

High Temperature Oil Switch - 24 V AC/DC

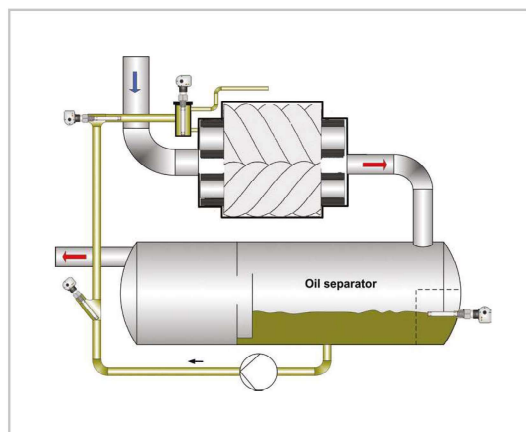
Category: HBSO-SSR-1/xx-x/HT



Functional description:

HBSO-SSR-1/XX-X-HT is a high temperature level switch for detecting common lubricating oils in refrigeration systems. The level switch is used for all oil types (PAO, POE, mineral oil and PAG oil). Typically it is installed in/on the compressor and the oil separator, but it is also suited for installation in other locations in the oil system. The sensor's measurement principle makes it unique for these purposes, since the properties of the measurement principle allows it, among other things, to detect oil without detecting refrigerant. It is calibrated so that it is unaffected by oil spray and only allows a small amount of foam. The sensor is also constructed to resist high pressure and temperatures.

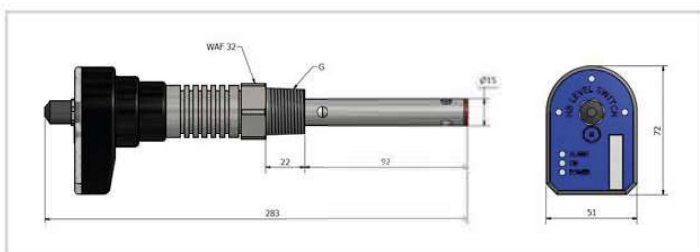
A solid state relay can also operate a valve directly.



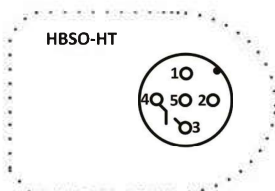
Technical data

Power supply		Mechanical specifications	
Voltage	24 V AC/DC	Thread connection	½", ¾" NPT / BSPP and 1 1/8" UNEF
Current consumption	30 mA	Material – mechanical parts	AISI 304 / PTFE
		Material – electronic parts	Nylon 6 (PA)
Plug connection	M12 - DIN 0627	Dimensions	See drawing
Output		Environmental conditions	
Output type	Solid state relay - 40W	Ambient temperature	-30...+50°C
Output function	NC or NO	Oil temperature	0...+145°C
LED indication		Max pressure	150 bar
Level indication	3 x LED (green)	Protection degree	IP65
Power supply	1 x LED (green)	Vibrations	IEC 68-2-6 (4g)
Relay-on activation	1 x LED (yellow)	Oil type	
Alarm	1 x LED (red)	HBSO	PAO, POE, PAG & Mineral
Cable specification (power supply)			
Cable size	5m - 3 x 0.25 mm ²		
Cable resistance	500 Ω/Km		
Approvals			
CE	EN 61000-2		

Mechanical dimensions



Electrical installation



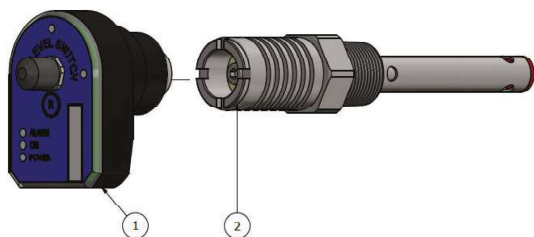
Supply 24V AC/DC, minimum 30 mA

- 1 = Brown +
- 2 = White -
- 3 = Blue - DO - Potential free solid state 1A
- 4 = Black - DO - Potential free solid state 1A
- 5 = Grey - Data only

Ordering code

Output	Thread type (G)	Oil type	Temperature	Ordering code
NO	1/2" NPT	All types	0...145 °C	HBSO-SSR-1/NO-1/HT
NO	3/4" NPT	All types	0...145 °C	HBSO-SSR-1/NO-2/HT
NO	1/2" BSPP	All types	0...145 °C	HBSO-SSR-1/NO-5/HT
NO	3/4" BSPP	All types	0...145 °C	HBSO-SSR-1/NO-6/HT
NO	1 1/8" UNEF	All types	0...145 °C	HBSO-SSR-1/NO-7/HT
NC	1/2" NPT	All types	0...145 °C	HBSO-SSR-1/NC-1/HT
NC	3/4" NPT	All types	0...145 °C	HBSO-SSR-1/NC-2/HT
NC	1/2" BSPP	All types	0...145 °C	HBSO-SSR-1/NC-5/HT
NC	3/4" BSPP	All types </td <td>0...145 °C</td> <td>HBSO-SSR-1/NC-6/HT</td>	0...145 °C	HBSO-SSR-1/NC-6/HT
NC	1 1/8" UNEF	All types	0...145 °C	HBSO-SSR-1/NC-7/HT

Spare parts



Position	Specification	Type	Ordering code
1	Electronic parts	NO	HBSO-SSR-1/NO-EL/HT
		NC	HBSO-SSR-1/NC-EL/HT
2	Mechanical parts	1/2" NPT	HBSO-MEK-1/HT
		3/4" NPT	HBSO-MEK-2/HT
		1/2" BSPP	HBSO-MEK-5/HT
		3/4" BSPP	HBSO-MEK-6/HT
		1 1/8" UNEF	HBSO-MEK-7/HT