

# HDP Series

Differential Pressure Transmitter



## *High-Range Differential Pressure Measurement*

### **Designed for many markets/applications**

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.

### **Manufactured for extended life cycle**

Every DP Series is built using advanced manufacturing techniques to 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 pressure.

### **Entirely welded stainless steel pressure cavities**

The DP Series pressure port's all welded stainless steel O-Ring free design make it ideal for high cyclical applications, capillary filled systems or applications where a guaranteed leak free system is needed.

### **Dylix's Customer Service**

Includes a NIST traceable calibration certificate.

### **Standard Features**

- ≤±0.25% FSO Static Accuracy
- NEMA 4X Package

### **Available Options**

- 5x proof/max pressure
- Zero & Span Controls
- Inconel 718 Wetted Parts



Shown with optional Mini DIN 43650 C  
(Option Code: B02)

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# HDP Series Pressure Transmitter



Ranges 0-100 PSID and higher

High Range Differential Pressure— All welded design

## Product Specifications

### Electrical

|                       |                                      |
|-----------------------|--------------------------------------|
| Excitation            |                                      |
| DP1                   | 2-15 Vdc                             |
| DP2 & DP3             | 9-36 Vdc*                            |
| Output                |                                      |
| DP1                   | 1-2 mV/V*                            |
| DP2                   | 0-5 Vdc*                             |
| DP3                   | 4-20 mAdc                            |
| Zero Balance          | ± 1% FSO                             |
| FSO Setting           | ± 1% FSO                             |
| Resolution            | Infinite (± 0.001% FSO usable)       |
| Response Time         |                                      |
| DP1                   | < 30 mS                              |
| DP2 & DP3             | < 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) |
| EMI/RFI               | Internal Filtering (DP2 & DP3)       |

### Mechanical

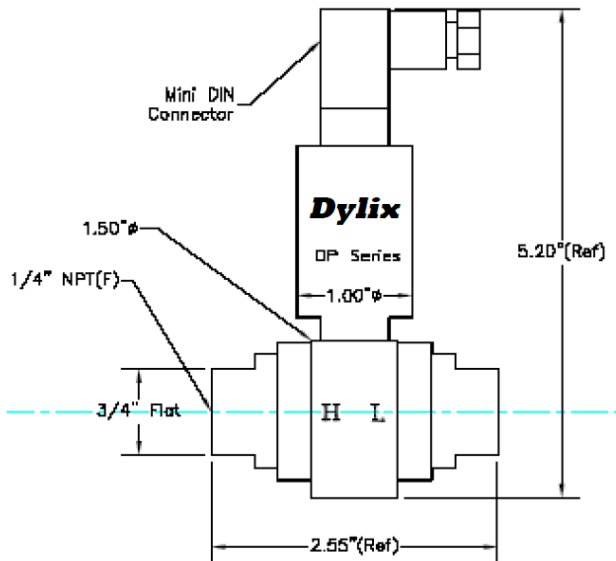
|                      |   |
|----------------------|---|
| Pressure Ranges      | 0-100 through 0-20,000 psid<br>(Customer may specify any range/eng. unit) |
| Proof Pressure       | 3X range (5X optional)  |
| Burst Pressure:      | 5X range (higher optional)  |
| Materials            |   |
| Wetted Parts         | 316L and 17-4 SS*   |
| Non-wetted Parts     | 316L SST plus electrical connector  |
| Pressure Port        | 1/4" NPT (Female)*<br>A/E F250 C for line pressure >20k                   |
| Electrical Connector | NEMA 4X cable exit (24" cable)*   |
| Dimensions           | Per outline below   |
| Weight               | 13 oz.  |

### Environmental

|                        |               |
|------------------------|---------------|
| Compensated Temp Range | -30 to 170° F |
| Operating Temp Range   | -40 to 185° F |
| Storage Temp Range     | -40 to 250° F |

### Performance

|                     |  |
|---------------------|--|
| Static Accuracy     | ≤ ± 0.25% FSO BSL*   |
| Repeatability       | ≤ ± 0.1% FSO   |
| Temperature Effects | ≤ ± 1.5% FSO/100° F over comp range*<br>(Combined effects of Zero & FSO with reference at 70° F) |
| Long Term Stability | ≤ ± 0.25% FSO per year   |



### \*Options Available

### 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 |                   |
| DP3   | 4-20 mAdc 2 wire    | Red/Pin 1/Pin A |                   | Black/Pin 2/Pin B |                   |

Dylix Corporation reserves the right to change specifications without prior notification. Please contact the factory for the latest revision.

Data Sheet HDP-17 Rev A