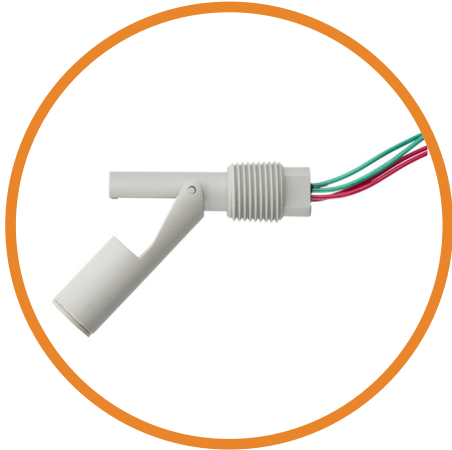


## TSF80 SERIES

### 1/2"NPT EXTERNAL MOUNT WITH TEMPERATURE SENSING

The TSF80 series is a compact external fitting device, via 1/2"NPT thread, with a high specification thermistor so capable of sensing both liquid level and temperature.



The device is mounted through a 1/2"NPT boss, so does not require access to the inside of the tank.

Typical applications include vending machines, commercial washing machines and evaporator units.

They are manufactured in a variety of materials, to suit most commonly used liquids.

The switch action may be reversed by rotating the device through 180°.

#### Features

- Compact design with temperature sensing
- 1/2"NPT thread for external mount
- 25VA & 100VA versions
- WRAS Pending versions

## SPECIFICATIONS

### Technical

	TSF83	TSF84	TSF88	TSF86
<b>Material</b>	Nylon	Polypropylene WRAS Pending	Polypropylene UL approved	Polyphenylene Sulphide (PPS)
<b>Colour</b>	Black	Opaque	White	Grey
<b>Temp. Range</b>	°C	-20/+75	-20/+100	-10/+120*
	°F	-4/+167	-4/+212	+14/+248*
<b>Min. Fluid SG</b>	0.85	0.85	0.85	0.85
<b>Must Close Level (SG=1)</b>	7mm	8mm	8mm	9mm
<b>Must Open Level (SG=1)</b>	20mm	20mm	20mm	24mm

\*Maximum temperature requires ETFE cable to be specified.

### Electrical

		25W (Y code)	100W (H code)
<b>Contact Form</b>		N/O (N/C)	N/O (N/C)
<b>Switching Power Max</b>	VA	25	100
<b>Switching Voltage AC Max</b>	V	240	300
<b>Switching Voltage DC Max</b>	V	120	300
<b>Switching Current Max</b>	A	0.6	1

All ratings are for resistive load only.

### Thermistor

<b>Nominal Temperature Resistance</b>	10k Ohm at 25°C
<b>Resistance Tolerance</b>	+/- 1%(25°C) to +/-4.3%(120°C)
<b>Operating Temperature Range</b>	-20°C to +120°C
<b>Temperature Sensing Accuracy</b>	+/-0.2°C (0°C to +70°C)
<b>Beta Value</b>	3892K (0/50°C)
<b>Response Time</b>	<1 sec
<b>Dissipation Constant</b>	0.75mW/K

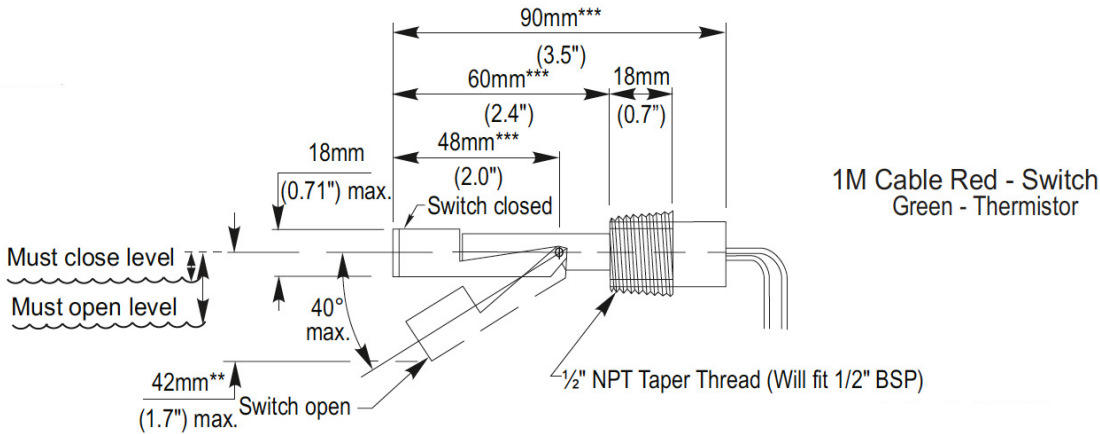
## STANDARD PARTS

	Material	Temperature	Max Power	Leadouts	Output
<b>TSF83H100D</b>	Nylon	-20°C to +75°C	100VA	100cm PVC 16/0.2	SPNO + Temp
<b>TSF83Y100D</b>	Nylon	-20°C to +75°C	25VA	100cm PVC 16/0.2	SPNO + Temp
<b>TSF84H100D</b>	PP	-20°C to +100°C	100VA	100cm PVC 16/0.2	SPNO + Temp
<b>TSF84Y100D</b>	PP	-20°C to +100°C	25VA	100cm PVC 16/0.2	SPNO + Temp
<b>TSF86H050T</b>	PPS	-10°C to +120°C	100VA	50cm ETFE 19/0.2	SPNO + Temp
<b>TSF86H100D</b>	PPS	-10°C to +100°C	100VA	100cm PVC 16/0.2	SPNO + Temp
<b>TSF86Y050T</b>	PPS	-10°C to +120°C	25VA	50cm ETFE 19/0.2	SPNO + Temp
<b>TSF86Y100D</b>	PPS	-10°C to +105°C	25VA	100cm PVC 16/0.2	SPNO + Temp
<b>TSF88H100D</b>	PP (UL)	-20°C to +100°C	100VA	100cm PVC 16/0.2	SPNO + Temp
<b>TSF88Y100D</b>	PP (UL)	-20°C to +100°C	100VA	100cm PVC 16/0.2	SPNO + Temp

Custom versions can be made for particular applications. Please contact Sensata with your requirements.

## DIMENSIONS

All dimensions are in millimeters.



\*\* 49mm TSF86

\*\*\* Add 10mm to dims, TSF86

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