

Flush Industrial Pressure Transmitter FL Series



“Non-Oil Filled” Flush Diaphragm Sensor

Design & Application

Dylix’s FL Series pressure transmitter’s innovative design is for the OEM and end user where ruggedness for high cyclical applications, including water hammer or spiking, is required. High performance and reliability can thus be provided at a competitive price. Key feature of the FL is its non-oil filled sensing element, with the sensing diaphragm machined from a solid piece of steel to withstand the most abrasive conditions.

Manufacturing & Quality

Sophisticated manufacturing techniques, advanced assembly procedures, extreme environmental burn-in and thorough residual stress relieving procedures ensure the FL Series maintains its performance over time.

Dylix’s Customer Service

Every FL Series is shipped with a NIST traceable calibration certificate. Annual re-calibration and repair/refurbishment services are available.

Standard Features

- $\leq \pm 0.5\%$ FSO Static Accuracy
- NEMA 4X Packaging
- $\leq \pm 0.25\%$ FSO/YR Stability

Optional Features

- $\leq \pm 0.25\%$ FSO Static Accuracy
- Hastelloy Wetted Materials
- Zero & Span Controls / Shunt Cal
- Intrinsically Safe

**Contact Dylix Sales for
Other Custom Applications...**
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Specifications: FL Series

Baseline Configuration Specs Represented.
Modifications Encouraged - See Below
Custom Designs Available

Pressure Transmitter

0-50 through 0-7,500 psi, Mechanically Isolated Sensor for Low Clamping Effect

Electrical

Excitation

FL1	2-15 Vdc
FL2, FL3, FL7	9-38 Vdc*

Output

FL1	1-2 mV/V*
FL2	0-5 Vdc*
FL3	4-20 mAdc
FL7	4-20 mAdc Intrinsically Safe

Zero Balance

±1% FSO

FSO Setting

±1% FSO

Resolution

Infinite (±0.001% FSO usable)

Response Time

FL1	< 0.5 mS
FL2, FL3, FL7	< 3 mS

Insulation Resistance

1000 M Ω at 50 Vdc

Reverse Polarity

Protected

Warm-up

< 10 mS

Power Supply Effect

±0.002% FSO per V input
(FL2, FL3, FL7)

EMI/RFI

Internal Filtering (FL2, FL3, FL7)

Short Circuit Protected

40 Vac (FL2, FL3, FL7)

Mechanical

Pressure Ranges

0-50 through 0-7,500 psi
(Customer may specify any range/eng. unit)
(Absolute, vacuum & compound are available options)

Proof Pressure

2X Full Scale*

Burst Pressure

5X Full Scale* (15k psi max)

Materials

Wetted Parts	316 & 17-4 ss*
Non-wetted Parts	316 ss

Pressure Port

3/4-16 UNF Flush with O-Ring*

Electrical Connector

NEMA 4X cable exit (24" cable)*

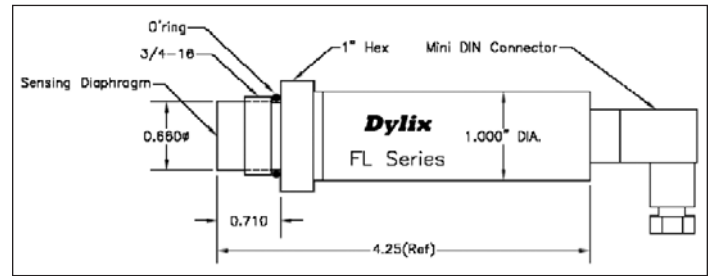
Dimensions

Per Drawing

Weight

Nominal 10 oz.

Product Dimensions (inches)



Performance

Static Accuracy

±0.5% FSO* (BFSL, RSS)*
(Combined effects of non-linearity, hysteresis & repeatability)

Repeatability

±0.1% FSO

Temperature Effects

±1.5% FSO over comp range*
(Combined effects of Zero & FSO with reference at 70° F)

Long Term Stability

±0.25% FSO per year

Environmental

Compensated Temp Range

0° to 170° F

Operating Temp Range

-40° to 200° F

Storage Temp Range

-40° to 250° F

Certifications

CSA/CUS Intrinsically Safe Class I Div. 1 Groups A,B,C,D T4

CSA/CUS Intrinsically Safe Zone 0,1&2 (A)Ex ia IIC T4 Ga

Standard Wiring

Model	Output	+ Power	- Power	+ Signal	- Signal
FL1	mV/V dc 4 wire	Red/Pin 1/Pin A	Black/Pin 2/Pin B	Green/Pin 3/Pin C	White/Pin 4/Pin D
FL2	0-5 (10) Vdc 3 wire	Red/Pin 1/Pin A	Black/Pin 2/Pin B	Green/Pin 3/Pin C	Black/Pin 2/Pin B
FL3	4-20 mAdc 2 wire	Red/Pin 1/Pin A		Black/Pin 2/Pin B	
FL7	4-20 mAdc 2 wire	Red/Pin 1/Pin A		Black/Pin 2/Pin B	

*Options Available

Modifications and Warranty

MODIFICATIONS: Transducer/Transmitter applications vary greatly. As such our designs are flexible. Choices such as pressure ports, electrical termination, material compatibility, and performance are a few of the many options available. Specifications on this datasheet represent standard configuration only. Product and company names that may be listed are trademarks of their respective companies. Any and all specifications subject to change without notice.

WARRANTY: Dylux Corporation warrants that its product shall be free from defective workmanship and/or material for a twelve month period from the date of shipment, provided that Dylux Corporation's obligation shall be limited to correcting any defective material, FOB our factory. No allowance will be made for any expenses incurred for correcting any defective workmanship and/or material without written consent by Dylux Corporation. This warranty is in lieu of all other warranties expressed or implied.

Due to the nature of technology, changes are inevitable.
For latest technical specifications, see our website.



A US Designer and Manufacturer of
Pressure Transducers & Transmitters

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