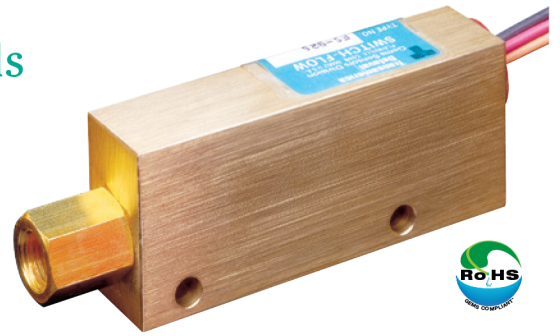


# FS-930 Series – Oil Flow Switch, Compensates For Viscosity Change In Fluids

**Flow Rate Settings:** 0.1 GPM to 1.0 GPM  
**Port Size:** 1/4" NPT  
**Primary Construction Material:** Brass  
**Setting Type:** Fixed



A unique, patented piston design assures accuracy within 20% over a full range of viscosities—from 40 to 2000 SSU. Ideal for use in applications where liquids of different viscosities are blended; or for use in lubrication systems where oil flow monitoring is critical at start-ups. Switch compensates for viscosity changes automatically. Each unit is factory preset, using 300 SSU oil, for actuation at specified flow rates.

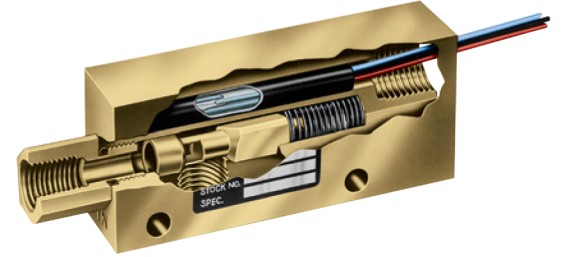


CE U.L. Recognized —  
File No. E31926

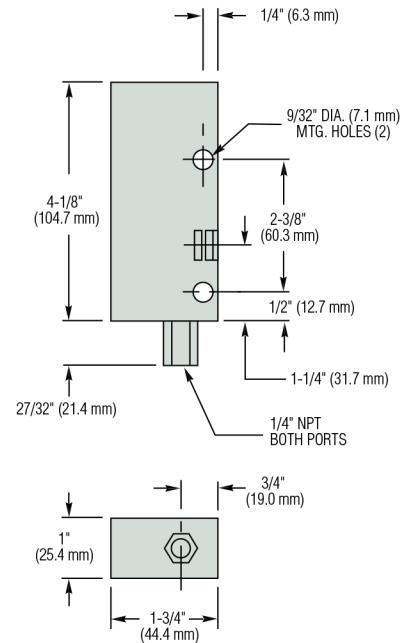
## Specifications

<b>Wetted Materials</b>	
<b>Housing</b>	Brass
<b>Piston</b>	Brass
<b>Spring</b>	316 Stainless Steel
<b>O-Ring</b>	Viton®
<b>Other Wetted Parts</b>	Epoxy
<b>Pressure Rating</b>	
<b>Operating, Maximum</b>	1000 PSIG (69 bar)
<b>Proof</b>	2500 PSIG (172 bar)
<b>Burst</b>	5000 PSIG (345 bar)
<b>Operating Temperature</b>	-20°F to +300°F (-29°C to +148.9°C)
<b>Repeatability</b>	1% Maximum Deviation**
<b>Set Point Accuracy</b>	±10%
<b>Set Point Differential</b>	15% Maximum
<b>Switch*</b>	SPDT, 20 VA
<b>Inlet/Outlet Ports</b>	1/4" NPT
<b>Electrical Termination</b>	No. 18 AWG, 24" L., Polymeric Lead Wires
<b>Explosion-Proof Approvals</b>	U.L. Approved for Class I, Division 2, Groups A, B, C, D. Also available with FM approved, explosion proof junction box for Class I, Division 1, Group D hazardous locations. U.L. Approved — File No. E183854, RoHS

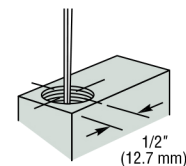
\* See "Electrical Data" on Page X-5 for more information  
 \*\* Reference at 300 SSU set point.



## Dimensions



## Electrical Connection, 1/2" NPT Conduit



## How To Order – Standard Models

Specify Part Number based on flow setting.

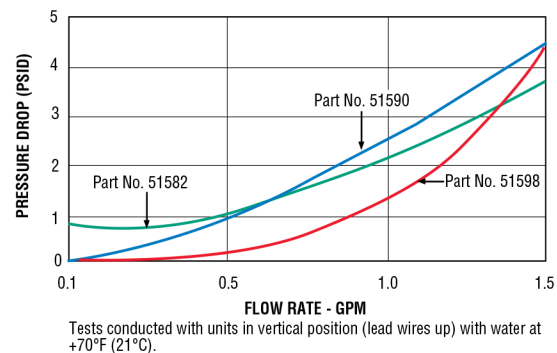
Flow Setting GPM, ±10%	Part Numbers
0.10	<b>51582</b> ⚡
0.25	<b>51586</b> ⚡
0.50	<b>51590</b>
0.75	<b>51594</b>
1.00	<b>51598</b>

**Notes:**

- Flow settings are calibrated in a vertical position (lead wires up) with 300 SSU oil. Set points will be maintained within 20% of settings in a liquid viscosity range of 40 to 2,000 SSU.
- Use of 50 micron filtration is recommended.

⚡ – Stock Items.

## Pressure Drop – Typical



**FS-930 switches are U.L. Approved for Class I, Division 2, Groups A, B, C, D hazardous locations.**

They are also available with FM-approved, explosion-proof junction box for Class I, Division 1, Group D hazardous locations. Units must be assembled completely at GEMS.

U.L. Approved — File No. E183854

## Standard Wiring Color Code

Wire Color	Terminal
Orange	N.O.
Black	Common
Red	N.C.