



Operating Instructions

212FT/C212FT (Flow-Through) Series

General Information

Your Setra pressure transducer has been carefully tested and calibrated before shipment. Specific performance information is listed on the specification bulletin for the transducer.

Installation

Environment - These transducers are designed to be used with any gas or liquid compatible with 316L stainless steel. Never totally submerge in any liquid. The operating temperature, based on the limits of the electronics, is -40°F to 260°F.

Mounting - Model 212FT Series pressure transducers and transmitters can be installed with male or female #4 Seal Fittings or can be butt welded into place (1/4 in. O.D. tubing). The Model 212FT is shipped with protective caps on the base and top of the unit. Caps should be removed only prior to final system installation. It is recommended that the unit be bracket mounted using the 2 tapped holes located on the bottom and avoid any side loading of the tube.

Note: Welding purge gases are very hot! It is important to flow hot purge gases away from the transducer.

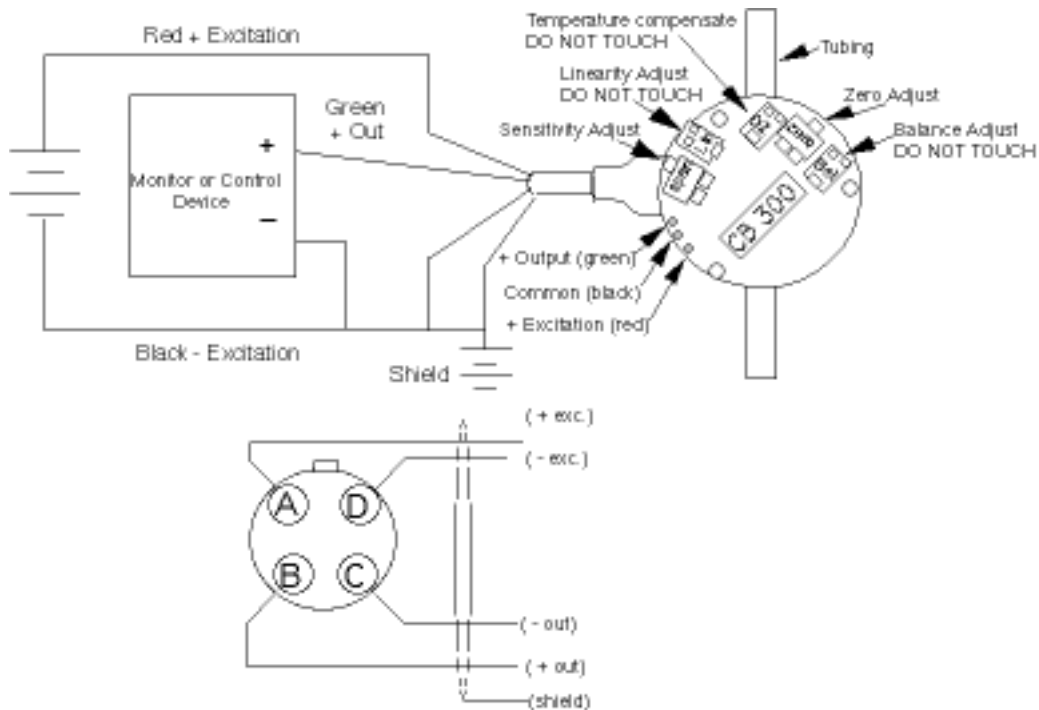
Venting - Model 212FT transducers and C212FT transmitters are vented through the cable.

Electrical Connections

The **Model 212FT** (0.2 - 5.2 VDC) voltage output transducer is supplied with a 6 foot multiconductor cable, which should be connected as follows:

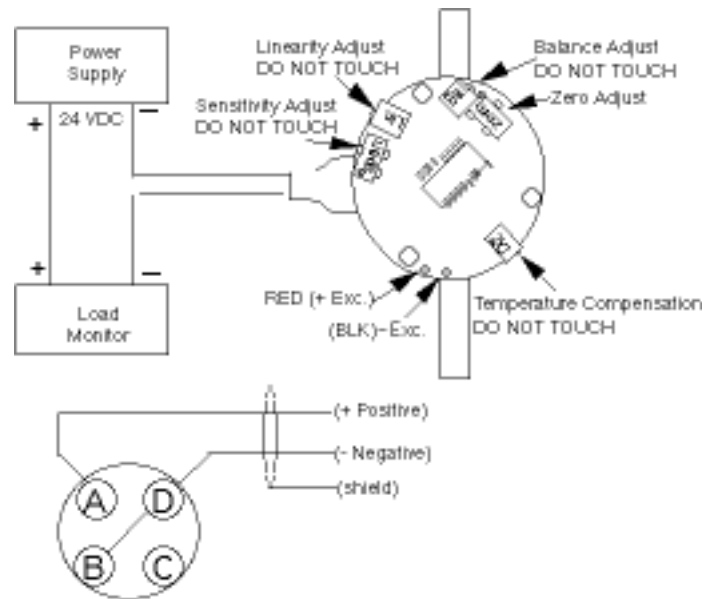
<p>Cable</p> <p>Red = + Excitation; connect to 12 VDC ± 10% power supply</p> <p>Green = + Output, connect to controls or monitor</p> <p>N/A = - Output</p> <p>Black = - Excitation; connect to return of 12 VDC power supply</p> <p>Shielding = Connect to system or earth ground</p>	<p>Bendix pin</p> <p>A</p> <p>B</p> <p>C</p> <p>D</p> <p>Connector or unit Body</p>
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Figure 1



The **Model C212FT** (4-20 mA) is a true 2-wire current output transmitter and delivers rated current into any external load of 0-800 ohms, 24 VDC excitation (16-32 VDC). The C212FT has a 6 foot cable where red is positive and black is negative. For units supplied with Bendix style connection Pin 'A' is positive and Pin 'B' or Pin 'D' is negative

Figure 2



Current must flow in one direction only - **Please observe polarity**. We suggest that the cable shield be connected to the system's loop circuit ground for optimum electrical noise rejection. For units with a Bendix style connector, shielding can be done at the connector or unit body.

Calibration

All Setra pressure transducers and transmitters are carefully calibrated to the specific input pressure range vs. output voltage or current at the factory so little or no field calibrating is necessary. The zero is more likely to shift slightly on units which are welded into place, due to the high welding temperature, than units which have optional factory installed fittings.

Zero and Sensitivity Adjustment (w/cover removed)

Zero Pressure Output - Can be adjusted to zero by potentiometer as shown in diagram. Changing zero will not change span.

Sensitivity (span) - Can be adjusted by potentiometer as shown in outline diagram. Unit factory adjusted to order specifications.

Linearity, Balance, DZ - DO NOT TOUCH - Factory adjusted for best linearity and performance. Touching any adjustments other than zero adjustment may necessitate recalibration.

Note: Sensitivity (span) adjustment is not recommended unless a primary pressure standard (dead weight tester, etc.) is available for use as a reference.

RETURNING PRODUCTS FOR REPAIR

Please contact Setra (1-800-257-3872, 978-263-1400) before returning unit for repair to review information relative to your application. Many times, only minor field adjustments may be necessary. When returning a product to Setra, the material should be carefully packaged and shipped prepaid to:

Setra Systems, Inc.
159 Swanson Road
Boxborough, MA 01719-1304
Attn: Repair Department

To assure prompt handling, please supply the following information and include it inside the package of returned material:

1. Name and phone number of person to contact.
2. Shipping and billing instructions.
3. Full description of the malfunction.
4. Identify any hazardous material used with product.

Notes: Please remove any pressure fittings and plumbing that you have installed and enclose any required mating electrical connectors and wiring diagrams.

Allow approximately 3 weeks after receipt at Setra for the repair and return of the unit. Non-warranty repairs will not be made without customer approval and a purchase order to cover repair charges.

Calibration Services

Setra maintains a complete calibration facility that is traceable to the National Institute of Standards & Technology (NIST). If you would like to recalibrate or recertify your Setra pressure transducers or transmitters, please call our Repair Department at 1-800-257-3872 (978-263-1400) for scheduling, cost and turnaround estimates.

LIMITED WARRANTY AND LIMITATION OF LIABILITY

SETRA warrants its products to be free from defects in materials and workmanship, subject to the following terms and conditions:

Without charge, SETRA will repair or replace products found to be defective in materials or workmanship within the warranty period; provided that:

- a) the product has not been subjected to abuse, neglect, accident, incorrect wiring not our own, improper installation or servicing, or use in violation of instructions furnished by SETRA;
- b) the product has not been repaired or altered by anyone except SETRA for its authorized service agencies;
- c) the serial number or date code has not been removed, defaced, or otherwise changed; and
- d) examination discloses, in the judgment of SETRA, the defect in materials or workmanship developed under normal installation, use and service;
- e) SETRA is notified in advance of and the product is returned to SETRA transportation prepaid.

Unless otherwise specified in a manual or warranty card, or agreed to in a writing signed by a SETRA officer, SETRA pressure and acceleration products shall be warranted for one year from date of sale.

The foregoing warranty is in lieu of all warranties, express, implied or statutory, including but not limited to, any implied warranty of merchantability for a particular purpose.

SETRA's liability for breach of warranty is limited to repair or replacement, or if the goods cannot be repaired or replaced, to a refund of the purchase price. SETRA's liability for all other breaches is limited to a refund of the purchase price. In no instance shall SETRA be liable for incidental or consequential damages arising from a breach of warranty, or from the use or installation of its products.

No representative or person is authorized to give any warranty other than as set out above or to assume for SETRA any other liability in connection with the sale of its products.

159 Swanson Road, Boxborough, MA 01719-1304; 800-257-3872;
(978) 263-1400; Fax. 978-264-0292; WEB; www.setra.com/;
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Rev. D 11/27/96

