



Your Source for Standard and Custom Solutions

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.

High Reliability Sensing

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 - 500, up to 0 - 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. *Note: A Low Internal Volume version (1 micro liter) of the Model DF2 is available, call DJ for details.*

We can also take the core sensing element and customize to exact form, fit and function including custom electronics.

The Model DF2 is well suited for OEM applications that require frequent cleaning and flushing of aggressive fluids. The Model DF 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 0-500 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

Pressure Sensor Type	One piece thru-FLO™ Element
Pressure ranges	500, 1000, 2500, 5000, 10K, 15K and 20K PSIG
Linearity and Hysteresis combined:	Within .25% of F.S.(BFSL)
Operating temperature range	-40°C to +60°C
Compensated temperature range	25°C to 60°C
Storage temperature	-40°C to +80°C (cable limited)
Zero	.02% of Full scale per °C
Span	.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	Splash proof 9.75 to 26 VDC
Max. current drain	30 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
	Distilled water and IPA
	4 Wire
	Pin 1 Green +Signal
	Pin 2 White -Signal
	Pin 3 Red +Excitation
	Pin 4 Black Common
	Yellow Shield

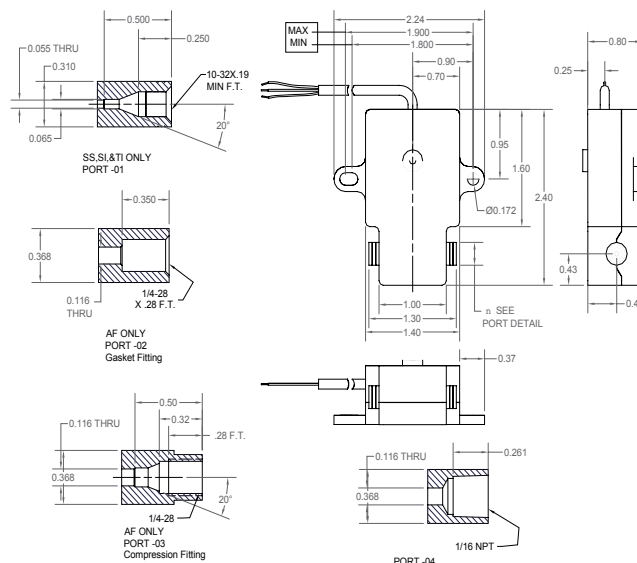
Mechanical

Proof Pressure	2x full scale or 25K PSI 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.

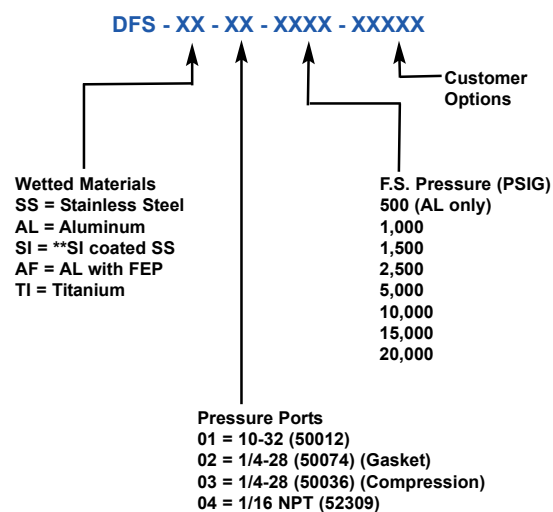
For best EMI immunity, connect cable drain wire at cables end to the analog ground and mount the housing to the chassis.

Listed specifications are standard. Specifications may change for certain combinations. Not all combinations are available. Consult factory for further information. For other ranges, materials and options not listed, consult factory.

Model DF2 Dimensions



Ordering Information



Example: DF2-SS-01-10000
 10,000 PSI, stainless steel, 10-32 chromatography pressure port, standard 8 in. of cable.
 ** 316 SS coated with 1200 Angstroms Silcosteel



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