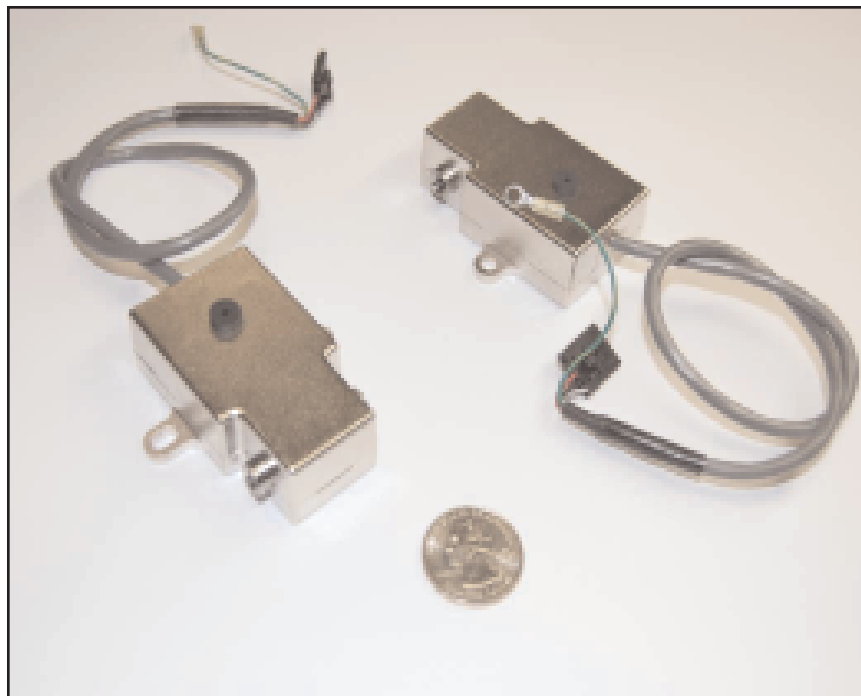


Low Profile *thru-FLO*™ Pressure Transducer

MODEL DF2



Connector pictured is optional

Since 1971 DJ Instruments has been providing standard and custom engineered strain gage sensors, transducers, and sensor systems for general and specific OEM requirements. Our engineering expertise is geared towards applications using bonded foil, semi-conductor or thick film on ceramic technologies as a sensing element. The DJ "DESIGN-TO-FIT™" process includes evaluating customer requirements and specifications, proposing a solution, supplying prototypes and manufacturing low-cost production quantities. After production has begun, DJ provides on-going technical support, assistance in "just-in-time", KanBan or Lean Manufacturing inventory management as well as participation in ongoing continuous improvement programs in cost, quality and delivery.

The DJ Model DF2 thru-FLO™ Pressure Transducer features a low internal volume sensing element design that has a true zero internal dead volume. The proprietary one-piece element eliminates the possibility of trapped particles and contamination since there are no internal cavities. The DF2 has a small footprint and is installed in line anywhere in the piping system. In addition, the DF2 package has excellent resistance to shock and vibration and provides excellent EMI Protection. Available for pressure ranges of 0-1000 up to 20,000 psig. Accuracy within 0.25% of Full Scale. Standard sensing element materials include 316 SS, Aluminum, Titanium. ID coatings of Teflon® FEP, SilcoSteel® or Parylene are also available.

The Model DF2 is well suited for OEM applications that require frequent cleaning and flushing of aggressive fluids. The Model DF2 provides pressure sensing and control in a variety of analytical instruments.

FEATURES

- True Zero Internal Dead Volume
- One-Piece Flow-Thru Element
- Pressure Range From 0-1000 Up To 20K psig
- Simple Mounting - Small Footprint
- Accurate And Rugged By Design
- Fine Zero Adjustment
- Choice Of Wetted Materials
- Excellent EMI Protection
- RoHS Compliant (Electronics only)

TYPICAL APPLICATIONS

- Chromatography
- Pharmaceutical
- Medical
- Semiconductor

SPECIFICATIONS

Performance

Pressure Sensor Type: One piece *thru-FLO*™ Element
 Pressure ranges 0-1000 up to 20,000 psig

Linearity and Hysteresis

combined Within 0.25% of F.S.(BFSL)
 Operating temperature range . . -40°F to +140°F (-40°C to +60°C)
 Compensated temperature range 77°F to +140°F (25°C to 60°C)
 Storage temperature -40°F to +176°F (-40°C to +80°C)
 (cable limited)

Temperature compensation

Zero 0.02% of Full scale per °C
 Span 0.03% of Full scale per °C
 Zero Balance AT 25°C 0.500 ±0.150 VDC
 (a zero trim pot is provided)
 Calibration medium Distilled water and IPA

Electrical

Electronics RoHS Compliant, Splash proof
 Excitation voltage 9.75 to 26 VDC
 Max. current drain 30 mA
 Output impedance 100 Ohms Max.
 Full scale output change 5.000 ±0.050 VDC

Electrical connections 3 Wire

Pin 1 White +Signal
 Pin 2 Black -Signal & Common
 Pin 3 Red +Excitation
 Yellow Shield

4 Wire

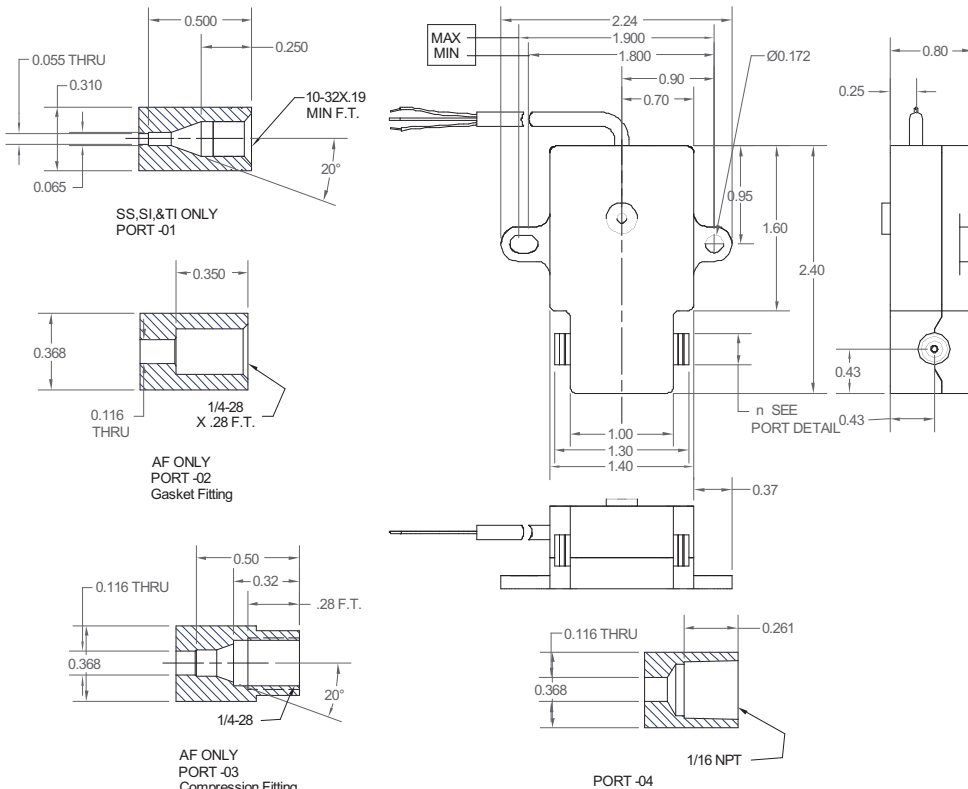
Pin 1 Green +Signal
 Pin 2 White -Signal
 Pin 3 Red +Excitation
 Pin 4 Black Common
 Yellow Shield

Mechanical

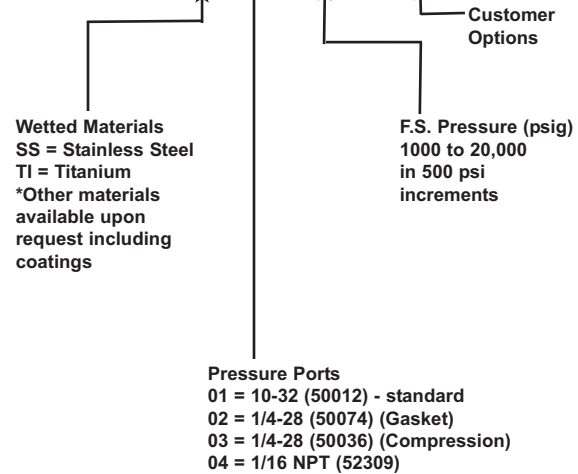
Proof Pressure 2x full scale or 25K psia whichever is less
 Shock 500 G's all axes
 Wetted materials See table
 Cover and Housing material Nickel plated cast zinc
 Internal volume 12 Microliters max. for port -01
 100 Microliters max. for ports-02,-03,-04
 Max. installation Torque 50 in.lbs. for ports -01 & -04
 20 in.lbs. for ports -02 & -03
 Zero shift due to torquing 3% of F.S. at 40 in. lbs.
 Weight 150 grams max.

For best EMI immunity, connect cable drain wire at cables end to the analog ground and mount the housing to the chassis.
 Listed specifications are standard. Specifications may change for certain combinations. Not all combinations are available. Consult factory for further information such as other ranges, materials and options not listed.

Model DF2 Dimensions



Ordering Information: DF2- XX - XX - XXXX - XXXXX



Example: DF2-SS-01-10000
 10,000 PSI, stainless steel, 10-32 chromatography pressure port, standard 8 in. of cable.



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 Website: www.djstruments.com

This information is accurate to the best of the manufacturer's knowledge. However, we reserve the right to change specifications at any time. Please contact your sales representative for specific order inquiries.