

SPECIFICATION FOR 623, 626, AND 627 VOLTAGE OUTPUT UNITS

Calibration Reference Conditions

Ambient Temperature: 75°F
Relative Humidity: 40% to 60%
Barometric Pressure: 29.92 In Hg

Performance Characteristics

Accuracy (LH&R): 0.5%, Best Fit Straight Line (BFSL) @ 75°F
Long Term Stability: Will repeat within $\pm 0.25\%$ FSO of original calibration curve for 1 year.

Proof Pressure: 2 times max. rated pressure range, or 9000 psig max. for -16 (6000psi) model

Life, Cycling: Full scale pressure cycles:
10⁸ to 300 psi
10⁷ to 1,000 psi
10⁶ to 6,000 psi

Vibration: 15 g's 10 to 2000Hz
(MIL-STD-202, M204, Cond B)

Shock: 50 g's 11ms
(MIL-STD-202, M213, Cond G)

Wetted Material: 316 Series Stainless Steel, Fluorocarbon Elastomer (Viton®), Ceramic.

Electrical Connections: Standard unit – Shielded, Jacketed Cable,
Optional – See sheet 2 of 2

Excitation Voltage: 9 ~ 30V \equiv (623)
 \equiv = Direct Current (DC) 14 ~ 30V \equiv (626 & 627)
Class 2 Power Source

Output: 0.5 ~ 5.5V \equiv (623)
1 ~ 11V \equiv (626)
0 ~ 10V \equiv (627)

Protection: Reverse Polarity Protected

Min. Load Resistance: 2000 Ohms

Temperature Range: Compensated: +30 to 130°F (-1 to 54°C)
Operating: -40 to 185°F (-40 to 85°C)
UL Max. Ambient: 122°F (50°C)

Wiring: Red Wire / Pin 1 = +Excitation
Black Wire / Pin 2 = Common
White Wire / Pin 3 = +Output
Drain / Pin 4 = Case Ground

Enclosure Rating: Type 4X (Indoor)

Weight: 5 oz.

Pressure Cavity Volume: 0.075 cu.in. max.

Agency Approvals: 34MX
UL File E302981, UL508, as Industrial Control Equipment (NMTR/NMTR7), and UL 61010-1, as Process Control Equipment (QUYX/QUYX7).



CALIBRATION

All models are factory tested to meet or exceed the published specifications. The calibration and testing were done using instrumentation and standards traceable to the National Institute of Standards and Technology (NIST), also, tested in accordance with MIL-STD-45662A.

WARNING! READ BEFORE INSTALLATION

Only install or uninstall the transducer when de-energized (electrically and hydraulic/pneumatically).

Pressure connection and electrical connection must be carried out by trained or instructed personnel according to state of the art standards.

To ensure safe operation and best performance, use only within specified ranges of temperature, pressure and electrical ratings. Only install in systems where the maximum (upper limit of adjustable range) pressure is not exceeded. To avoid permanent damage, do not exceed proof pressure. See label for limits of operation. Clean only with damp cloth.

Fluid hammer and surges can destroy any pressure transducer, and must always be avoided. Fluid hammer occurs when a liquid flow is suddenly stopped, as with quick closing solenoid valve. Surges occur when flow is suddenly begun, as when a pump is turned on at full power or a valve is quickly opened. Liquid surges are particularly damaging to pressure transducers if the pipe is originally empty. To avoid damaging surges, fluid lines should remain full (if possible), pumps should be brought up to power slowly, and valves opened slowly. To avoid damage from both fluid hammer and surges, a surge chamber should be installed, and a pressure snubber should be installed to protect each transducer.

Symptoms of fluid hammer and surge's damaging effects:

1. Pressure transducer exhibits an output at zero pressure (large zero offset). If zero offset is less than 10%FS, user can usually re-zero meter, install suitable pressure snubber and continue monitoring pressures.
2. Pressure transducer output remains constant regardless of pressure.
3. In severe cases, there will be no output.

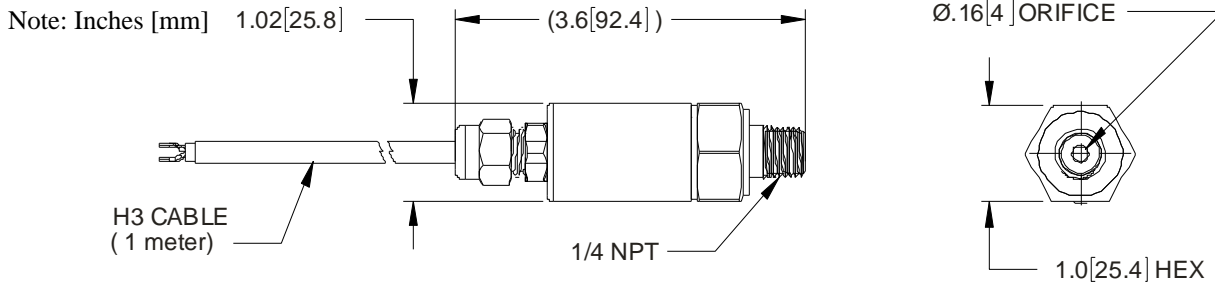
Improper installation may impair transducer function, and compromise safe use. If the pressure transducer is not working correctly, stop operation immediately, and review the application for corrective action.

TIGHTENING REQUIREMENTS:

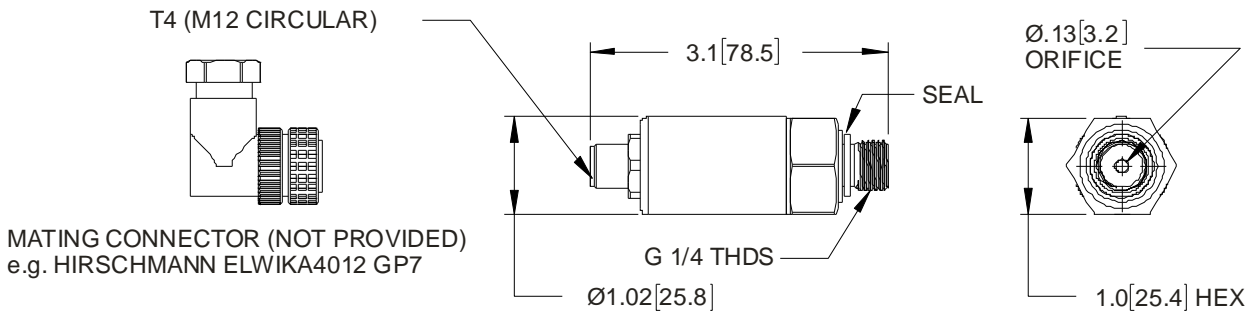
Apply pipe compound sparingly to male threads only. Avoid pipe strain on transducer housing by properly supporting and aligning piping. Apply wrench to the hex flats of fittings only, then tighten the connection. Adequate support of piping and proper mounting of the pressure transducer should be made to avoid excessive shock and vibration.

1/4 NPT: WRENCH TIGHTEN 2-3 TURNS FROM HAND TIGHT
(P9) - G 1/4 TIGHTENING TORQUE: 22-26 LB FT (30-35NM), (P3) - 7/16-20 UNF: 11-12 LB FT (15-16NM)

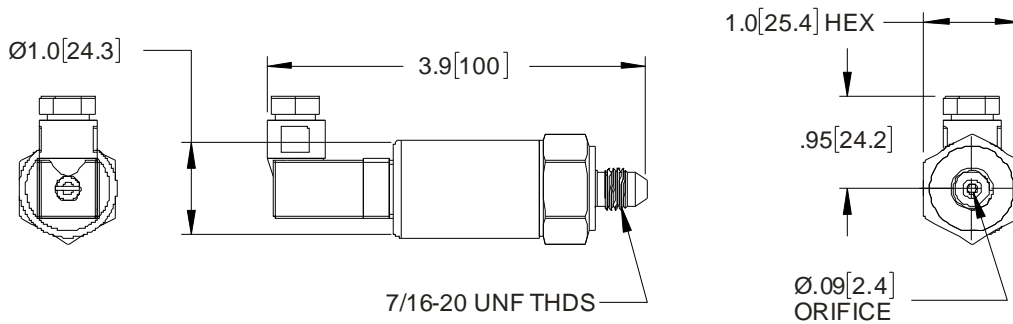
CAUTION: For steam service, install a condensate loop (pigtail or steam siphon tube) between the steam line and pressure transducer.



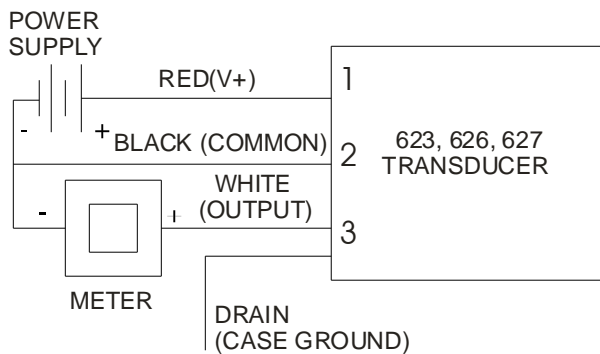
H3 STANDARD CONFIGURATION



T4(M12 CIRCULAR - P9(G1/4) CONFIGURATION



H4(DIN 43650 TYPE 'C' (MINI) - P3(7/16) CONFIGURATION



VOLTAGE OUTPUT WIRING

WIRING CODE

RED PIN1 +EXCITATION (V+)
 BLACK PIN2 COMMON
 WHITE PIN3 +OUTPUT (-V)
 DRAIN PIN4 CASE GROUND

RETURN REQUEST / INQUIRIES

Direct all warranty and repair requests to Barksdale Inc.
 Customer Service Department. Call 323 589-6181, FAX: 323 589-3463.

2. Model number of the product under warranty.
3. Repair instructions and/or specific problems you are having with the product.
4. Application information.

BEFORE RETURNING ANY PRODUCT(S) TO BARKSDALE, YOU MUST OBTAIN A RETURN MERCHANDISE AUTHORIZATION FROM OUR CUSTOMER SERVICE DEPARTMENT IN ORDER TO AVOID PROCESSING DELAYS.

FOR NON-WARRANTY REPAIRS OR CALIBRATION. CONSULT Barksdale for current repair/calibration charges. Have the following information available BEFORE contacting Barksdale:

- FOR WARRANTY RETURNS, please have the following information available BEFORE contacting Barksdale:
1. P.O. number under which the product was PURCHASED.

1. Your P.O. number to cover the COST of the repair/calibration
2. Model number of the product.
3. Repair instructions and/or specific problems you are having with the product.