### SPECIFICATIONS

**Accuracy:** ± 1% of F.S.

**Maximum Pressure:** 40 PSIG

**Supply Voltage:** 12 - 40 VDC; 12 - 35 VAC (VDC output transducers only)

**Supply Current:** 10 mA maximum VDC output transducers; 20 mA maximum VAC output transducers

**Enclosure:** 18 Ga. C.R. steel NEMA-4 (IP45)

**Finish:** Baked on enamel PMS2GR88B

**Conformance:** EMC standards EN50082-1(1992), EN50170(1993), EN61326(1993), EN60730-1(1992)

**Compensated Temperature Range:** 0° F to 180° F (18° C to 82°C)

**Maximum Pressure Transducer:** PX-271A

**DIMENSIONS**

<table>
<thead>
<tr>
<th>Configuration</th>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
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<tbody>
<tr>
<td>020</td>
<td>0 - 20 PSIG</td>
<td>0 - 10 PSIG</td>
<td>0 - 5 PSIG</td>
</tr>
<tr>
<td>030</td>
<td>0 - 30 PSIG</td>
<td>0 - 15 PSIG</td>
<td>0 - 7.5 PSIG</td>
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<tr>
<td>X15</td>
<td>3 - 15 PSIG</td>
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**Jumper Configurations for mA Output Transducers**

1. **Range A:** 0 - 20 PSIG
2. **Range B:** 0 - 10 PSIG
3. **Range C:** 0 - 5 PSIG

**Jumper Configurations for VDC Output Transducers**

1. **Range A:** 0 - 30 PSIG
2. **Range B:** 0 - 15 PSIG
3. **Range C:** 0 - 7.5 PSIG

**CALIBRATION**

All transducers are factory calibrated to meet or exceed published specifications. If field adjustment is necessary, follow these instructions:

1. Connect the [+] and [-] terminals to the appropriate power source.
2. If calibrating an mA output transducer, connect a digital voltmeter in series to the [+] and [-] terminals.
3. If calibrating a VDC output transducer, connect a digital voltmeter on DC volts across the [+] and [-] terminals.

**PRESSURE RANGES AND JUMPER CONFIGURATIONS**

**WIRING**

Use 12 AWG wire maximum for wiring terminals and flexible ¼-inch O.D. (5/32-inch I.D.) tubing for pressure connections.

The VAC output pneumatic pressure transducer must be powered with a 12 - 40 VDC pneumatic power supply. The VDC output pneumatic pressure transducer is field selectable for 0 - 5 VDC or 0 - 10 VDC output and can be powered with either 12 - 40 VDC or 12 - 35 VAC.

**Firing for mA Output:**

1. Remove the blue terminal block by carefully pulling it off the circuit board.
2. Note the block’s terminal markings on the circuit board.
3. If using an external power supply, make these connections:
   - supply voltage wire to the [+] terminal
   - power supply common to the common bus of the controller/meter
   - input signal of the controller/meter to the [-] terminal
4. If using a controller/meter with an internal power supply, make these connections:
   - controller/meter input signal to the [+] terminal
   - controller/meter common to the [-] terminal
5. Reinsert the terminal block onto the circuit board and apply power to the transducer.

**Wiring for VDC Output:**

1. Remove the blue terminal block by carefully pulling it off the circuit board.
2. Note the block’s terminal markings on the circuit board.
3. Connect the power supply voltage wire to the [+] terminal and the power supply common to the [-] terminal.
4. Connect the controller/meter input wire to the [+] terminal and the controller/meter common wire to the [-] terminal.
5. Reinsert the terminal block onto the circuit board and apply power to the transducer.
6. Check for the appropriate output signal using a digital voltmeter set to DC milliamperes connected in series to the [+] terminal.

**Use electrostatic discharge precautions such as wrist straps when installing and wiring the transducer.**

**Do not exceed ratings for the transducer.**

If grounded AC, ensure that the hot wire is on the [+] terminal. Also, if using a controller without built-in isolation, use an isolation transformer to supply the transducer. This transducer contains a half-wave rectifier power supply and must not be powered from transformers powering other devices with non-isolated full-wave rectifier power supplies.

When multiple transducers are powered from the same transformer, damage will result unless all 24-gage power leads are connected to the same power lead on all transformers. Maintain the correct phasing when powering devices with non-isolated full-wave rectifier power supplies.

**MA Output Transducer**

- **Connector:** M8 x 1.25 x 0.5
- **Port Connection:** ¼-inch O.D. (5/32-inch I.D.) tubing for pressure connections.
- **Wire Size:** 12 AWG maximum for wiring terminals and flexible ¼-inch O.D. (5/32-inch I.D.) tubing for pressure connections.
- **Weight:** 1.0 lb. (.45 kg)
- **Media Compatibility:** Clean dry air or any inert gas
- **Environmental:** 10 to 90% RH non-condensing
- **Finish:** Baked on enamel PMS2GR88B

**Vacuum Measurement**

- **Port Connection:** ¼-inch O.D. (5/32-inch I.D.) tubing for pressure connections.
- **Wire Size:** 12 Ga. maximum
- **Weight:** 1.6K ohms maximum at 40 VDC (MA output transducers only)

**Pressure Measurement**

- **Port Connection:** ¼-inch O.D. (5/32-inch I.D.) tubing for pressure connections.
- **Wire Size:** 12 Ga. maximum
- **Weight:** 1.6K ohms maximum at 40 VDC (MA output transducers only)

**Jumper Configurations for Pressure Ranges**

1. Remove the blue terminal block by carefully pulling it off the circuit board.
2. Note the block’s terminal markings on the circuit board.
3. If using an external power supply, make these connections:
   - supply voltage wire to the [+] terminal
   - power supply common to the common bus of the controller/meter
   - input signal of the controller/meter to the [-] terminal
4. Apply low pressure to the transducer and carefully adjust the zero trimmer [Z] to obtain the desired low output pressure.
5. Apply high pressure to the transducer and adjust the span trimmer [S] to obtain the desired high output pressure.
6. Repeat steps 4 and 5 until the transducer is fully calibrated.
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FOR WARRANTY RETURNS, please have the following information available BEFORE contacting OMEGA:
1. Purchase Order number under which the product was PURCHASED.
2. Model and serial number of the product under warranty, and
3. Repair instructions and/or specific problems relative to the product.

FOR NON-WARRANTY REPAIRS, consult OMEGA for current repair charges. Have the following information available BEFORE contacting OMEGA:
1. Purchase Order number to cover the COST of the repair,
2. Model and serial number of the product, and
3. Repair instructions and/or specific problems relative to the product.

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