Differential Pressure Sensor Control



APPLICATIONS

- Tank level indication
- Marine
 - Tank level, draft monitoring and vessel management
 - Ballast water
 - Fuel oil
 - Fresh water
 - Lube oil
 - Brine
 - Preload
 - Holding

868 SERIES

- 4 mA to 20 mA output for broad compatibility
- Better than ±0.02% span repeatability
- · Piezoresistive technology for enhanced stability
- Also offered in hybrid versions combined with an air flow control for pneumatic sensors or downpipe (bubbler) systems

| | SPECIFICATIONS | | | | |
|--|---|--|--|--|--|
| Output signal | 4 mAdc to 20 mAdc (milliamperes) | | | | |
| Accuracy | $\pm 0.2\%$ FS ($\pm 0.10\%$ F.S., typical) includes non-linearity, hysteresis and non-repeatability | | | | |
| Repeatability | ±0.02% of calibrated span | | | | |
| Temperature range | 0 °F to 180 °F/-18 °C to 82 °C (operating range) | | | | |
| Compensated temperature range | 32 °F to 120 °F/ 0 °C to 54 °C | | | | |
| Thermal effects (over compensated temperature range) | Less than .007% °F (.011% °C) span shift—sensitivity Less than .007% °F (.011% °C) span shift—zero | | | | |
| Power requirement* | 14 Vdc to 40 Vdc | | | | |
| Power supply stability (effect on FSO) | Less than .005% of span change in output per volt change at input terminals | | | | |
| Burst pressure | 200 psi | | | | |
| Combined accuracy** | 0-5 psid trans./control ±0.34% full scale 0-10 psid trans./control ±0.27% full scale 0-15 psid trans./control ±0.24% full scale 0-30 psid trans./control ±0.22% full scale 0-50 psid trans./control ±0.21% full scale | | | | |
| Compressed air requirement | 35 psid to 150 psig supply pressure at control inlet | | | | |
| Maximum depth measurement | 1,937 inH ₂ O (49.0 m water) | | | | |

Unregulated

^{**} Combined accuracy refers to the primary accuracy of the sensor in combination with the secondary accuracy of the D/P transmitter.

| ORDERING INFORMATION | | | | | | | |
|----------------------|-----|---------------------------------------|-----|-----------------------------|-----|---|--|
| SERIES | 868 | D/P Sensor Control (Air Flow Control) | | | | | |
| FITTINGS | 19 | None, 1/4" NPT | 39 | Polyflo; (4) 1/4" tube | 49 | Swagelok; (4) 1/4" tube (compatible with copper or poly tubing) | |
| MILLIAMP OUTPUTS | 108 | 4 mAdc to 20 mAdc 0-5 psid | 128 | 4 mAdc to 20 mAdc 0-15 psid | 148 | 4 mAdc to 20 mAdc 0-50 psid | |
| | 118 | 4 mAdc to 20 mAdc 0-10 psid | 138 | 4 mAdc to 20 mAdc 0-30 psid | 168 | 4 mAdc to 20 mAdc 0-2 psid | |

NOTE: Unit includes (1) water-resistant Hubbell cord grip.



