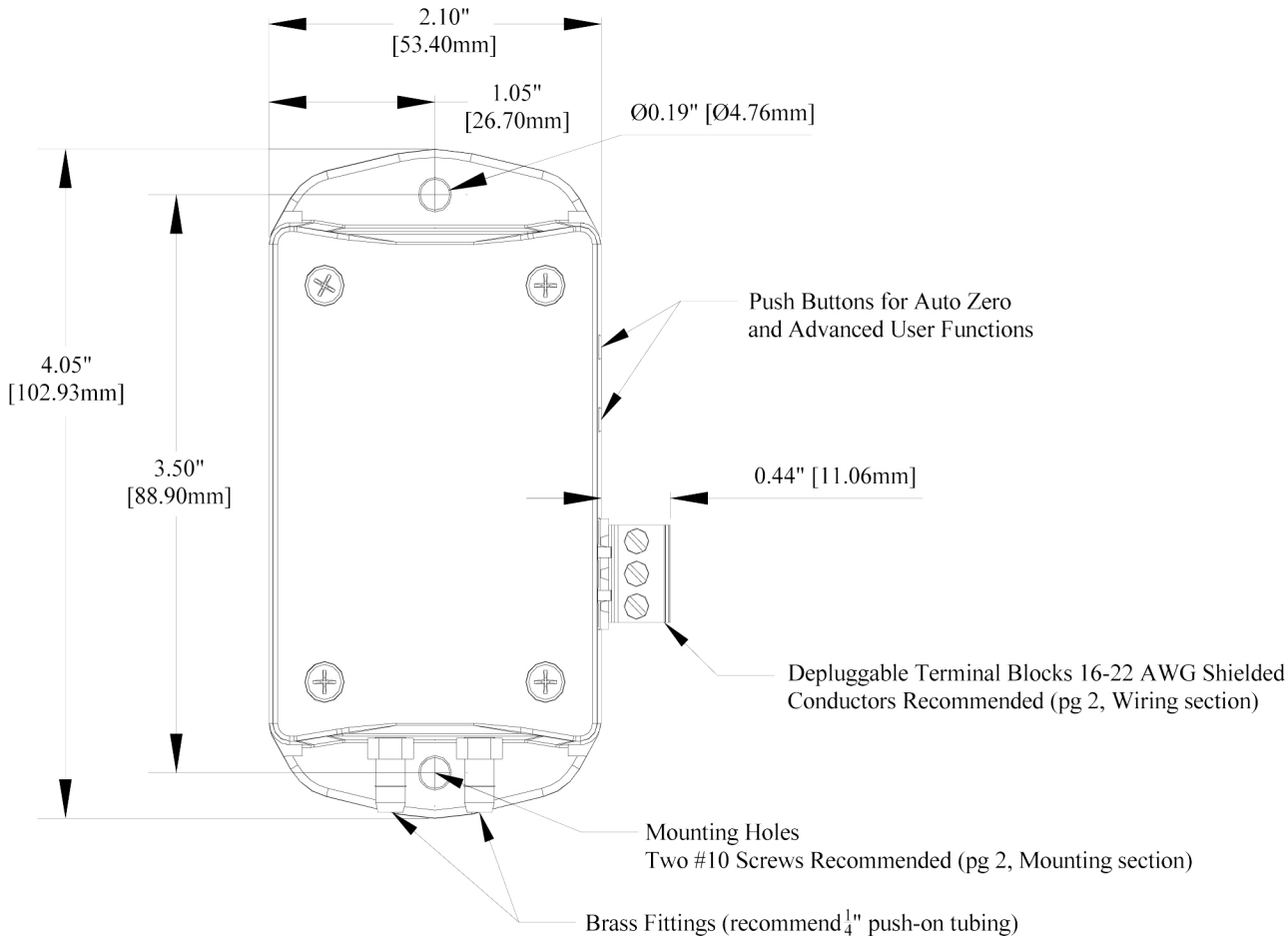

Figure 1: DPA-M Dimensions and Hardware

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

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MOUNTING

Two size #10 screws are recommended. Mount the unit vertically with the brass fittings pointing towards the ground. Attach the unit to the mounting surface using the two mounting holes 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.

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.

Output Signal: VDC, mA, mA
Supply Voltage: AC/DC, AC, DC
Wire Connections: VIN, VIN, VIN, GND, GND, ----, OUT, OUT, OUT

PRESSURE CONNECTIONS

The recommended connection tubing is." push-on tubing (1/8" – 3/16" I.D.). The DPA-M units are uni-directional and must have a positive pressure applied to the HI pressure port to generate an output voltage or current.

AUTO ZERO

The Auto Zero adjustment should only be performed with no pressure applied. Small positive or negative pressure offsets can be removed using the Auto/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

ADVANCED FEATURES

FACTORY RESET – Press and hold the Span and Auto/Zero buttons for 6 seconds. This will restore the factory calibration and remove any zero or span adjustments that have been applied in the field.

ZERO (OFFSET) ADJUST – Manually adjust small positive or negative pressure offsets by using the Zero Adjust feature. Press and hold the Auto/Zero button for 2 second and release. Then use the Up and Down buttons to obtain the desired output. The output will stop changing when the limits have been reached. After 3 seconds the unit will resume normal operation.

SPAN (GAIN) ADJUST – Manually adjust the span using the Span Adjust feature. The span can be modified against a known reference at any point within the range although it is best done at the sensor's full scale pressure. Press and hold the Span button for 2 second and release. Then use the Up and Down buttons to obtain the desired output. The output will stop changing when the limits have been reached. After 3 seconds the unit will resume normal operation.

DIAGNOSTIC MODE – The diagnostic mode can be used to help prove out a system by simulating 0%, 50% and 100% output, i.e. for a 4-20mA unit, you can simulate 4, 12 and 20mA. Hold down the Span button for 6 seconds. Then use the Up and Down buttons to select the desired mode. The unit will resume normal operation after 2 minutes. Press the Span and Auto/Zero buttons to return to normal operation immediately.

Supply Voltage:

- 250 Ohm Load: 12-36 VDC / 24VAC
- 0-5 VDC: 12-36 VDC / 24VAC
- 500 Ohm Load: 15-36 VDC / 24VAC
- 0-10 VDC: 15-36 VDC / 24VAC

Supply Current:

- 23mA minimum

Output:

- 2-wire, Linear 4 to 20mA DC Current or
- 3-wire, 0-5 or 0-10VDC, or 4-20mA

Sensor Accuracy[1]:

- +/- 1% FSO

Response Time:

- 500 mS

Operating Temperature Range:

- 32 to 140°F (0 to 60°C)

Compensated Temperature Range:

- 32 to 122°F (0 to 50°C)

Humidity:

- 0 to 95% RH, non-condensing

Thermal Effects[2]:

- +/-0.067%FSO/°F (+/-0.12% FSO/°C)

Proof Pressure:

- 100 inWC (24.9 kPa)

Burst Pressure:

- 200 inWC (49.8 kPa)

Media:

- Dry air or inert non-conductive gases

Features:

- Depluggable terminal blocks
- Push button Auto Zero
- User adjustable Zero and Span
- Diagnostic / Fixed Output Mode

Enclosure:

- UL94-V0 rated, flame retardant ABS

Approvals:

- REACH
- RoHS
- WEEE

Note 1: Accuracy includes linearity, hysteresis and repeatability.
Note 2: Shift is relative to 77°F (25°C).