



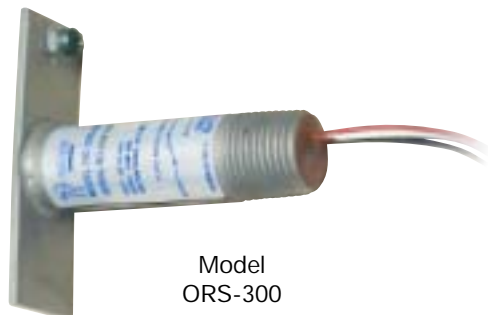
**MODEL ORS-300  
ELECTRO-MAGNETIC SWITCHES**

**DESCRIPTION**

The Model ORS-300 reed switch is available to augment the control capabilities of Orion's extensive line of magnetic level indicators. Housed in an explosion proof stainless steel enclosure, the ORS-300 mounts to the outside of the MLI via clamps. This mounting style allows addition or repositioning of switches at any time, without disruption of the process.

Each switch is designed for optimal repeatability and reliability. The magnetic field produced by the MLI float actuates the ORS-300 when the liquid level moves the float into the proximity of the reed switch. The switch is bi-stable, so it will not reset until the float's magnetic field passes it 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.

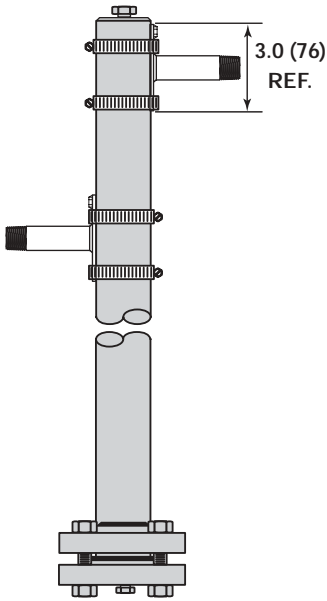


Model  
ORS-300

**SPECIFICATIONS**

Model	ORS-300E-001
Type	Bi-stable, reed switch
Contacts	One SPDT
Supply voltage	125 - 250 VAC/VDC
Contact rating	1.0 amps
Maximum load	25 Watts
Dead band	±0.50" (13 mm) float travel
Switch temperature range	-58° to +325° F (-50° to +163° C)
Enclosure rating	NEMA 4X/7/9
Enclosure material	316 stainless steel
Mounting	Clamp mount to MLI

AGENCY	MODEL	APPROVAL CATEGORY
FM & CSA  APPROVED	ORS-300E-001	Class I, Div. 1, Grps B, C, & D Class I, Div. 2, Grps A, B, C, & D Class II, Grps E, F, & G Class III, TYPE 4X
CE 	ORS-300E-001	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



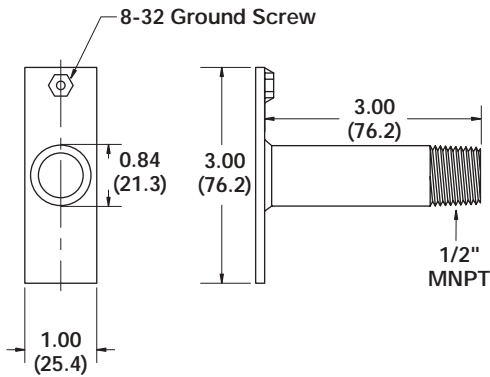
## MOUNTING TO ATLAS OR GEMINI

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

With mounting clamps loosened, position ORS-300 reed switch on the MLI body so that the centerline of the stainless steel tube which houses the switch is at the desired switch point level. The switch should be oriented so that the green ground screw is closest to the top of the MLI. Tighten the clamps so that the switch is secured to the MLI. If required, place the insulation between the MLI body and the switch before tightening the clamps.

## MOUNTING TO AURORA

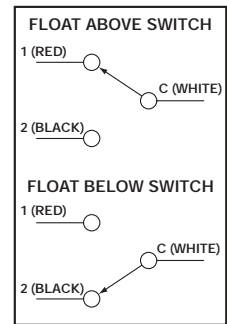
Follow procedure for mounting to Atlas or Gemini, but ensure that the switch is positioned on the circumference of the Aurora body as close to the indicator as possible.



## WIRING

The leads protruding from the potted end of the switch housing are color coded as follows:

- White = Common
- Black = Normally Closed
- Red = Normally Open



Note: For supply connections, use wire with a minimum rating of +167° F (+75° C) as required by the process conditions. Use a minimum of 14 AWG wire for power and ground field wires.

Note: Housing must be grounded via protective ground screw in base of housing.

**CAUTION:** In hazardous areas, do not power the unit until the conduit is sealed and the enclosure is screwed down securely.

### SWITCH FOR ATLAS

O R S - 3	Electric bi-stable 1 amp SPDT reed switch in stainless steel clamp-mounted housing, NEMA 4X/7/9
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### ENCLOSURE

0	Standard enclosure
2	Standard enclosure with cast aluminum junction box with terminal block (ORS-3 only)
3	Standard enclosure with stainless steel junction box with terminal block (ORS-3 only)

ORS - 3 0 E - 0 0 1



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**EFFECTIVE: March 2004**  
**SUPERSEDES: January 2003**