

THERMAL DISPERSION FLOW SWITCHES FOR LIQUIDS

FST-200 Series



- ✓ High Reliability—
No Moving Parts
- ✓ Very Low Flow
Detection—Down to
0.04 FPS Liquids
- ✓ Use in 1/8 to
12" Pipe or Tubing
- ✓ SPST Relay Standard
- ✓ Excellent for Pump
and Valve Monitoring
of Critical Flows

OMEGA® FST-200 Series flow switches use thermal dispersion technology to create a very accurate and economical method of sensing flow. Monitor fluids from 0.4 to 1.2 specific gravity, 1 to 300 cp, and pulsating flow from 10 to 100 pulses per minute. The sensors incorporate two temperature probes, one of which is heated. The flow of liquid reduces the temperature of the heated probe, decreasing the temperature differential with the non-heated probe. OMEGA's LVCN Series of controllers can easily be interfaced to perform a variety of control functions.

SPECIFICATIONS

Range: 0.04 to 3 fps (liquids)

Accuracy: ±5% of setpoint at constant temperature and flowrate

Response Time: 10 sec after initial 30 sec warm up

Setpoint Drift With Fluid

Temperature: 0.5% per °C

Voltage Input: 12 to 36 Vdc @ 70 mA

Contact Output Mode:

Selectable, NO or NC states

Fluid Temperature: 0 to 60°C

(32 to 140°F)

Maximum Fluid Pressure: PP or

PVDF: 150 psi @ 25°C (77°F) derated @ 1.667 psi per °C above 25°C (77°F)

Wetted Materials: PP and PVDF

Cable Specifications: 3 m (10')

Maximum Cable Length: 305 m (1000')

Dimensions:

76.2 or 114.3 L x 26.7 mm diameter
(3.0 or 4.5 x 1.05")

FST-221-SPST
shown actual size.



FST-211-SPST
shown actual size.

To Order

Model No.	Description	Material	Size	Use With Pipe Size
FST-211-SPST	Thermal dispersion flow switch	PP/ PVDF	3.0 x 3/4 NPT	3/4 to 1 1/2"
FST-212-SPST	Thermal dispersion flow switch	PVDF	3.0 x 3/4 NPT	3/4 to 1 1/2"
FST-221-SPST	Thermal dispersion flow switch	PP/ PVDF	4.5 x 3/4 NPT	2 to 12"
FST-222-SPST	Thermal dispersion flow switch	PVDF	4.5 x 3/4 NPT	2 to 12"

Flow Switch Fittings For Use with 76 mm (3") Sensor Only (Also For Pulsating Flow Applications)

Model No.	Wetted Material	Range (GPM)	Use With Pipe/Tube ID
FT-51	PP	0.05 to 1.53	1/8 to 1/2"
FT-52	PVDF	0.05 to 1.53	1/8 to 1/2"

Comes complete with operator's manual.

Two extended cable lengths available: for 7.62 m (25') add suffix "-25" for PP/PVDF, or PVDF; for 15.24 m (50') add suffix "-50" for PP/PVDF or PVDF, for additional cost.

Note: Sizes above 1/2" fit into 3/4" NPT fitting adaptor.

Ordering Examples: FST-211-SPST, flow switch, 3.0 x 3/4" NPT size, plus FT-51, fitting. FST-221-SPST, flow switch, 4.5 x 3/4" NPT.