

## Homogenizer Pressure Sensor FH Series



### Extremely Low Clamping Effect

#### Design & Application

Dylix's FH Series Pressure Transmitter is designed for the OEM and end user where ruggedness, high performance, and reliability are required at a competitive price.

Key features of the FH are:

1. its non oil-filled sensing element
2. extremely low clamping effect

The sensing diaphragm is designed using a solid piece of steel, and can withstand the most abrasive/cyclical applications, including water hammer/spiking.

#### Manufacturing & Quality

The FH Series is built using an advanced modular assembly process that allows high customization and short delivery times.

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

#### Dylix's Customer Service

Every FH 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
- Fast Thermal Response Time
- Designed for wash-down areas

### Optional Features

- $\leq \pm 0.25\%$  FSO Static Accuracy
- All Hastelloy Wetted Parts
- Zero & Span Controls / Shunt Cal
- $\frac{3}{8}$ " NPT conduit
- Intrinsically Safe

**Contact Dylix Sales for  
Other Custom Applications...**  
[sales@dylixcorp.com](mailto:sales@dylixcorp.com) • 716.773.2985

# Specifications: FH Series

## Pressure Transmitter

0-100 through 0-20k psi, Low Clamping Effect / Designed for High Cycles

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

### Electrical

#### Excitation

FH1 2-15 Vdc  
FH2, FH3, FH7 9-36 Vdc\*

#### Output

FH1 1-2 mV/V\*  
FH2 0-5 Vdc\*  
FH3 4-20 mAdc  
FH7 4-20 mAdc Intrinsically Safe

#### Zero Balance

±1% FSO

#### FSO Setting

±1% FSO

#### Resolution

Infinite (±0.001% FSO usable)

#### Response Time

FH1 < 0.5 mS  
FH2, FH3, FH7 < 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  
(FH2, FH3, FH7)

#### EMI/RFI

Internal Filtering (FH2, FH3, FH7)

#### Short Circuit Protected

40 Vdc (FH2, FH3, FH7)

### Mechanical

#### Pressure Ranges

0-100 through 0-20k psi  
(Customer may specify any range/eng. unit)  
(Absolute, vacuum & compound are available options)

#### Proof Pressure

2X Full Scale (22,500 psi max)

#### Burst Pressure

5X Full Scale (23,000 psi max)

#### Materials

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

#### Pressure Port

Standard Homogenizer

#### Electrical Connector

NEMA 4X cable exit (24" cable)\*

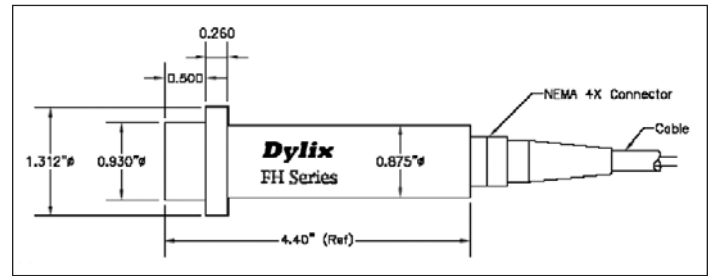
#### Dimensions

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

± .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 C/US Intrinsically Safe Class1 Div 1 Groups A,B,C,D T4

CSA C/US Intrinsically Safe Zone 0,1&2 A/Ex ia IIC T4 Ga

### Standard Wiring

Model	Output	+ Power	- Power	+ Signal	- Signal
FH1	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
FH2	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
FH3	4-20 mAdc 2 wire	Red/Pin 1/Pin A		Black/Pin 2/Pin B	
FH7	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

# Dylux Corporation

347 Lang Blvd. Grand Island, NY 14072 USA

Phone: 716.773.2985 | Fax: 716.773.2786

Web: dyluxcorp.com

Copyright © 2018 Dylux Corporation • All Rights Reserved  
Datasheet FH-118