

Neo-Dyn® Series 158F Liquid Flow Switch

Factory-set/tamper-proof liquid flow switch for coolants, oil and fuel flow applications. Nega-Rate® Belleville spring with high efficiency venturi provide excellent set point repeatability. Hermetically sealed electrical assembly ideally suited for hazardous or corrosive environments.

Operating Flow Data

Fixed Set Point Range		Maximum Recommended System Pressure	Proof Pressure
Increasing	Decreasing		
.5 to 7 gpm	.4 to 6 gpm	250	400

All values given in psig.

Standard Specifications

Deadband (Differential)

Deadband range from .1 GPM or 15%, whichever is greater, to 45% of the set point

Pressure Drop

1 psid to 10 psid dependent on settings and media (consult factory)

Electrical

Switching mechanism enclosed in a chamber hermetically sealed per MIL-E-5400, para. 6.3.10.

Electrical Connection

PVC insulated 18 AWG leads
18" long

Process Connections

MS16142-½ (MOD.) equivalent to SAE straight thread boss

Temperature Range*

Ambient: -40°F to +180°F
(-40°C to +82°C)

Media: +32°F to +160°F
(0°C to +71°C) (water)

*Temperature limits change with O-Ring selection

Shipping Weight

Approximately 1.5 pounds



Ordering Sequence — Select desired option for each category

OPTIONS

Wetted Material

4 300 series stainless steel, acetal, Teflon coated polyimide diaphragm and EPR O-Rings

Electrical Form

C 7 amps 125, 250 VAC; 7 amps resistive, 4 amps inductive 28 VDC

CC 7 amps 125, 250 VAC; 7 amps resistive, 4 amps inductive 28 VDC

Enclosure

5 Hermetically sealed electrical assembly (Suitable for all Division 2 hazardous locations)

Miscellaneous

B Viton O-Rings

M Gold electrical contacts for extremely low current applications

R 72" Electrical free leads

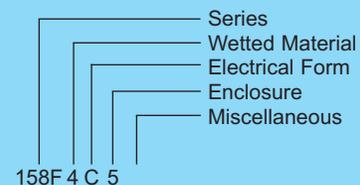
Special (Consult representative or factory)

- Set points to 28 GPM in different configurations
- MS/QPL electrical connectors readily available
- MS16142 ½" equivalent to SAE straight thread boss
- Aluminum port and body
- QPL to MIL-S-28788/1A for military applications
- Limited set point adjustments
- UL/CSA explosion-proof electrical assembly

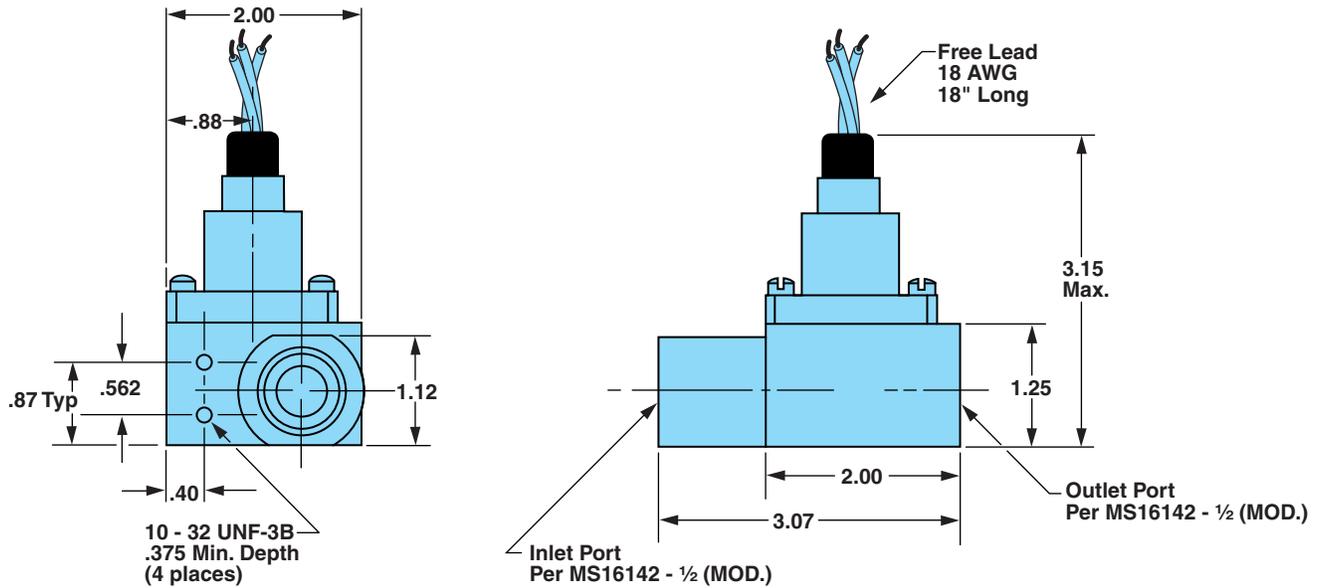
Ordering Procedure

- Specify critical set points, increasing or decreasing
- Specify deadband if pertinent, and if not, specify as "open"
- Specify system pressure and normal flow
- Specify proof pressure
- Specify maximum pressure drop allowable
- Specify exact media and ambient temperatures

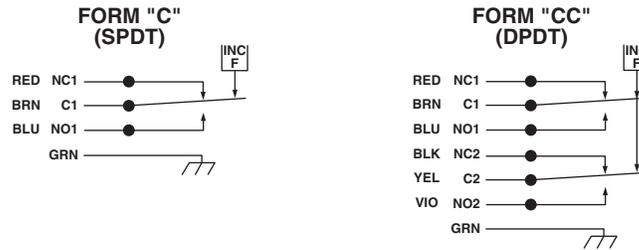
Example



Envelope Dimensions



Electrical Form



Basic Principles of Design

