

### Proximity Limit Switch

#### Model S9/SS9

This Limit Switch Assembly is an accessory which, enables remote signaling upon the opening or closing of the BERMAD Deluge valve or other types of Water Control Valves. It is equipped with one or two switches actuated by the closing or opening of the valve.

This limit switch assembly is suitable for harsh environments, it is all 316 Stainless steel construction equipped with a rigid proximity magnetic switch sensor. The switch is suitable for hazardous locations, ATEX certified for Category II 2G EEx d IIC T6 and UL-Listed for Class I, Division 1, Groups A, B, C, D and Class II, Division 1, Groups E, F, G to NEC 500, NEMA 4,4X, 7, 9. The proximity sensor is hermetically sealed and requires a ferromagnetic target to operate the internal switch.

The switch is equipped with Tungsten contacts and is electrically rated for 2 Amps at 24VDC.

Two versions are available:

- Single limit switch assembly:  
Equipped with one SPDT, signaling closed or open valve position.
- Double limit switch assembly:  
Equipped with two SPDT, signaling closed and fully open valve positions.



**Proximity Limit Switch Assembly**  
(Double Switch Shown)

#### Technical Data

##### Switch type

- All Stainless steel 316, corrosion-resistant
- Proximity magnetic switch sensor
- ATEX, UL and Inmetro certified for Zone 1
- Hermetically Sealed dry contact - Improves Safety
- SPDT (single pole double throw), 1NO, 1NC
- Tungsten contacts
- Galvanized isolated
- IP 67 rated
- 3 Amps/120VAC, 1.5 Amps/240VAC, 2 Amps/24VDC rated
- Sensor rated temperature: -30 to +90°C

#### Features

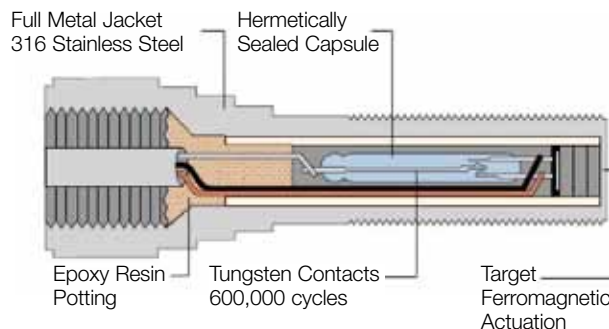
- Rigid construction
- Vibration resistant technology
- Switching element with snap-action contact

#### Material of Constructions

- Valve plug, cover plug, Bracket nut, cam: Stainless steel 316
- Wetted parts: Stainless steel 316
- Sensor: Stainless steel 316

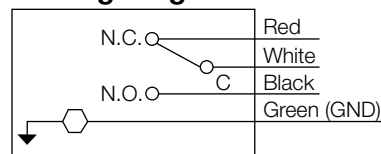
#### Optional Materials:

- Ni.Al.Bronze and Monel wetted parts
- Hastelloy C276 wetted parts



**Proximity Limit Switch Sensor**

#### Wiring Diagram



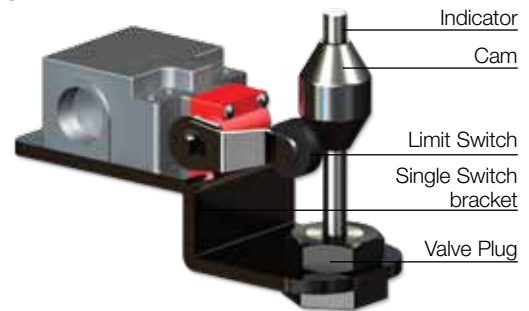
## Mechanical Limit Switch

### Model S

This Valve Position Limit Switch enables a remote signaling upon the opening or closing of the BERMAD Deluge valve or other types of Water Control Valves. It is equipped with one or two electrical switches actuated by the closing or opening of the valve.

The following are available:

- Single limit switch assembly:  
Equipped with one SPDT, signaling closed valve position
- Double limit switch assembly: Equipped with two SPDT, signaling closed and fully open valve positions
- Weather Proof Switch unit - General Purpose



**Single Limit Switch Assembly**

### Technical Data

#### Switch type

- SPDT (single pole double throw), 1NO, 1NC
- Silver contacts
- Galvanized isolated
- IP 66 rated
- 5 Amps normal at 220VAC rated
- Power: 125VAC, 250VAC, 24VDC, 125VDC and 250VDC
- Ambient temperature: -30 to 55°C

#### Features

- Rigid construction
- Vibration resistant technology
- Switching element with snap-action contact

#### Material of Constructions

- Enclosure: Epoxy coated aluminum.
- Valve plug, cover plug, Bracket nut, cam: Brass
- Internal parts: Stainless steel 303/304

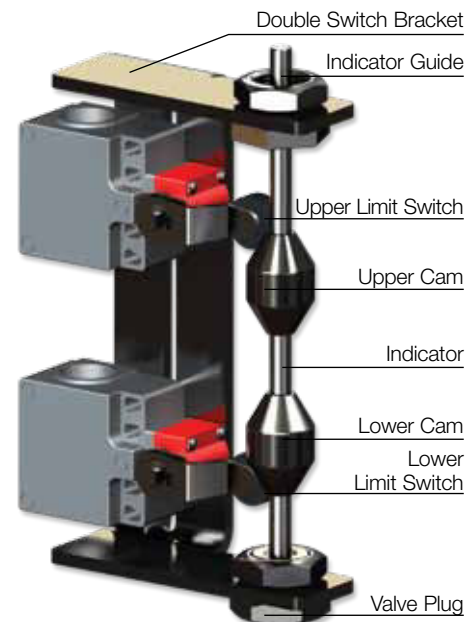
#### Optional Materials:

Stainless steel 316

#### Limit Switch Specifications

##### General Purpose Limit Switch, model S

This limit switch is used in safe area or non-classified locations. It is rated for IP 66 ingress protection. This switch unit is UL 508, IEC 60947-5-1 and GB14048.5-2001 approved for safe area. It is rated for 10 Amp for a short circuits, 6 Amp at 125, 250 VAC and 6 Amp at 24VDC, 1.1 Amp at 125VDC, 0.4 Amps at 250VDC. Amps inductive at 28VDC with 5 Amp at 250VAC. The limit switch is furnished with Silver contacts, SPDT type (1NO, 1NC). The switch unit enclosure includes integral epoxy coated aluminum terminal box with internal terminal blocks, M20x1.5 conduit entry.



**Double Limit Switch Assembly**