

# Model DES Point Level Switch



OES as a low level switch



## **DESCRIPTION**

The Model OES snap switch is utilized to expand the control capabilities of Orion's extensive line of magnetic level indicators. This cam-operated DPDT mechanism is clamp-mounted to the outside of the MLI. This mounting style allows easy addition or repositioning of switches without disruption of the process.

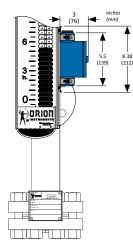
Designed for optimal repeatability and reliability, the OES-100 is actuated by simple magnetic coupling. As the liquid level moves, the MLI float (with its internal magnets and flux rings) follows. When the float moves into the proximity of the snap switch, the switch magnet interacts with the float's magnetic field actuating the switch. The bi-stable design of the switch ensures that it will not reset until the float passes the switch in the opposite direction.

For use in Installation Category II, Pollution Degree 2. If equipment is used in a manner not specified by the manufacturer, protection provided by the equipment may be impaired.

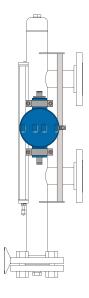
SPECIFICATIONS	
Model	OES-xxxx-xxx
Туре	Bi-stable, cam operated switch
Supply Voltage	125–250 VAC
Contacts	Two SPDT (one DPDT)
Contact Rating	10.1 amps max
Deadband	±0.75" (20 mm) float travel
Temperature Range	-58 to 392° F (-50 to 200° C)
Enclosure Rating	NEMA 4X/7/9
Enclosure Material	Aluminum or stainless steel
Mounting	Clamp mount to MLI or switch mount rod (both are field adjustable)
Conduit/Cable Entry	<sup>3</sup> / <sub>4</sub> " FNPT (consult factory for alternative options)

AGENCY	MODEL	CATEGORY
FM	All models	Class I, Div. 1, Groups B, C, & D
APPROVED		Class I, Div. 2, Groups B, C, & D
CSA	All models	Class I, Div. 2, Groups A, B, C, & D (FM only)
		Class II, Groups E, F, & G
		Class III, Type 4X
CE	OES-xxxx-xxx	Installation Category II, Pollution Degree 2
((		Low Voltage Directives, 73/23/EEC & 93/68/EEC
		per Harmonized Standard EN 61010-1/1993 & Amendment No. 1

The OES level switch is completely field adjustable. Simply loosen the included mounting clamps and position at the desired location. Ensure that the switch always remains in close proximity to the internal float.



Physical Dimensions



A switch mount rod is an available alternative method for mounting the OES to an MLI when insulation is present. The rod assembly, which is welded to the MLI chamber, allows the switch to slide along the full length. When the desired position is selected, simply tighten it in place.



## MOUNTING TO ATLAS<sup>™</sup> OR GEMINI<sup>™</sup> MLI

Position the OES cam-operated snap switch on the MLI body so that the centerline of the switch enclosure is at the desired switch point level. Ensure that the switch is oriented so that the arrow on the internal mechanism is pointing toward the top of the MLI. Install the clamps around the MLI and over the mounting brackets on the top and bottom of the OES housing. Tighten the clamps until the switch is firmly secured to the MLI. Replace the housing cover. If required, place the insulation between the MLI body and the OES before securing the clamps.

## **MOUNTING TO AURORA® MLI**

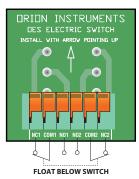
Special care must be taken when adding OES switches to an Aurora<sup>®</sup> after initial purchase. For proper function, the

switch must be located as close to the internal float magnet as possible. achieve this, slight repositioning of the visual indicator may be required.



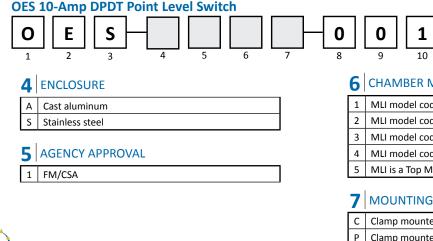
#### WIRING

The lower conduit opening is protected with a plastic shipping plug. The upper opening is sealed with a steel plug. If it is preferable to wire through the upper conduit entry, the steel plug may be moved to the lower opening. The DPDT switch has two sets of contacts. Refer to diagram above or label on mechanism.



CAUTION:

If equipment is used in a manner not specified by the manufacturer, protection provided by the equipment may be impaired.



#### 6 CHAMBER MOUNTING CODE

1	MLI model code digit 20 is 1, 2, or 7
2	MLI model code digit 20 is 3, 4, 5 or 6
3	MLI model code digit 20 is A, B, C, or D
4	MLI model code digit 20 is E, F, G, H, or J
5	MLI is a Top Mount design

## MOUNTING STYLE

С	Clamp mounted on MLI (standard)
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- Clamp mounted on MLI with insulation pad
- Attached to switch mount rod



2105 Oak Villa Boulevard • Baton Rouge, Louisiana 70815 • 225-906-2343 • orioninstruments.com

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