



## | TSF40 SERIES

### COMPACT INTERNAL MOUNT WITH TEMPERATURE SENSING



The TSF40 series is a compact internal fitting device, with a high specification thermistor so capable of sensing both liquid level and temperature.

Mounting of this series requires 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 with a choice of gasket materials, to suit most commonly used liquids.

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

Available with flying lead connection.

#### Features

- Compact design with temperature sensing
- Available in Nylon, Polypropylene or PPS
- 25VA & 100VA versions
- WRAS Approved versions



## SPECIFICATIONS

### Technical

	TSF43	TSF44	TSF48	TSF46
<b>Material</b>	Nylon	Polypropylene WRAS approved	Polypropylene	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
<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

		<b>25W (Y code)</b>	<b>100W (H code)</b>
<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

	<b>Material</b>	<b>Temperature</b>	<b>Max Power</b>	<b>Leadouts</b>	<b>Gasket</b>	<b>Approvals</b>
<b>TSF43H100DF</b>	Nylon	-20°C to +75°C	100VA	100cm PVC 16/0.2	Nitrile	WRAS
<b>TSF43Y100DF</b>	Nylon	-20°C to +75°C	25VA	100cm PVC 16/0.2	Nitrile	WRAS
<b>TSF44H100DF</b>	PP	-20°C to +100°C	100VA	100cm PVC 16/0.2	Nitrile	WRAS
<b>TSF44Y100DF</b>	PP	-20°C to +100°C	25VA	100cm PVC 16/0.2	Nitrile	WRAS
<b>TSF46H050TG</b>	PPS	-10°C to +120°C	100VA	50cm ETFE 19/0.2	Viton	WRAS
<b>TSF46H100DF</b>	PPS	-10°C to +100°C	100VA	100cm PVC 16/0.2	Nitrile	WRAS
<b>TSF46Y050TG</b>	PPS	-10°C to +120°C	25VA	50cm ETFE 19/0.2	Viton	WRAS
<b>TSF46Y100DF</b>	PPS	-10°C to +105°C	25VA	100cm PVC 16/0.2	Nitrile	WRAS
<b>TSF48H100DF</b>	PP (UL)	-20°C to +100°C	100VA	100cm PVC 16/0.2	Nitrile	
<b>TSF48Y100DF</b>	PP (UL)	-20°C to +100°C	100VA	100cm PVC 16/0.2	Nitrile	

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