

# RSF80 SERIES

COMPACT EXTERNAL FITTING BY 1/2"NPT



The RSF80 series are designed for mounting through the wall of a tank, via  $\frac{1}{2}$ "NPT thread without requiring access to the inside of the tank.

Typical applications include diesel generators, hydraulic oil and gearbox oil levels.

They are manufactured in a range of plastics to suit most commonly used liquids.

The switch can be fitted to achieve either make on rise (N/O) or make on fall (N/C) action by simply rotating through 180°.

Available with either flying leads or M12 circular connector socket. Cables are available for use with M12 connector versions.

### Features

- 1/2"NPT external mount
- Available in Nylon, Polypropylene, PPS or PVDF
- WRAS (pending) and NSF Approved versions
- Many variants are UL recognised components File No. E171218
- Flying lead or M12 connection

## SPECIFICATIONS

#### Technical

|                         |    | RSF83   | RSF84         | RSF88         | RSF86          | RSF87           |
|-------------------------|----|---------|---------------|---------------|----------------|-----------------|
| Material                |    | Nylon   | Polypropylene | Polypropylene | Polyphenylene  | Polyvinylidene  |
|                         |    |         | WRAS pending  | UL approved   | Sulphide (PPS) | Fluoride (PVDF) |
| Colour                  |    | Black   | Opaque        | White         | Grey           | Green           |
| Temp. Range             | °C | -20/+75 | -20/+100      | -20/+100      | -10/+120*      | -10/+105        |
|                         | °F | -4/+167 | -4/+212       | -4/+212       | +14/+248*      | +14/+221        |
| Min. Fluid SG           |    | 0.85    | 0.85          | 0.80          | 0.85           | 0.85            |
| Must Close Level (SG=1) |    | 7mm     | 8mm           | 8mm           | 9mm            | 9mm             |
| Must Open Level (SG=1)  |    | 20mm    | 20mm          | 20mm          | 24mm           | 24mm            |

\* Maximum temperature requires ETFE cable to be specified.



### Electrical

|                          |    | 25W<br>(Y code) | 100W<br>(H code) |
|--------------------------|----|-----------------|------------------|
| Contact Form             |    | N/0 (N/C)       | N/O (N/C)        |
| Switching Power Max      | VA | 25              | 100              |
| Switching Voltage AC Max | V  | 240             | 300              |
| Switching Voltage DC Max | V  | 120             | 300              |
| Switching Current Max    | А  | 0.6             | 1                |

All ratings are for resistive load only.



|            | Material         | Max Power | Leadouts         | Approvals      |
|------------|------------------|-----------|------------------|----------------|
| RSF83H100R | Nylon            | 100VA     | 100cm PVC 16/0.2 | WRAS           |
| RSF83Y100R | Nylon            | 25VA      | 100cm PVC 16/0.2 | WRAS           |
| RSF84H100R | Polypropylene    | 100VA     | 100cm PVC 16/0.2 | WRAS & NSF     |
| RSF84Y100R | Polypropylene    | 25VA      | 100cm PVC 16/0.2 | WRAS & NSF     |
| RSF86H050T | PPS              | 100VA     | 50cm ETFE 19/0.2 | WRAS, UL & NSF |
| RSF86H100R | PPS              | 100VA     | 100cm PVC 16/0.2 | WRAS, UL & NSF |
| RSF86Y050T | PPS              | 25VA      | 50cm ETFE 19/0.2 | WRAS, UL & NSF |
| RSF86Y100R | PPS              | 25VA      | 100cm PVC 16/0.2 | WRAS, UL & NSF |
| RSF87H100G | PVDF             | 100VA     | 100cm PTFE 7/0.2 | UL & NSF       |
| RSF87Y100G | PVDF             | 25VA      | 100cm PTFE 7/0.2 | UL & NSF       |
| RSF88H100R | Polypropylene UL | 100VA     | 100cm PVC 16/0.2 | UL             |
| RSF88Y100R | Polypropylene UL | 25VA      | 100cm PVC 16/0.2 | UL             |
| RSF83HP    | Nylon            | 100VA     | M12 connection   | -              |
| RSF83YP    | Nylon            | 25VA      | M12 connection   | -              |
| RSF84HP    | Polypropylene    | 100VA     | M12 connection   | WRAS & NSF     |
| RSF84YP    | Polypropylene    | 25VA      | M12 connection   | WRAS & NSF     |
| RSF86HP    | PPS              | 100VA     | M12 connection   | WRAS, UL & NSF |
| RSF86YP    | PPS              | 25VA      | M12 connection   | WRAS, UL & NSF |
| RSF87HP    | PVDF             | 100VA     | M12 connection   | UL & NSF       |
| RSF87YP    | PVDF             | 25VA      | M12 connection   | UL & NSF       |
| RSF88HP    | Polypropylene UL | 100VA     | M12 connection   | UL             |
| RSF88YP    | Polypropylene UL | 25VA      | M12 connection   | UL             |

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





All dimensions are in millimeters.

Switch on pins 1 & 2



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