



## LEVEL SWITCH ASSEMBLIES

### GENERAL OPERATING PRINCIPLE

Nutherm Level Switches operate on a direct, simple principle. In most models, a float encircling a stationary stem is equipped with powerful, permanent magnets. As the float rises or lowers with liquid level, the magnetic field generated from within the float actuates a hermetically sealed, magnetic actuated reed switch mounted within the stem.

The stem is made of non-magnetic metals such as 316 stainless steel. When mounted vertically, this basic design provides a consistent accuracy of  $\pm 1/8"$  (3.2mm).

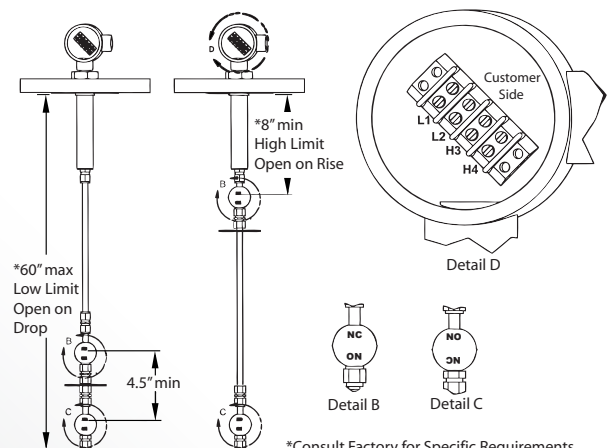
Multi-station versions use a separate reed switch for each level point being monitored. Stem shaft can be provided with a field adjustment of  $\pm 1.5"$  (38 mm) to allow vertical adjustment to your switch assembly. When large deadbands are required, two floats are utilized.

### REED SWITCH RELIABILITY

The durable construction of these reed switch designs ensures long, trouble-free service. Because the effects of shock, wear and vibration are minimized, these hermetically sealed switches provide precise repeatability with no more than 1% deviation. The switch actuation points remain constant over the life of the unit.

### ACCURACY AND REPEATABILITY

The accuracy of level switches is  $\pm 1/8"$  (3.2 mm) of true liquid level. In order to assure the proper accuracy for your liquid, please specify the specific gravity of the media. Nutherm will adjust and test the switches for the submergence of the float based on this specific gravity information. Furthermore, accuracy may be enhanced by specifying whether the circuit condition should be measured on decreasing or increasing liquid level. The repeatability of the actuation point is approximately  $1/32"$  (0.79 mm).



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