

Submersible Pressure Transmitter ST Series



Shallow or Deep Well Measurement

Design & Application.

Performance/cost at single piece quantities

Dylix's ST Series Submersible Pressure Transmitter is designed for low cost of ownership for level /depth measurement applications in shallow or deep wells. Key features of the ST are its long term stability, internal protection from lightning via dual gas discharge tubes, internal EMI/RFI filtering, double sealed waterproof cable exit and a maintenance free vent filter. Ranged from 0-5ft H₂O through 0-1500ft H₂O, the ST Series is available in either a 4-20 mA or 0-5 Vdc output signal..

Manufacturing & Quality

The ST Series is built using an advanced modular assembly process that allows high customization and short delivery times. Innovative manufacturing and 100% 24 hour duration testing techniques ensure the integrity of the double sealed connection. Automated welding procedures and extreme environmental burn-in, along with the internal protection against harsh well conditions, give Dylix's customers the confidence of long term product reliability.

Dylix's Customer Service

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

Standard Features

- Moisture Free/Maintenance Free Vent Filter
- EMI/RFI filtering with lightning protection
- ≤±0.5% FSO Static Accuracy
- · Double sealed cable exit
- · ≤± 0.25% FSO/yr long term stability

Optional Features

- · ≤± 0.1% FSO Static Accuracy
- Low power (5 Vdc, 1.5 mA) < 3 msec warm-up time maximizes battery life
- Remote Zero/Span Controls with Cal Digital Output
- Alternate wetted materials: Hastelloy C-276
- · Alternate cable: Hytrel & Tefzel®
- · Intrinsically Safe

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

Specifications: ST Series

Submersible Pressure Transmitter

0-5 through 0-1,500 ftwc High Stability Depth/Double Seal Level Transmitter

Electrical

Excitation 9-38 Vdc*

Output

ST2 0-5 Vdc* ST3 4-20 mAdc

ST7 4-20 mAdc Intrinsically Safe

Zero Balance ≤± 1% FSO **FSO Setting** ≤± 1% FSO

Resolution Infinite (± 0.001% FSO usable)

Response Time

Insulation Resistance 1,000 M Ω @ 50 Vdc

Reverse Polarity Protected Warm-up < 3 mS

Power Supply Effect ≤± 0.002% FSO per V input

(ST2, ST3, ST7)

EMI/RFI Internal Filtering (ST2, ST3, ST7)

Short Circuit Protected 40 Vac (ST2, ST3, ST7) **Lightning Protected** Dual gas discharge tubes

Mechanical

0-5 through 0-1500 ftwc **Pressure Ranges**

> (Customer may specify any range/eng. unit) (Absolute, vacuum, compound available options)

Proof Pressure 2X Full Scale **Burst Pressure** 5X Full Scale **Materials** 316 ss & 17-4* **Pressure Port PVC Bullet Nose***

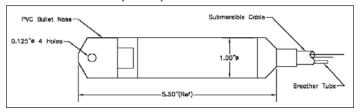
Electrical Connection Submersible cable exit with 10ft vented

polyurethane cable*

Dimensions Per Drawing

Weight 10 oz (nominal) excluding cable

Product Dimensions (inches)



Performance

Static Accuracy ≤± 0.25% FSO* (BFSL, RSS)*

(Combined effects of non-linearity,

Baseline Configuration Specs Represented.

Modifications Encouraged - See Below

Custom Designs Available

hysteresis & repeatability)

Repeatability ≤± 0.1% FSO

Temperature Effects ≤± 1.5% FSO over comp range*

(Combined effects of Zero & FSO

with reference at 70° F)

≤± 0.25% FSO per year Long Term Stability

Environmental

Compensated Temp Range 20° to 120° F **Operating Temp Range** 0° to 200° F **Storage Temp Range** -20° 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

Entity Parameters

Vmax, Ui	32 Vdc		
lmax, li	100 mA		
Pmax, Pi	800 mW		
Ci	0.055 μF		
ij	0 mH		

Standard Wiring

Model	Output	+ Power	- Power	+ Signal	- Signal
ST2	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
ST3	4-20 mAdc 2 wire	Red/Pin 1/Pin A		Black/Pin 2/Pin B	
ST7	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: Dylix 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 Dylix 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 Dylix Corporation. This warranty is in lieu of all other warranties expressed or implied.



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