

## BLS 9200 Bilge Level Switch



### Key features

- Designed and constructed for severe service applications, where absolute reliability is required for safety critical installations
- Rugged all 316 Stainless Steel design ensures reliable operation
- Compact design
- Simple installation via integral mounting bracket
- Fully submersible IP68 construction with cable resistant to marine applications
- Stainless steel slosh and debris protection shield
- Marine type approved by LR, BV & DNV
- Standard shock rated to 30G, extended shock rating to 170G for Military applications
- IECEx, ATEX, & UKEX certified for Hazardous Areas

## BLS 9200 level switch for liquid detection in bilges, voids and sumps

Bilge level switches are a safety critical component for the detection of liquid in dead spaces, voids and sumps that are rarely visited or inspected by the crew. They need to be able to withstand years of installation in difficult environmental conditions yet operate immediately and reliably should a rising liquid level indicate a leakage or flooding hazard.

When considering these products, it would be easy for a ship builder or owner to try and make economies by using cheaper devices, often constructed with poor quality materials and designs. PSM believe that this approach compromises safety and is a false economy as maintenance and replacement costs will always exceed those of installing “the right device first time”.

The PSM BLS 9200 Bilge Level Switch is designed, manufactured and approved to meet and exceed the requirements for severe service applications on all classes of marine vessels and offshore installations, and should always be the first choice for safety critical applications. As standard it is approved for shock up to 30G and is also available with extended approval to 170G.

The Switch also carries Intrinsic Safety certification under IECEx, ATEX, and UKEX for use in Hazardous Areas.

## Never compromise on safety

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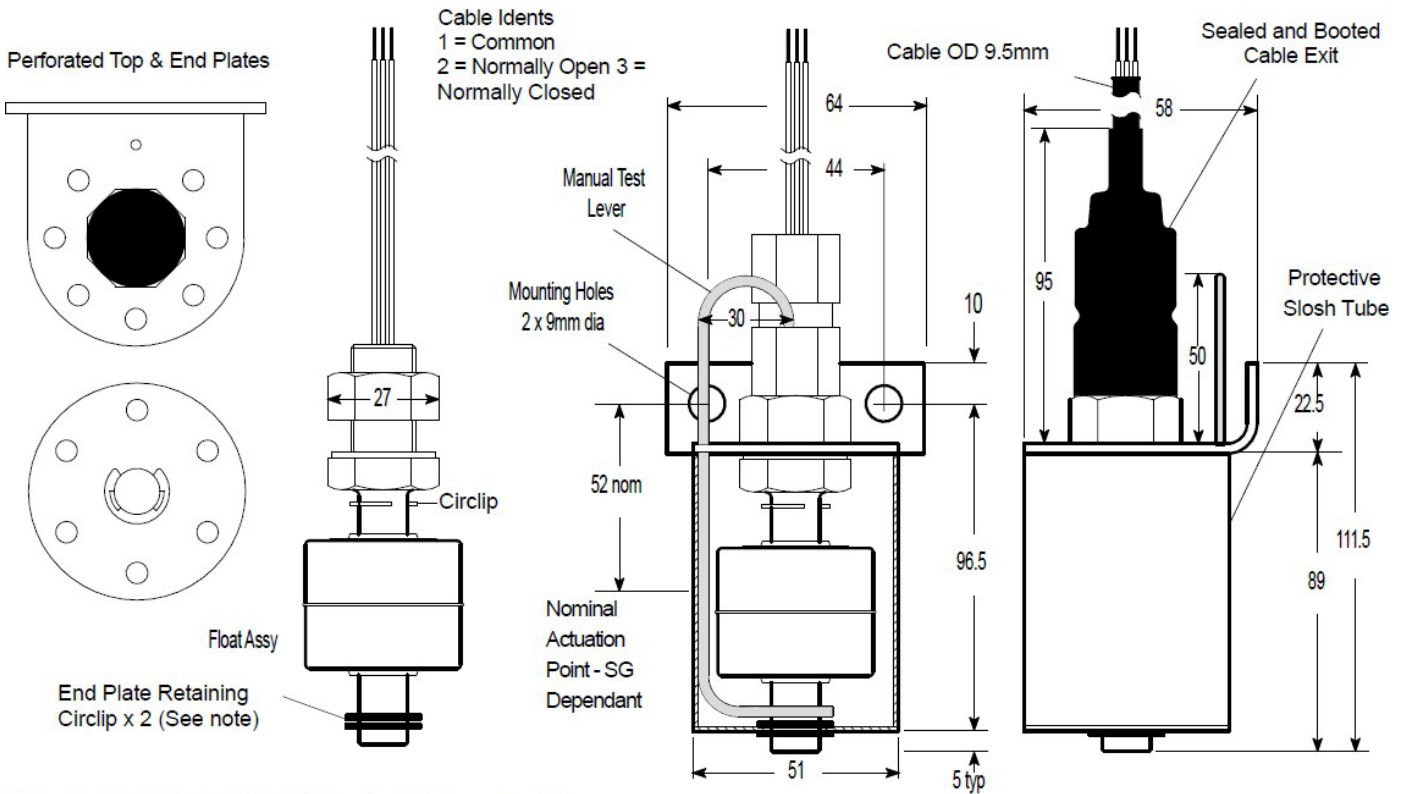
Key benefits that the BLS 9200 offer are:

- Rugged all-stainless-steel design with EPR cable resistance to seawater, fuel oil and hydraulic fluid ensure reliable operation over years of service.
- Compact in size with mechanical mounting using a two-bolt mounting bracket means that installation and commissioning is simple and fast.
- Self-draining cage design prevents fouling of the float from obstructions or floating debris in the bilge, as well as protection from false switching.
- Integral switch test lever allows full testing of the float movement and switch functionality ensure routine safety tests can be carried out for peace-of-mind.
- Normally-open or normally-closed operation and user-selectable cable lengths ensures the BLS 9200 can be quickly delivered against each customer’s exact requirement.

Many major ship builders and offshore rig construction companies also agree with the PSM “safety first” message and now specify the BLS 9200 as standard fitment for all their new build and refurbishment projects.

<b>Specifications</b>	
Material of construction	Stainless steel stem, float, test mechanism, body plates & slosh shield
Cable	Marine grade EPR Insulated with LSZH elastomeric type SW4 sheath, 3 -core with polyolefin boot
Cable length	2m as standard. Other lengths optional
Process Temperature	-10 to +90C
Switch type	S.P.C.O. reed switch
Switch MTBF	3 per million hours operation. Internal reed switch sample tested to 5,000,000 operations at 50 ohm resistance and load current at 0.24 amps, with zero failure based on a test batch of 10 units
Electrical rating - maximum	100 VA resistive load (maximum 500 V DC or 250 V AC at 3A)
Electrical rating - minimum	3W (to prevent long-term switch contact material activation)
Float SG	0.62 (others optional)
Float Pressure Rating	Maximum 12 Bar
Continuous Immersion	Up to 1 Bar Gauge with no effect.
Marine type approvals	LR, BV and DNV - Refer to PSM for certificates
Intrinsic Safety approvals	IECEX, ATEX, UKEX - Refer to PSM for certificates

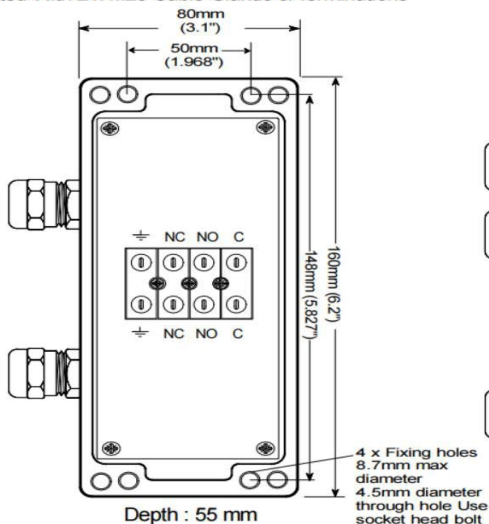
### GA drawing



**Note:** For High Shock (HS) variants of switch the end plate retaining circlips are welded in place.

**Material All 316 Stainless Steel**

**BSE1**  
IP66 Polycarbonate Bilge Switch Termination Enclosure  
Suitable For Use With 1 x Switch  
Fitted With 2 x M20 Cable Glands & Terminations



**BSE2**  
IP66 Polycarbonate Bilge Switch Termination Enclosure  
Suitable For Use With 2 x Switches  
Fitted With 3 x M20 Cable Glands & Terminations

