## **Differential Pressure LiquiSeal™ Purge Control**



## **APPLICATIONS**

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

## **738** SERIES

- Fully integrated air purge regulator that provides continuous level measurement
- Integral differential pressure transmitter provides 4 mAdc to 20 mAdc output proportional to liquid level
- · Reliable proven sensing technique
- A highly refined versions of the basic bubbler air control
- All-pneumatic version available
- · Simple to install and maintain

| SPECIFICATIONS             |  |  |  |  |  |  |  |
|----------------------------|--|--|--|--|--|--|--|
| Output signal              | 4 mAdc to 20 mAdc (milliamperes)   |  |  |  |  |  |  |
| 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  |  |  |  |  |  |  |
| Repeatability              | ± 0.20% of calibrated span   |  |  |  |  |  |  |
| Temperature range          | 0 °F to 120 °F / -16 °C to 54 °C   |  |  |  |  |  |  |
| Maximum pressure           | 300% over-range  |  |  |  |  |  |  |
| Burst pressure             | 200 psig   |  |  |  |  |  |  |
| Power requirement*         | 14 Vdc to 40 Vdc   |  |  |  |  |  |  |
| Compressed air requirement | 35 psig to 150 psig supply pressure at control inlet. (Minimum supply pressure should be at least 20 psig greater than anticipated maximum liquid head pressure.)  |  |  |  |  |  |  |
| Maximum depth measurement  | 1,937 inH <sub>2</sub> O(49.0 m)   |  |  |  |  |  |  |
| DP Purge control           | Unit incorporates differential air flow regulator with flow control orifice. Fixed differential set to nominal 10 psid. Output is 1:1 pneumatic pressure (hydrostatic force equivalent). Includes an integral differential pressure (D/P) transmitter converting pneumatic pressure into 4 mAdc to 20 mAdc electronic output. Ranges available: 0 psid to 5 psid, 0 psid to 10 psid to 30 psid, 0 psid to 50 psid, |  |  |  |  |  |  |
| Flow rate (air purge)      | Nominal 1 cfh (cubic feet per hour) at specified differential. Maximum air consumption under 5 cfh.  |  |  |  |  |  |  |
| Materials of construction  | Machined brass body with acrylic semi-gloss enamel finish; integral filter element is aluminum with acrylic semi-gloss enamel finish.  |  |  |  |  |  |  |

<sup>\*</sup> Unregulated

| ORDERING INFORMATION |      |                             |      |  |      |   |  |
|----------------------|------|-----------------------------|------|--|------|---|--|
| SERIES               | 738  |                             |      |  |      |   |  |
| FITTINGS             | 1918 | None, 1/4" NPT              | 3918 | Polyflo; (1) 3/8" tube, (1) 1/4" tube x 1/4" NPT | 4918 | Swagelok; (1) 3/8" tube, (1) 1/4" tube x 1/4" NPT (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.



