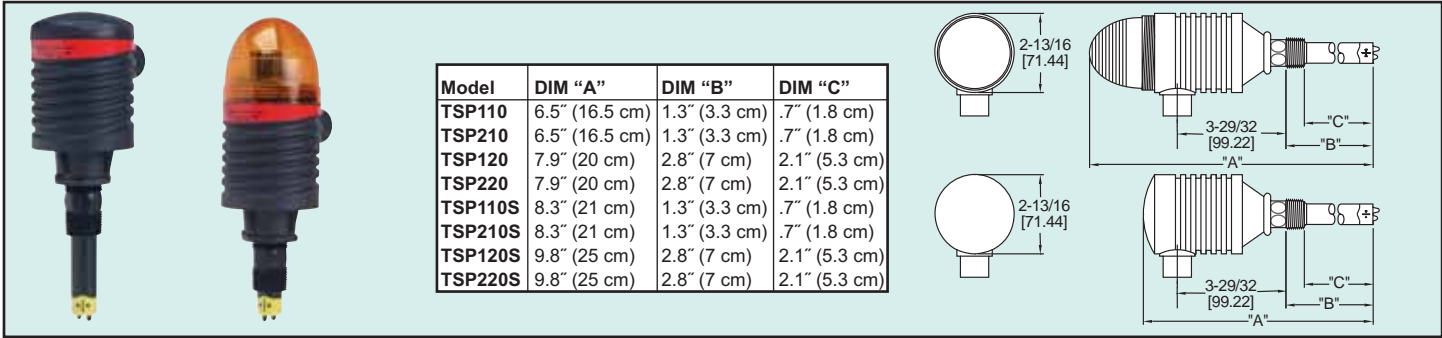




Series  
TSP

# Liquid Flow Controller

## NO or NC Relay Output, Adjustable Time Delay



| Model   | DIM "A"        | DIM "B"       | DIM "C"       |
|---------|----------------|---------------|---------------|
| TSP110  | 6.5" (16.5 cm) | 1.3" (3.3 cm) | .7" (1.8 cm)  |
| TSP210  | 6.5" (16.5 cm) | 1.3" (3.3 cm) | .7" (1.8 cm)  |
| TSP120  | 7.9" (20 cm)   | 2.8" (7 cm)   | 2.1" (5.3 cm) |
| TSP220  | 7.9" (20 cm)   | 2.8" (7 cm)   | 2.1" (5.3 cm) |
| TSP110S | 8.3" (21 cm)   | 1.3" (3.3 cm) | .7" (1.8 cm)  |
| TSP210S | 8.3" (21 cm)   | 1.3" (3.3 cm) | .7" (1.8 cm)  |
| TSP120S | 9.8" (25 cm)   | 2.8" (7 cm)   | 2.1" (5.3 cm) |
| TSP220S | 9.8" (25 cm)   | 2.8" (7 cm)   | 2.1" (5.3 cm) |

**Protect pumps and valves** from dry running with the Series TSP Liquid Flow Controller. The Series TSP combine a liquid flow switch with a failsafe relay controller to detect a flow or no flow situation and provides switching for direct actuation of pumps and valves. Controller features adjustable time delay, selectable NO or NC operation, and LED indication of sensor, relay, and power status. Four models (TSP110S, TSP210S, TSP120S, TSP220S) are designed with an integral flash alarm to provide immediate indication of local alarm conditions.

| Model   | Flash Alarm | Wetted Parts | Sensor Length |
|---------|-------------|--------------|---------------|
| TSP110  | No          | PP           | Short         |
| TSP210  | No          | PVDF         | Short         |
| TSP120  | No          | PP           | Long          |
| TSP220  | No          | PVDF         | Long          |
| TSP110S | Yes         | PP           | Short         |
| TSP210S | Yes         | PVDF         | Short         |
| TSP120S | Yes         | PP           | Long          |
| TSP220S | Yes         | PVDF         | Long          |

### SPECIFICATIONS

**Service:** Compatible liquids.

**Wetted Materials:** Polypropylene/PPS or Polyvinylidene Fluoride.

**Temperature Limits:** -40 to 158°F (-40 to 70°C).

**Pressure Limits:** 150 psi (10 bar) @ 77°F (25°C), derated 1.67 psi (.113 bar) per °C above 25°C.

**Relay Output:** 1 SPDT Form C, isolated and sealed.

**Relay Load:** 250 VAC, 10 A resistive, 1/2 hp.

**Switching Mode:** Selectable NO or NC.

**Supply Voltage:** 120/240 VAC, 50/60 Hz, selectable.

**Current Consumption:** .25 amps maximum.

\*Applies to models with flash alarm only.

**Sensor Voltage Supply:** 13 VDC, 1 Watt max., nominal.

**Sensor Trigger Point:** Dry <10 mA, wet >10 mA.

**Time Delay:** Adjustable, 0.15 to 60 seconds.

**Flash Type:** \*Xenon tube.

**Flash Frequency:** \*1 per second.

**Brightness:** \*>50,000 CP.

**Strobe Life:** \*10 M cycles.

**Conduit Connection:** 1/2" NPT.

**Mounting Connection:** 3/4" NPT.

**Enclosure:** Polypropylene, flame retardant, probe NEMA 4X (IP65).

**Agency Approvals:** CE.