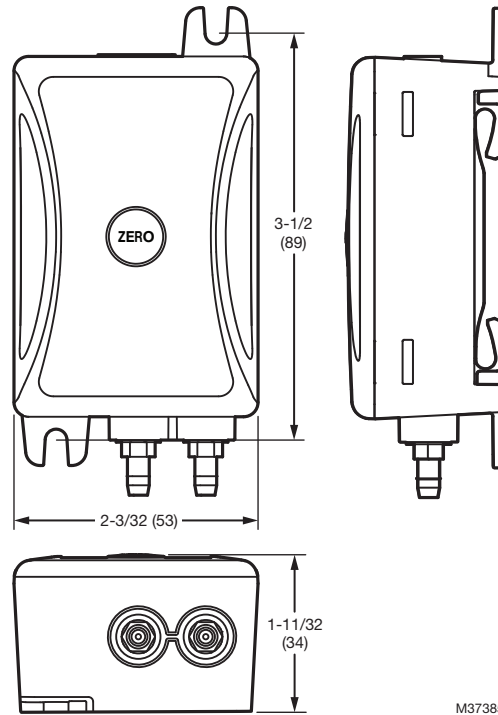


Fig. 1. Dimensions in in. (mm).

Table 1.

Part	Pressure Range	Units	Range	Accuracy (%)	Output
P7635D01M	0 to 0.1	in wc	Uni	0.5	4-20mA
P7635D025M	0 to 0.25	in wc	Uni	0.5	4-20mA
P7635D05M	0 to 0.5	in wc	Uni	0.5	4-20mA
P7635D1M	0 to 1	in wc	Uni	0.5	4-20mA
P7635D2M	0 to 2	in wc	Uni	0.5	4-20mA
P7635D5M	0 to 5	in wc	Uni	0.5	4-20mA
P7635D10M	0 to 10	in wc	Uni	0.5	4-20mA
P7635B01M	-0.1 to 0.1	in wc	bi	0.5	4-20mA
P7635B025M	-0.25 to 0.25	in wc	bi	0.5	4-20mA
P7635B05M	-0.5 to 0.5	in wc	bi	0.5	4-20mA
P7635B1M	-1 to 1	in wc	bi	0.5	4-20mA
P7635D2V	0 to 2	in wc	Uni	0.5	0-10Vdc

REGULATORY INFORMATION

FCC REGULATIONS

§ 15.19 (a)(3)

This device complies with part 15 of the FCC Rules.

Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

IC REGULATIONS

RSS-GEN

This device complies with Industry Canada's license-exempt RSSs.

Operation is subject to the following two conditions:

1. This device may not cause interference; and
2. This device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

1. l'appareil ne doit pas produire de brouillage;
2. l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

FCC Warning (Part 15.21) (USA only)

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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Home and Building Technologies

In the U.S.:

Honeywell

715 Peachtree Street NE

Atlanta, GA 30308

customer.honeywell.com

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