

High-Line Differential Pressure Transmitter DP Series



Up to 6000 psi Pressure Measurement

Design & Application

Dylix's DP Series differential pressure transmitter is designed for End Users and OEMs where ruggedness, high performance and reliability are required at a competitive price. This product is modular and is configurable to meet our customer's exact needs.

Entirely welded 316L SST pressure cavities with no o-rings make it ideal for high cyclical applications, capillary filled systems or installations requiring a guaranteed leak free system.

Manufacturing & Quality

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

Our modern CNC machining centers ensure symmetry between the HI and LO ports. Symmetry, along with automated welding procedures and extreme environmental burn-in, give Dylix's differential pressure products excellent performance and reliability over time and at high elevated line pressures.

Dylix's Customer Service

Each DP unit is delivered with a NIST traceable calibration certificate. Annual re-calibration and repair/refurbishment services are available.

Standard Features

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

Optional Features

- $\leq \pm 0.1\%$ FSO Static Accuracy
- Zero & Span Controls
- 20X Overpressure protection
- Hastelloy Wetted Parts
- Intrinsically Safe

**Contact Dylix Sales for
Other Custom Applications...**
sales@dylixcorp.com • 716.773.2985

Specifications: DP Series

Differential Pressure Transmitter

0-15 through 0-6K psig. High Line Pressure – O-Ring Free Design

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

Electrical

Excitation

DP1 2-15 Vdc
DP2, DP3, DP7 9-36 Vdc*

Output

DP1 1-2 mV/V*
DP2 0-5 Vdc*
DP3 4-20 mA_{dc}
DP7 4-20 mA_{dc} Intrinsically Safe

Zero Balance

± 1% FSO

FSO Setting

± 1% FSO

Resolution

Infinite (± 0.001% FSO usable)

Response Time

DP1 < 30 mS
DP2, DP3, DP7 < 50 mS

Insulation Resistance

1,000 M Ω @ 50 Vdc

Reverse Polarity

Protected

Warm-up

< 20 mS

Power Supply Effect

± 0.002% FSO per V input
(DP2, DP3, DP7)

EMI/RFI

Internal Filtering (DP2, DP3, DP7)

Short Circuit Protected

40 Vac (DP2, DP3, DP7)

Mechanical

Pressure Ranges

Range a: 0-15 through 0-200 psid
Range b: 0-300 through 0-1K psid
Range c: 0-2K through 0-6K psid
(Customer may specify any range/eng. unit)

Line Pressure

Range a: 1,000 psi
Range b: 3,000 psi
Range c: 7,000 psi

Proof Pressure

3X Full Scale Differential (7K psi) max*

Burst Pressure

Range a: Minimum 5K psi
Range b: Minimum 10K psi
Range c: Minimum 12K psi

Materials

Wetted Parts 316L ss*
Non-wetted Parts 316L ss plus electrical connector

Pressure Port

1/2" NPT (Female)*

Electrical Connector

NEMA 4X, 24" pigtail*

Dimensions

Per Drawing

Weight

13 oz

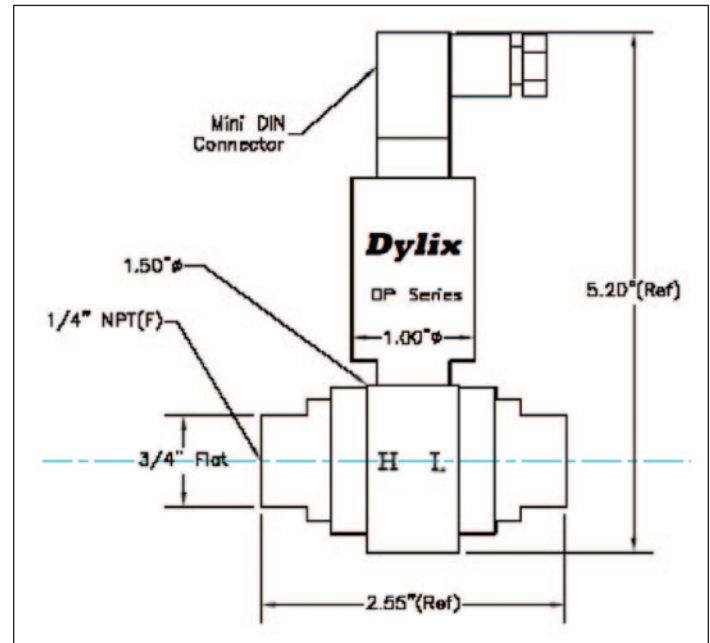
Modifications and Warranty

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.*

Product Dimensions (inches)



Performance

Static Accuracy

± 0.25% 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
DP1	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
DP2	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
DP3	4-20 mA _{dc} 2 wire	Red/Pin 1/Pin A		Black/Pin 2/Pin B	
DP7	4-20 mA _{dc} 2 wire	Red/Pin 1/Pin A		Black/Pin 2/Pin B	

*Options Available



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 DP-1118