



Advantages/Benefits

- ▶ Designed for installation inside the tank or vessel
- ▶ Unique baffle body dampens process turbulence to eliminate unwanted switch chatter
- ▶ All plastic, PP construction
- ▶ Probe and cable rated IP67 when fully submersed
- ▶ AC or DC power configurations
- ▶ Available with reed or hall effect actuated FET switch output
- ▶ Selectable, NO or NC states
- ▶ Shielded probe and cable
- ▶ Designed for installation on Smart Trak

Design/Function

The reed switch output provides an AC or DC level interface with pumps, valves, PLCs, relays and alarms.

The FET switch output provides a solid state, DC level interface with PLCs, relays and alarms.

For remote 12 amp relay control, select from Burkert's family of SL 31 rail mount controllers.

Applications

- Clean liquids compatible with polypropylene
- Corrosive liquids compatible with polypropylene
- Environments with extreme levels of electromagnetic or radio frequency interference (reed switch output only)
- Leak detection in and around secondary containment vessels

bürkert
Easy Fluid Control Systems

Vertical
Buoyancy
Level Switch



Principle of Operation

A reed or hall effect switch is located at the top of the sensing chamber. When the probe is dry, the float rests on the bottom of the chamber, such that the internal magnet cannot effect the switches operation.

As liquid fills into the sensing chamber, the float becomes buoyant, causing the magnet to elevate and the switch changes state.

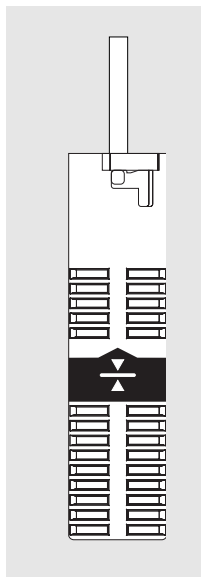
Baffle body design

The baffle body eliminates the switch chatter normally associated with traditional float devices. All liquid entering into the switch is dampened prior to reaching the float cavity.

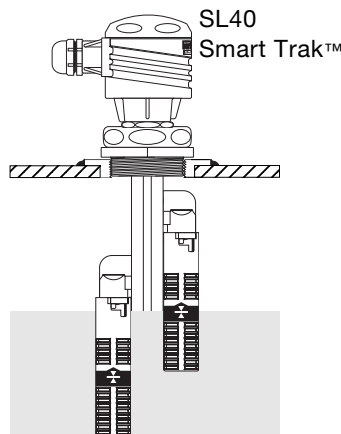
Unsuitable applications

Not suitable for: 1) liquids with a specific gravity less than .8 (SG); or 2) applications with ultrapure, dirty, coating or scaling liquids.

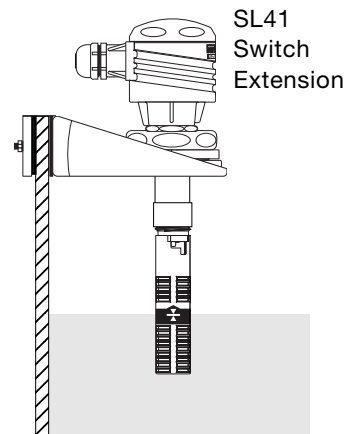
Switch with Reed Output



- All plastic construction with PP materials
- Baffle body dampens out unwanted signal chatter
- Designed for installation inside the tank or vessel
- Probe and cable rated IP67 when fully submersed
- Magnetically actuated reed switch with shielded probe and cable
- Selectable normally open or normally closed switch states
- Reed switch output provides AC or DC level interface with pumps, valves, PLCs, relays and alarms

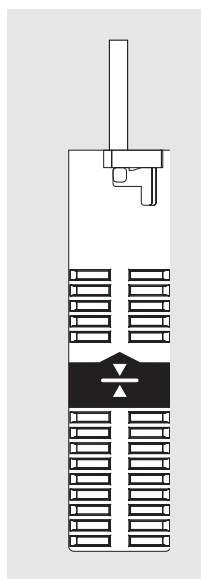


Up to four switches may be installed and adjusted to various depths on this in tank fitting called Smart Trak. Multi-switch installation is made both fast and simple.

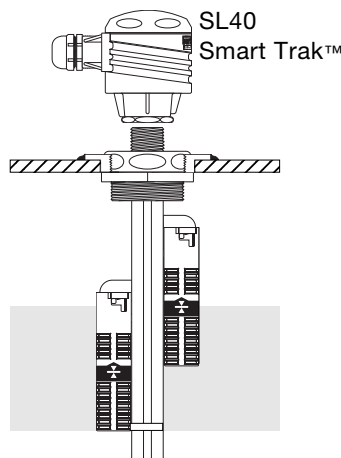


The switch extension fitting provides increased insertion depth for one switch. The optional side mount bracket may be used for installation to the tank's side wall.

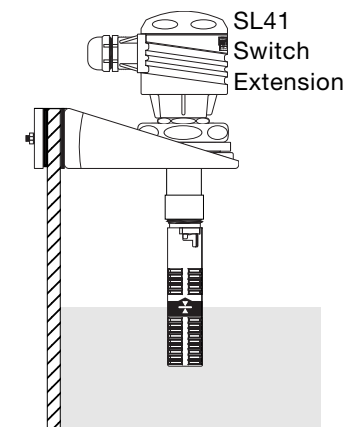
Switch with FET Output



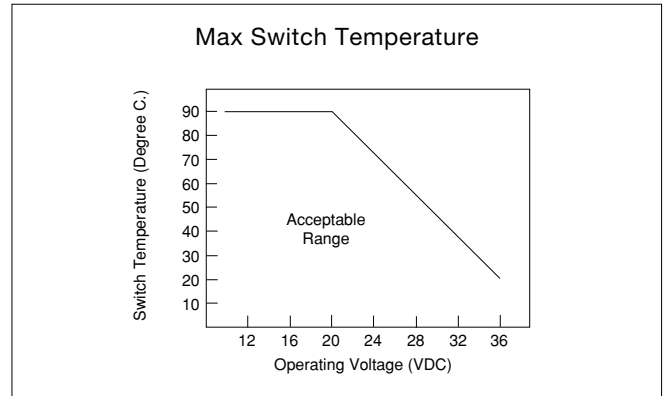
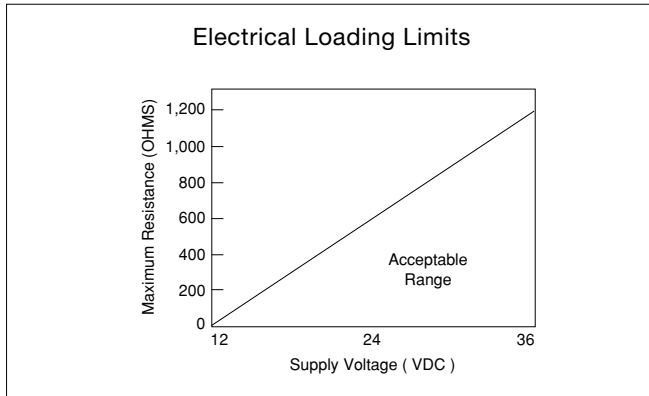
- All plastic construction with PP wetted materials
- Baffle body dampens out unwanted signal chatter
- Designed for installation inside the tank or vessel
- Probe and cable rated IP67 when fully submersed
- Hall effect actuated FET switch with shielded probe and cable
- Selectable normally open or normally closed switch states
- Solid state, FET switch output provides DC level interface with PLCs, relays and alarms



Up to four switches may be installed and adjusted to various depths on this in tank fitting called Smart Trak. Multi-switch installation is made both fast and simple.



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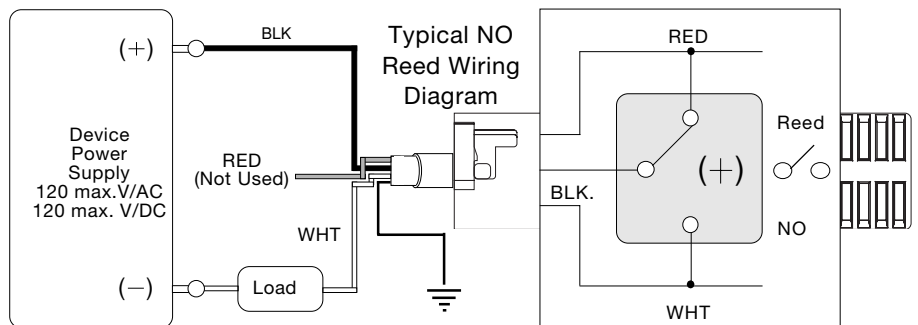


Switch with Reed Output

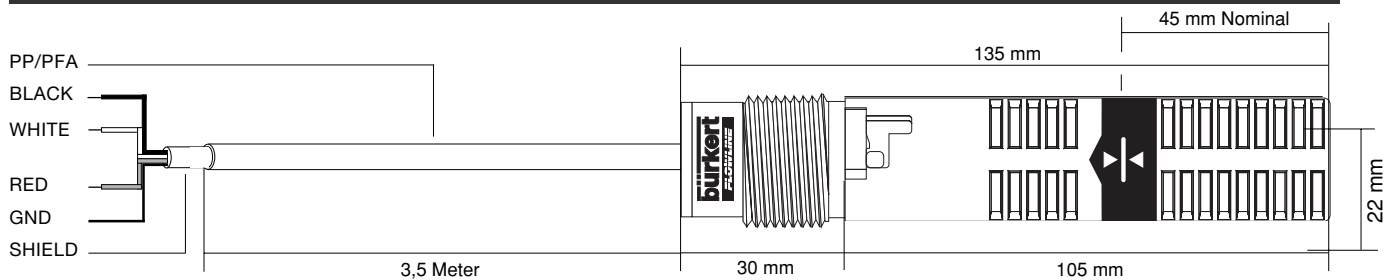
Voltage input 120 VAC, 20VA max
120 VDC, 20VA max

Switch type SPDT, dry contact closure

Switch mode Selectable, NO or NC based on wires connected



Switch Shown with Bayonet to 3/4" BSP Adaptor



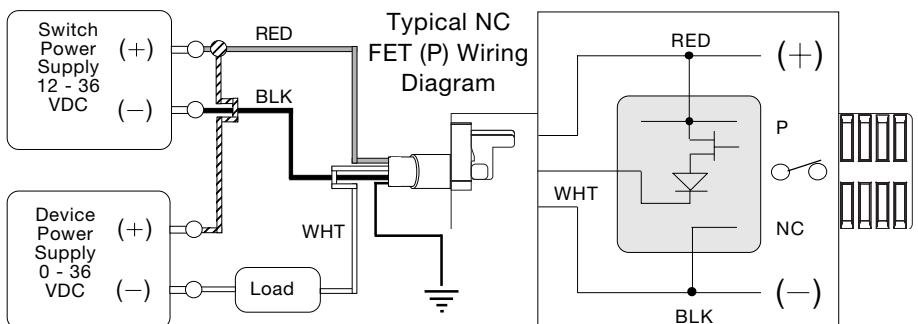
Switch with FET Output

Voltage input 12 - 36 VDC,
0.1 amp max

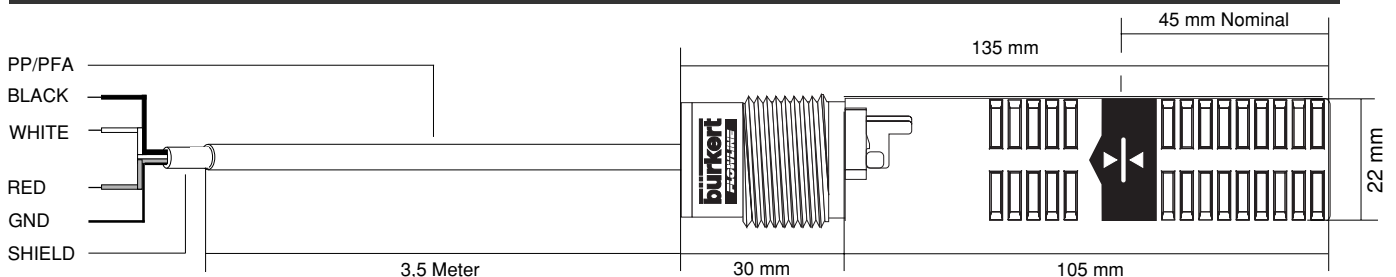
Current Dry: 5 mA (+/- 1 mA)
Wet: 19 mA (+/- 1 mA)

Switch type P channel or N channel

Switch mode Selectable, NO or NC based on supply polarity



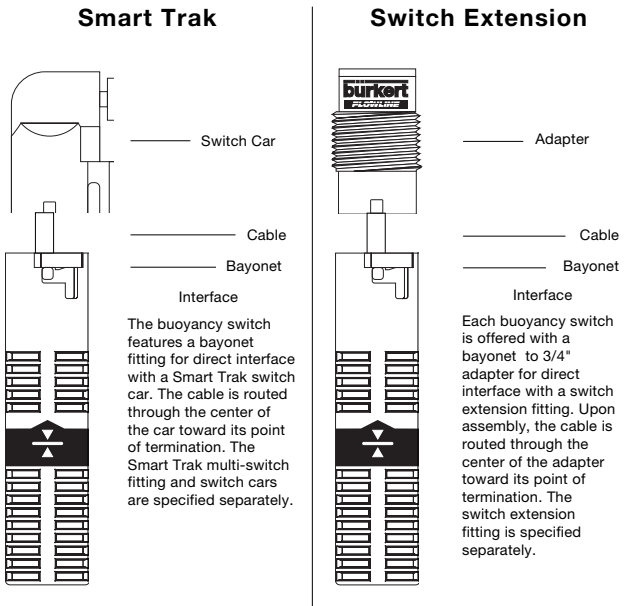
Switch Shown with Bayonet to 3/4" BSP Adaptor



Buoyancy Switch Technical Data

Accuracy	+ / - 2 mm in water
Repeatability	+ / - 1 mm in water
Specific gravity	.8 - 1.2
Reed voltage input	120 VAC / 120 VDC, 20 VA max
FET voltage input	12 - 36 VDC, 0.1 amp max
FET consumption	Dry: 5 mA (+ / - 1 mA) Wet: 19 mA (+ / - 1 mA)
FET switch voltage	0 - 36 VDC, 0.1 amp maximum
FET switch current	100 mA maximum (independent of supply)
Switch mode	Selectable, NO or NC states
Wetted materials	PP probe body and cable
Pressure rating	PP probe: 1 bar @ 25 degrees C.
Temperature rating	90 degrees C. maximum
Mounting interface	Bayonet 3/4" BSP or 3/4" NPT
Extreme orientation	+ / - 20 degrees from vertical
Probe rating	IP67 submersible probe & cable design
Cable type	3 wire, 22 gauge with ground, foil shield and PP sealed jacket
Cable length	3.5 meters

Buoyancy Switch Fitting Interface



Ordering Data (Other Versions on Request)

Supply Voltage	Output	Mounting Threads	Probe Material	Specification	Item No.
120 V/AC	REED	BSP 3/4"	PP	SL25-RM	417013 C
12 - 36 V/DC	FET (P)	BSP 3/4"	PP	SL25-PM	417164 Q
12 - 36 V/DC	FET (N)	BSP 3/4"	PP	SL25-NM	417166 J