



TSF40 Series

Compact Internal Mount with Temperature Sensing



- **Compact design with temperature sensing**
- **Available in Nylon, Polypropylene or PPS**
- **25VA & 100VA versions**
- **Many variants are UL recognised components File No. E171218**
- **WRAS Approved versions**

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°.

Technical Specification	TSF43	TSF44	TSF48	TSF46
Material	Nylon	Polypropylene WRAS approved	Polypropylene UL approved	Polyphenylene Sulphide (PPS)
Colour	Black	Opaque	White	Grey
Temp. Range °C	-20 / +75	-20 / +100	-20 / +100	-10 / +120 *
°F	-4 / +167	-4 / +212	-4 / +212	+14 / +248 *
Min. Fluid SG	0.85	0.85	0.85	0.85
Must close level (SG=1)	7mm	8mm	8mm	9mm
Must open level (SG=1)	20mm	20mm	20mm	24mm

* Maximum temperature requires ETFE cable to be specified.

Electrical Specification	25W (Y code)	100W (H code)
Contact Form	N/O (N/C)	N/O (N/C)
Switching Power Max	VA	100
Switching Voltage AC Max	V	240
Switching Voltage DC Max	V	300
Switching Current Max	A	0.6

All ratings are for resistive load only.

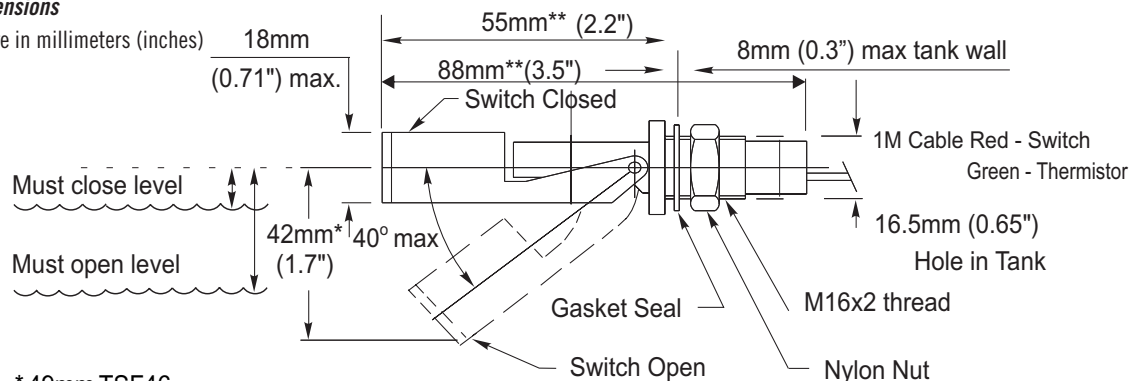
Thermistor Specification	
Nominal Temperature Resistance	10k Ohm at 25°C
Resistance Tolerance	+/- 1% (25°C) to +/- 4.3% (120°C)
Operating Temperature Range	-20°C to +120°C
Temperature Sensing Accuracy	+/- 0.2°C (0°C to +70°C)
Beta Value	3892K (0/50°C)
Response Time	<1 sec
Dissipation Constant	0.75mW/K

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

Custom versions can be made for particular applications. Please contact Cynergy3 with your requirements.

Mechanical Dimensions

All dimensions are in millimeters (inches)



* 49mm TSF46

** Add 10mm to dims, TSF46

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