

# THERMAL DISPERSION FLOW SWITCHES FOR USE WITH GASES

## FST-320 Series



- ✓ Measure Mass Flow of Gases
- ✓ High Reliability, No Moving Parts
- ✓ Effectively Monitor Critical Gas Flows
- ✓ May Be Used in Small Piping or Large Ducts
- ✓ Standard with SPST Relay

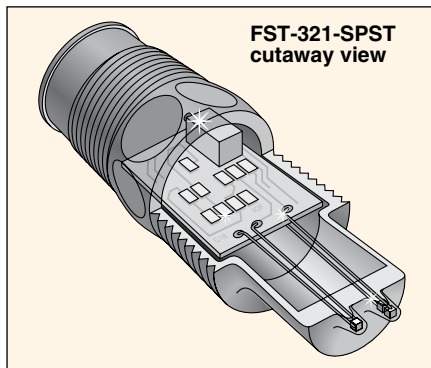


OMEGA's FST-320 Series thermal dispersion flow switches, especially designed for use with gases, sense changes in the heat transfer characteristics of the gases. Flow velocities from 1 to 90 fps are effectively monitored. The flow switch incorporates a standard SPST Relay switch output for control flexibility. OMEGA® controllers can easily be interfaced to perform a variety of control functions. The FST-320 family of sensors can be easily installed in line sizes ranging from 3/4 to 12".

### SPECIFICATIONS

**Range:** 1 to 90 fps  
**Accuracy:** ±5% of setpoint at constant temperature and flow rate  
**Response Time (Approx.):** 10 sec, after initial 30 sec warm up  
**Set Point Drift with Fluid Temperature:** 0.5% per °C  
**Voltage Input:** 12 to 36 Vdc @ 70 mA  
**Contact Output:** Selectable, NO or NC states

**Fluid Temp. Rating:** 0 to 60°C (32 to 140°F)  
**Maximum Fluid Pressure:** PP: 150 psi @ 25°C (77°F) derated @ 1.667 psi per °C above 25°C (77°F)  
**Contact Materials:** Polypropylene (PP) with PVDF  
**Cable Length:** 3 m (10')  
**Maximum Cable Run:** 305 m (1000')  
**Dimensions:** 76.2 or 114.3 x 26.7 mm (3.0 or 4.5 x 1.05"), 3/4 NPT



To Order			
Model No.	Material	Size	Use with Pipe Size
FST-321-SPST	PP/PVDF	3" x 3/4 NPT	3/4 to 1 1/2"
FST-322-SPST	PVDF	3" x 3/4 NPT	3/4 to 1 1/2"
FST-323-SPST	PP/PVDF	4.5" x 3/4 NPT	2 to 12"
FST-324-SPST	PVDF	4.5" x 3/4 NPT	2 to 12"

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

**Ordering Examples:** FST-321-SPST, polypropylene flow switch.  
 FST-323-SPST, polypropylene flowswitch, 4.5 x 3/4 NPT.