

# 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.

# Specifications

Wetted Materials	
Housing	Brass
Piston	Brass
Spring	316 Stainless Steel
0-Ring	Viton®
Other Wetted Parts	Ероху
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.

CE RN U.L. Recognized --File No. E31926



### Dimensions



# Electrical Connection, 1/2" NPT Conduit



Visit www.GemsSensors.com for most current information.

# How To Order - Standard Models

Specify Part Number based on flow setting.

	° °
Flow Setting GPM, ±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



### 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, explosionproof 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.