

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

UL Approved
Explosion-Proof

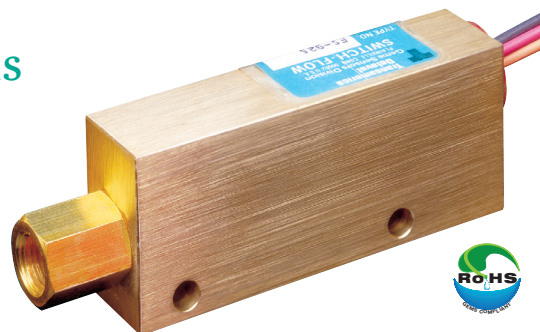
A unique, patented piston design assures accuracy within 20% over a full range of viscosities—from 40 to 2000 SSU. Ideal for use in applications where liquids of different viscosities are blended; or for use in lubrication systems where oil flow monitoring is critical at start-ups. Switch compensates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

Specifications

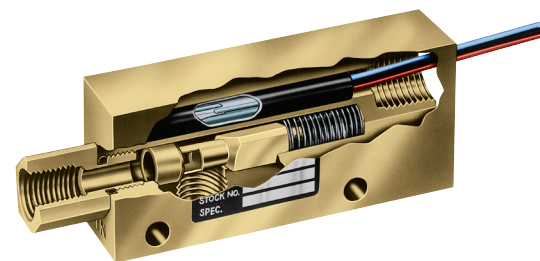
Wetted Materials	
Housing	Brass
Piston	Brass
Spring	316 Stainless Steel
O-Ring	Viton®
Other Wetted Parts	Epoxy
Pressure Rating	
Operating, Maximum	1000 PSIG (69 bar)
Proof	2500 PSIG (172 bar)
Burst	5000 PSIG (345 bar)
Operating Temperature	-20°F to + 300°F (-29°C to +148.9°C)
Repeatability	1% Maximum Deviation**
Set Point Accuracy	±10%
Set Point Differential	15% Maximum
Switch*	SPDT, 20 VA
Inlet/Outlet Ports	1/4" NPT
Electrical Termination	No. 18 AWG, 24" L., Polymeric Lead Wires
Explosion-Proof Approvals	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

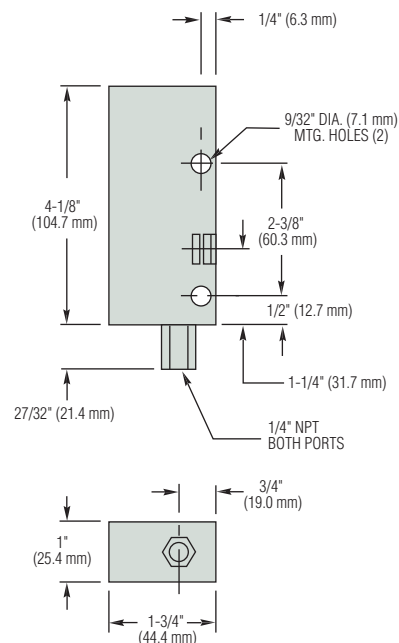
** Reference at 300 SSU set point.



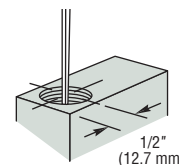
U.L. Recognized —
File No. E31926



Dimensions



Electrical Connection, 1/2" NPT Conduit



How To Order – Standard Models

Specify Part Number based on flow setting.

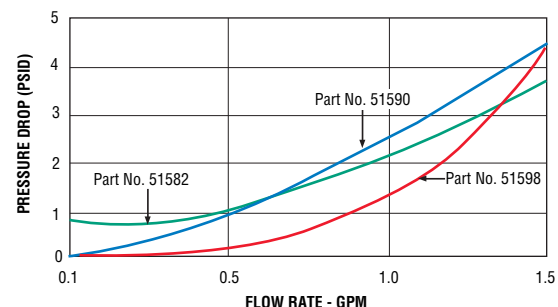
Flow Setting GPM, $\pm 10\%$	Part Numbers
0.10	51582 ⚡
0.25	51586 ⚡
0.50	51590
0.75	51594
1.00	51598

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



Tests conducted with units in vertical position (lead wires up) with water at +70°F (21°C).

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.