



EXTENDED VERTICAL LIQUID LEVEL SENSORS

EVS Series

Two position level switching

Mounted on the top wall of a tank

Reliable hermetically sealed reed switches

Body and float made from inert materials

Features

- Full and/or empty detection
- Voltage rating up to 175VDC
- Current rating up to 0.4 amp
- Compact easy to install design
- Optional cable lengths
- Includes mounting hardware

Applications

- Water and fuel storage tanks
- Pump on/off controls
- Marine bilge and ballast tanks
- Flood detection and prevention
- Coolant level indication
- Livestock watering tanks
- Irrigation systems
- Water treatment plants
- Waste water tanks

The EVS series of point liquid level switches demonstrate a high degree of reliability due to the use of non-reactive wetted components and a unique reed switch designed specifically for level sensing applications. The sensor utilizes a moving float with an embedded magnet to activate one of two reed switches located in the sensor body.

As the liquid level raises the float, it moves a magnet from the bottom switch to the top switch. The use of two switches provides an indication of three different level conditions.

The reliability of this sensor results from a very simple operating principle, a single moving part, media compatible wetted materials, and a unique reed switch design.

The sensor mounts into the top wall of a liquid storage tank using an M16 x 2.0 threaded fitting. The M16 mount is available in an internal or external configuration. The outputs are simple N.O. or N.C. SPST reed switches that utilize Ruthenium contact points for reliability. Electrical outputs are three wires with PVC insulation and optional lengths of 0.5 m or 2.0 m.

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LIQUID LEVEL SWITCH

EVS Series

Absolute Maximum Ratings⁽¹⁾

| Parameter | | Min | Max | Units | Notes/Conditions |
|--------------------------------------|-----------|------|------|-------|------------------------|
| DC contact voltage | | | 175 | V | Do not exceed 5 W |
| DC contact current | | | 0.4 | A | |
| RMS contact voltage | | | 125 | V | |
| RMS contact current | | | 0.28 | A | |
| Storage and operating temperature | Model 3xx | -30 | 110 | °C | |
| | Model 4xx | -30 | 60 | °C | |
| | Model 7xx | -30 | 80 | °C | |
| Fitting pressure | | -1.0 | 4.7 | Bar | Internal tank pressure |
| Tank wall thickness (Internal mount) | | 1.0 | 10 | mm | |
| Tank wall thickness (External mount) | | 1.0 | 4.0 | mm | |

⁽¹⁾Maximum limits the device will withstand without damage

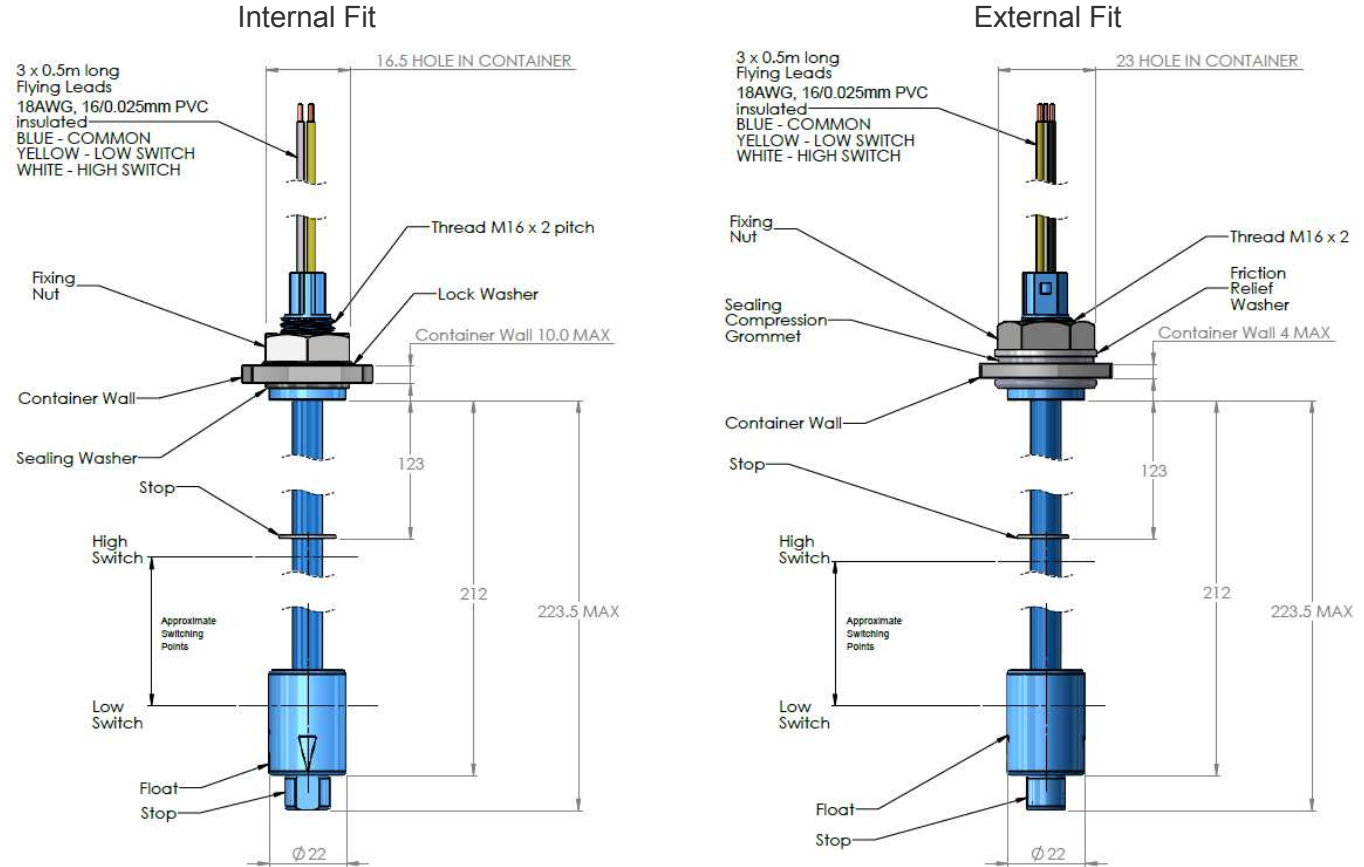
Product Specifications

| Parameter | Details & Options |
|------------------------------------|---|
| Mounting Orientation | Top entry (Internal or external) |
| Fitting | M16 x 2.0 Internal or External |
| Switch Operation | Both switches N.C. when float is at the bottom of the body |
| Contact Forms | Top switch – Form B (N.C. SPST) Bottom switch – Form A (N.O. SPST) |
| Contact Material | Ruthenium |
| Contact resistance (max) | 140 mΩ |
| Housing and Float Material Options | Housing: Nylon 6.6 PVC Brass Float: Glass filled nylon 6.6 PVC Polypropylene |
| Cable Description | 18 AWG 16/0.025mm PVC insulated, UL/CSA/BS6361 |
| Shock | ±50g 11ms half sign duration |
| Vibration | ±35g 0 – 500Hz |
| Ambient Humidity | 0 – 95% RH (non-condensing) |
| Ingress protection | IP68 (wetted surfaces) IP65 (non-wetted surfaces) |

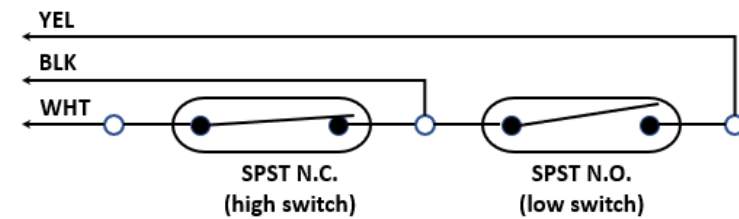
LIQUID LEVEL SWITCH

EVS Series

Outline Dimensions

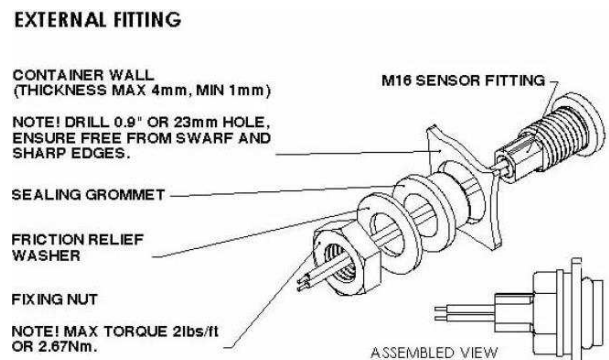
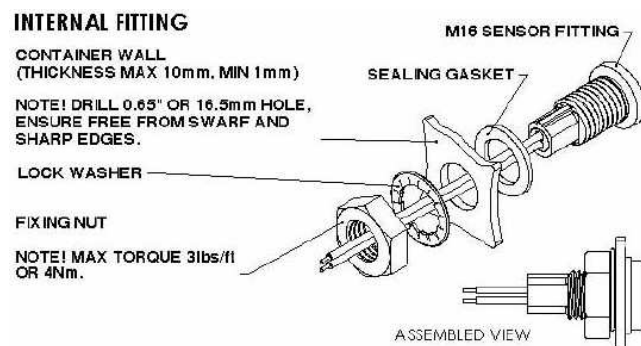


Schematic and Switch Operation



| Float Position | High Switch | Low Switch |
|------------------------|-------------|------------|
| Top Limit | Open | Open |
| Between Top and Bottom | Closed | Open |
| Bottom Limit | Closed | Closed |

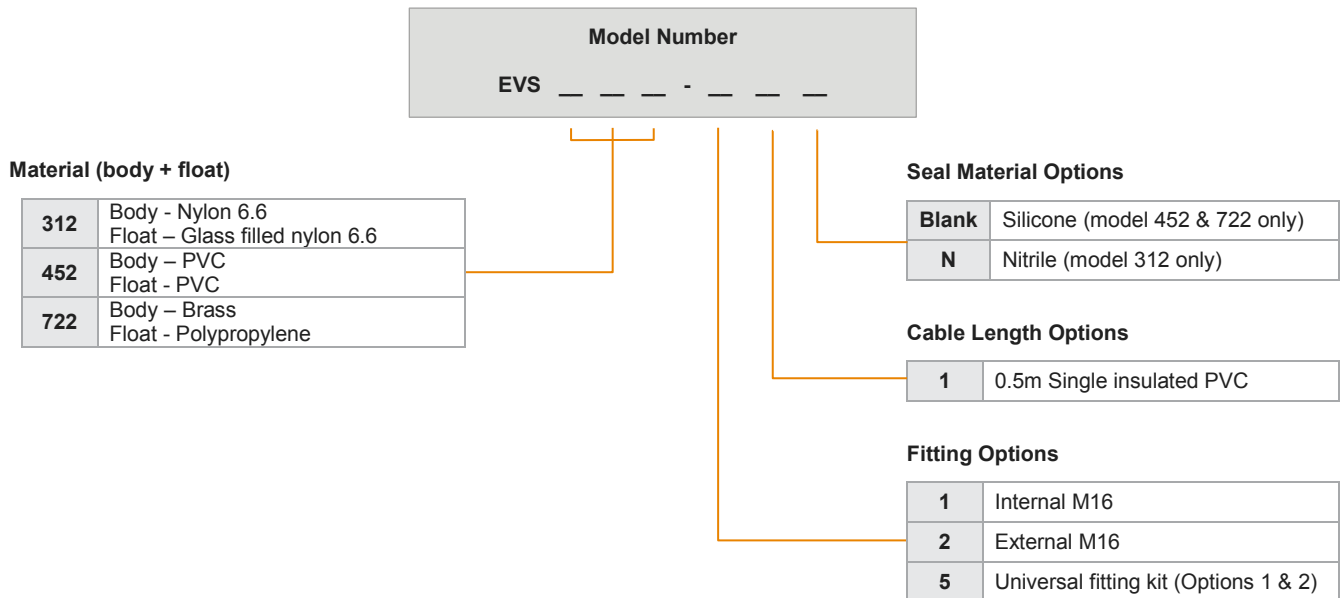
Mounting Detail & Hardware



LIQUID LEVEL SWITCH

EVS Series

Ordering Information



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CONNECT WITH A SPECIALIST

NORTH AMERICA
Tel +1 800 522 6752

EUROPE
Tel +31 73 624 6999

ASIA
Tel +86 0400 820 6015

te.com/sensors

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