

# DPL Series

## Differential Pressure Transmitter



*UP to 4000 psi Line Pressure*

### **Designed using variable capacitance technology**

Dylix's DPL Series is a high static-low differential pressure transmitter based on proven capacitance sensing technology. Key feature of the sensing element is its isolation from induced stress which improves performance and long term stability over elevated line pressures.

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

Reliability and stability are manufactured into every device using advanced manufacturing techniques. Extended burnin and thermal cycling are just a few extra steps Dylix utilizes to ensure performance over time.

### **316L SST standard material of construction**

The DPL comes standard with 316L SST sensing diaphragms and process flanges to handle most aggressive fluids.

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

Every DPL Series is shipped within 3-4 Weeks ARO with a NIST traceable calibration certificate.

Variable Capacitance Technology



6:1 Turndown

### **Standard Features**

$\leq \pm 0.2\%$  FSO Static Accuracy  
316L SST diaphragms & Flanges  
 $\leq \pm 0.25\%$  FSO/YR Stability

### **Available Options**

$\leq \pm 0.1\%$  FSO Static Accuracy  
Line Pressure to 4000 psi  
Hart Protocol

Dylix Corporation  
347 Lang Blvd.  
Grand Island, NY 14072 USA

*Design & Manufacture of  
Pressure Instruments*

www.dylixcorp.com  
P 716.773.2985  
F 716.773.2786

# DPL Series Pressure Transmitter



0-5" H<sub>2</sub>O through 0-750" H<sub>2</sub>O  
2000 psi Line Pressure

## Product Specifications

### Electrical

Power Supply	12 to 45 Vdc with no load
Output	4-20 mA <sub>dc</sub> linear
Zero & Span Adjust	Continuous
Warm up	2 seconds max (with minimum damping)
Damping	Variable from 0.2 to 1.67 seconds
Power Supply Effect	Less than +/-0.005% of span/volt input change
Load Effect	No effect except power across transmitter
EMI/RFI	Less than +/-0.1% FSO; 20 to 1000 MHz; @ 30 V/m
Short Circuit Protected	

### Pressure Ranges

Standard Ranges (STR)	0-30", 150", 750" H <sub>2</sub> O
Range ability	6:1 max
Maximum Static Pressure	2000 psi
Overpressure Protection	2000 psi without changing calibration
Burst Pressure	8,700 psi

### Performance

Static Accuracy	+/-0.2% of calibrated span
Base Pressure Effect	
On Zero	+0.25% FSO of standard range per 2000 psi
On span	+/-0.5% of reading for 0-30" H <sub>2</sub> O +/-0.25% of rdg per 1000 psi; 0-150" & 750" H <sub>2</sub> O
Temperature Effect	+/-2.5% FSO Total Error Band for 0-30" H <sub>2</sub> O +/-1.5% FSO Total Error Band; 0-150" & 750" H <sub>2</sub> O
Vibration Effect	0.05% FSO per g to 200 Hz in any axis
Mounting Effect	Zero shifts up to 1" H <sub>2</sub> O depending on orientation
Stability	+/-0.2% FSO per annum

### Options

Mounting Brackets	2" Pipe mount Panel Mount
Integral Meters	2" Analog meter or LCD

### Standard Wiring:

**Screw Terminal Block**  
**+Power -Signal Return**

### Mechanical

Materials	
Wetted Parts	
Diaphragms	316L SST
Process Flanges	316L SST
'O'-Rings	Viton
Non-Wetted Parts	
Bolts	Plated carbon steel
Electrical Housing	Low-copper aluminum
Paint	Polyurethane
Cover 'O'-Ring	Buna-N
Fill Fluid	Silicon Oil
Process Connections	1/4-18 NPT Female
Port centers	2 1/8"
Flange adapters included	
Drain/vent	Side of process flange
Electrical Connector	1/2-14 NPT Female w/ screw terminals
Weight	Approximately 6.5 lbs.

### Environmental

Temperature Limits Operating	
Electronics	-40 to + 200°F
Sensing element	-40 to + 220°F
Temperature Limits Storage	-60 to + 250°F
Humidity	0-100% relative humidity
Volumetric Displacement	Less than 0.01 in <sup>3</sup>

### \* Options Available

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