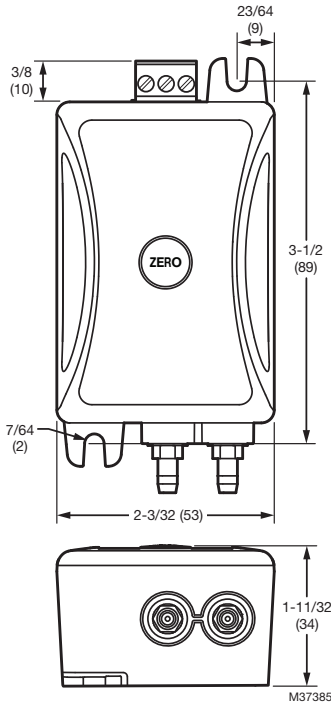


Honeywell

P7635 Differential Air Pressure Sensors

INSTALLATION INSTRUCTIONS



PRECAUTIONS

- **Remove Power Before Wiring. Never Connect Or Disconnect Wiring With The Power Applied. Do Not Allow Live Wires To Touch The Circuit Board.**
- **An Isolation Transformer Is Recommended When Powering The Device With 24vac.**
- **Do Not Run The Wiring In Any Conduit With Line Voltage.**
- **Failure To Wire Devices With The Correct Polarity When Using A Shared Transformer May Result In Damage To Any Device Powered By The Shared Transformer.**
- **Do Not Remove The Cover. All User Features Are Accessible From The Outside Of The Unit**

MOUNTING

Using the two #8 x 3/4-in. self-drilling mounting screws, or the integrated 35mm DIN rail clip on the back, mount the unit vertically with the brass fittings pointing toward the ground.

Attach the unit to the mounting surface using the two mounting openings located on the top and bottom flanges. This ensures that any condensation that may form in the tubing does not have an effect on the pressure sensor. If mounting the unit horizontally, a slight zero shift may occur and care must be taken to prevent moisture from building up in the sensor.

WIRING

Shielded cable with 16 to 22AWG conductors is recommended. Use the Wiring Connections table below to determine the proper wiring for your application. Insert the wire into the depluggable terminal block sockets and tighten the screws. In some circumstances, it may be easier to remove the terminal blocks while connecting the wires.

NOTE: When using a shielded cable, be sure to connect only (1) end of the shield to ground at the controller. Connecting both ends of the shield to ground may cause a ground loop. When removing the shield from the sensor end, make sure to properly trim the shield to prevent any chance of shorting.

Table 1. Wiring Connections

Output signal	Supply Voltage	Wire Connections		
		VIN	GND	OUT
VDC	AC/DC	VIN	GND	OUT
mA	AC	VIN	GND	OUT
mA	DC	VIN		OUT

Pressure Connections

The recommended connection tubing is 1/4" push-on tubing (1/8" – 3/16" I.D.). Keep the tubing runs as short as possible so as to not affect the response time.



Zero Adjustment

The Zero adjustment should only be performed with no pressure applied.

Small positive or negative pressure offsets can be removed using the Zero push button. Make sure that there is no pressure at the HI and LO pressure fittings. Additionally, a small piece of tubing can be connected between the HI and LO brass fittings to neutralize any external pressure effects. Press and hold the Zero button for 5 seconds. The P7635 will enter zero mode AFTER push button is released.

SPECIFICATIONS

Supply Voltage

250 Ohm Load: 16-36 VDC / 24VAC \pm 10%, 50/60 Hz

0-5 VDC: 12-36 VDC / 24VAC \pm 10%, 50/60 Hz

500 Ohm Load: 21-36 VDC / 24VAC \pm 10%, 50/60 Hz

0-10 VDC: 16-36 VDC / 24VAC \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 Max.)

4-20 mA: 3-Wire, VAC Powered (Output limited to 20.5 mA Max.)

0-5 VDC or 0-10 VDC: 3-Wire, VAC, or VDC Powered (Output limited to 5.25 and 10.25 VDC)

Sensor Accuracy: \pm 0.5 % FSO (Standard)

NOTE: Accuracy includes linearity, hysteresis, and repeatability.

Operating Temperature Range: 32 to 185°F (0 to 85°C)

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

Humidity: 10 to 95% RH, non-condensing

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

NOTE: Shift is relative to 77°F (25°C)

Warm Up Time: 15 minutes

Response Time (T95): 8 seconds

Output Update Range: 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)]

Media Types: Dry air or inert non-conductive gases

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

Wire 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)

Tubing Size Accepted:

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

Enclosure Material [Flame Rating]: Polycarbonate [UL 94V-0]

Approvals: CE, RoHS2, WEEE

WEEE Directive

At the end of their useful life packaging and product should be disposed of via a suitable recycling center. Do not dispose of with household waste. Do not burn.

Table 2.

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

部件名称 Component Name	有害物质 Hazardous Substances					
	铅 (Pb) Lead (Pb)	汞 (Hg) Mercury (Hg)	镉 (Cd) Cadmium (Cd)	六价铬 (Cr6+) Chromium VI Compounds (Cr6+)	多溴联苯 (PBB) Polybrominated Biphenyls (PBB)	多溴二苯醚 (PBDE) Polybrominated Diphenyl Ethers (PBDE)
Brass Hose Barbs	0	0	0	0	0	0
Brass Inserts	0	0	0	0	0	0
本表格依据 SJ/T 11364 的规定编制。 This table is prepared in accordance with the provisions of SJ/T 11364.						
O: 表示该有害物质在该部件所有均质材料中的含量均在 GB/T 26572 规定的限量要求以下。 Indicates that said hazardous substance contained in all of the homogeneous materials for this part is below the limit requirement of GB/T 26572.						
X: 表示该有害物质至少在该部件的某一均质材料中的含量超出 GB/T 26572 规定的限量要求。 Indicates that said hazardous substance contained in all of the homogeneous materials for this part is above the limit requirement of GB/T 26572.						

" 未列入表内的其他部件，皆不含任何超出限量要求的限制使用物质。

All other components not listed in the table do not contain restricted substances above the threshold level.

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.

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.

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.

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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