

# Differential Pressure LiquiSeal™ Purge Control



## 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 version of the basic bubbler air control
- All-pneumatic version available
- Simple to install and maintain

### SPECIFICATIONS

|                                   |  |
|-----------------------------------|--|
| <b>Output signal</b>              | 4 mAdc to 20 mAdc (milliamperes)   |
| <b>Accuracy</b>                   | 0-5 psid trans./control $\pm 0.34\%$ full scale<br>0-10 psid trans./control $\pm 0.27\%$ full scale<br>0-15 psid trans./control $\pm 0.24\%$ full scale<br>0-30 psid trans./control $\pm 0.22\%$ full scale<br>0-50 psid trans./control $\pm 0.21\%$ full scale  |
| <b>Repeatability</b>              | $\pm 0.20\%$ of calibrated span  |
| <b>Temperature range</b>          | 0 °F to 120 °F / -16 °C to 54 °C   |
| <b>Maximum pressure</b>           | 300% over-range  |
| <b>Burst pressure</b>             | 200 psig   |
| <b>Power requirement*</b>         | 14 Vdc to 40 Vdc   |
| <b>Compressed air requirement</b> | 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.)  |
| <b>Maximum depth measurement</b>  | 1,937 inH <sub>2</sub> O(49.0 m)   |
| <b>DP Purge control</b>           | 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, |
| <b>Flow rate (air purge)</b>      | Nominal 1 cfh (cubic feet per hour) at specified differential. Maximum air consumption under 5 cfh.  |
| <b>Materials of construction</b>  | Machined brass body with acrylic semi-gloss enamel finish; integral filter element is aluminum with acrylic semi-gloss enamel finish.  |

\* Unregulated



**WARNING:** This product can expose you to chemicals including Lead and Nickel, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

| ORDERING INFORMATION     |  |  |   |
|--------------------------|--|--|---|
| <b>SERIES</b>            | <b>738</b>                             |  |   |
| <b>FITTINGS</b>          | <b>1918</b> None, 1/4" NPT             | <b>3918</b> Polyflo; (1) 3/8" tube, (1) 1/4" tube x 1/4" NPT | <b>4918</b> Swagelok; (1) 3/8" tube, (1) 1/4" tube x 1/4" NPT (compatible with Copper or Poly tubing) |
| <b> MILLIAMP OUTPUTS</b> | <b>108</b> 4 mAdc to 20 mAdc 0-5 psid  | <b>128</b> 4 mAdc to 20 mAdc 0-15 psid                       | <b>148</b> 4 mAdc to 20 mAdc 0-50 psid  |
|                          | <b>118</b> 4 mAdc to 20 mAdc 0-10 psid | <b>138</b> 4 mAdc to 20 mAdc 0-30 psid                       | <b>168</b> 4 mAdc to 20 mAdc 0-2 psid   |

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

### EXAMPLE

Series ..... 738 Series  
 Fitting ..... Polyflo; (1) 3/8" tube, (1) 1/4" tube x 1/4" NPT  
 Milliamp output..... 4 mAdc to 20 mAdc 0-5 psid

738 - 3918 - 108

