Hazardous Area Liquid Level Switch for use in Instrincally Safe Systems

TM-DEE-VFS-SA

The VFS-SA is a vertically mounted magnetic float switch for the control and indication of a liquid level while in a potentially explosive atmosphere. It is certified for use as Simple Apparatus in Intrinsically Safe systems.

Certificate: ExVeritas 19SYS2152X
Refer to certificate for clarification of system suitability and conditions for safe use.
This switch must be used in conjunction with an intrinsically safe barrier when used in a potentially explosive atmosphere.

The VFS-SA can be considered for the following systems:

Gas Atmospheres:	
II 1 G IIC T3 Ga	T_{amb} -20°C to +190°C
II 1 G IIC T4 Ga	T_{amb} -20°C to +125°C
II 1 G IIC T5 Ga	T_{amb} -20°C to +90°C
II 1 G IIC T6 Ga	T_{amb} -20°C to +75°C

Dust Atmospheres:	
II 1 D IIIC T200°C Da	T_{amb} -20°C to +190°C
II 1 D IIIC T135°C Da	T_{amb} -20°C to +125°C
II 1 D IIIC T100°C Da	T_{amb} -20°C to +90°C
II 1 D IIIC T85°C Da	T_{amb} -20°C to +75°C

The VFS-SA is a small vertically mounted liquid level sensor which has been certified for use as Simple Apparatus in Intrinsically Safe systems. Its wide ranging certification allows for custom lengths and switching positions depending on your bespoke requirements.

Features Include:

- ATEX Certified for use as simple apparatus in an intrinsically safe system.
- Temperature range of -20°C to 120°C, with temperatures up to 190°C available.
- Up to 7 switching positions.
- Stem lengths of up to 6 metres.
- Available with Form A (SPST) or Form C (SPDT) contacts.
- A 1 meter cable is provided as standard, however custom lengths are available.

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TM-DEE-VFS-SA

Technical Data

	VFS-SA-(XXX)01/02/03	VFS-SA-(XXX)04	Non-Standard Options Available
Reference Float Specific Gravity	0.71	0.66	0.49
Maximum Pressure	10 Bar	10 Bar	45 Bar
Operating temperatures	-20°C to +120°C	-20°C to +120°C	-20°C to +190°C

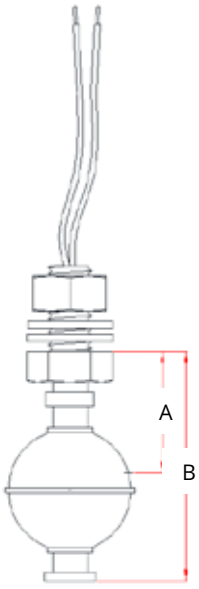
Switch Contact Ratings

Form A switches are rated at 240v AC/DC, 50 Watts, 1.0 Amp resistive load only.
Form C switches are rated at 50v AC/ DC, 10 Watts, 0.25 Amp resistive load only.

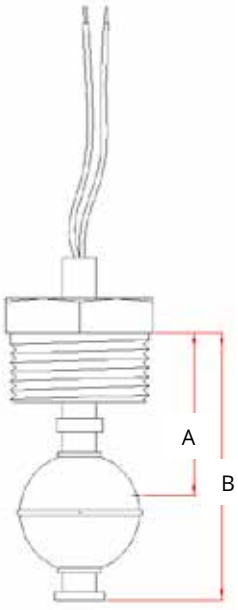
All variations have 24AWG, 7/0.2 PTFE insulated wires.

Fixing

	Length A	Length B	Float Type
M10	28mm	54mm	1" Ball Float
M16	32mm	57mm	1" Ball Float
1" BSP	39mm	64mm	1" Ball Float
1" NPT	39mm	64mm	1" Cylinder Float



M10 and M16 Internally Mounted Versions



1"BSP and 1" NPT Externally Mounted Versions

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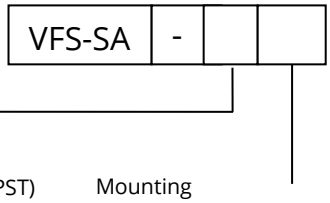
Ordering Code



Contact form
50A – 50 Watts form A (SPST)
10C – 10 Watts form C (SPDT)

Mounting
01 – M10 internal thread with nut and washer
02 – M16 internal thread with nut and washer
03 – 1"BSP Tapered External
04 – 1"NPT External

Example: VFS-SA-50A01 describes a sensor with an M10 thread, Form A switch rated at 50 watts.
Custom stem lengths and switching points are available. Please contact the sales office for more information.

All electrical equipment should be installed by a qualified/certified electrician. Please check the Conditions of Certification before Installation.
* When integrating the VFS-SA into the intrinsically safe system, it's the user's responsibility to produce a Descriptive System Document (DSD) in accordance with BS EN 60079-25 which considers the Intrinsically Safe Barrier and Cable parameters to ensure the system is compliant with BS EN 60079-25.

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