Bintech Magnetic Float Level Switch

Operational Principle

The Bintech Magnetic Float Switch provides a system for controlling different levels of liquid in tanks and vessels. One of the applications of the Float Switch is as a Tank Pump Controller for automatic filling of day tanks.
The Float Switch can be customized to best fit your alarm, display and tank level control requirements. Our most common configuration consists of a triple point system using two float switches. The switch points are used to provide pump start and pump stop with an additional switch backup. The switches are reed contacts, volt-free, enclosed within the switch tube. As such, the switch is not in direct contact with the liquid, to further increase the switch reliability.

Each switch contact in the Bintech Float Switch can be of 3 different switching types:

- S for a closing contact on a rising level
- O for an opening contact on a rising level
- U for a change-over contact
  (offering both closing and opening contacts)

* The last switch point must be at least 60mm (if closing on rising) or 50mm (if opening on rising)
from the bottom of the probe. A minimum of 80mm is required between switch points.

Features

The Bintech Magnetic Float Level Switch has these features:

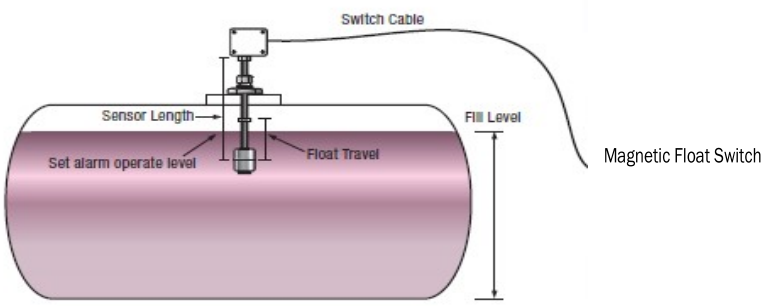
- Standard Terminal Box Aluminium
- Suitable for most liquids
- Simple operating principle suitable for a wide range of applications
- Wide range of specific gravity (>=450 g/l)
- Simple device (please consult us for installation in hazardous areas)
- Highly repeatable
- Durable
- Corrosion resistant

Specifications

Enclosure and Probe	
Enclosure material:	Die-cast Aluminium (other materials available)
Dimensions:	L x H x D, 80 x 75 x 57 mm
Mounting:	Integral - fixed to sensor
Environment:	Outdoor, IP65
Power requirements:	No power required (switch only)
Operating Temperature:	-30°C to 100°C
Standard Colour :	Grey (previously Red)
Certification:	None, the float switch is a simple device
Swiching action (on rising):	Closing (S) / Opening (O) /Changeover (U)
Process Connection:	Standard connection: 2" BSP mounted downwards Other process connections as factory options
Orientation:	Vertical ± 30º
Guide Tube OD:	12 mm
Guide Tube Length:	As specified (3000 mm maximum)
Standard float:	SVK44/15/A, stainless steel, cylindrical, 44 mm diameter
Other floats (option):	Other float types as factory options

Typical Configuration

The Bintech Magnetic Float Switch can used to detect any tank levels (Low, Low Low, High,…).
The float moving along the guide tube operates a magnetic reed switch as it rises and falls.
The Float Switch provides volt-free contacts that can be wired to your alarm or control system.
In the picture below, a typical installation is shown.



Ordering Information

1	...	Electrical connection	...	Process connection material	...	Process connection
.../.../...	A	Terminal box aluminium	V	Stainless steel	R	Mounting thread downwards (BSP)

2	...	Threaded connection size
...	...	Thread size (in inches)

3A	...	Guide tube material	...	Level switch function
.../... ...	V	Stainless steel	S	Closing on rising*
			O	Opening on rising*
			U	Change-over switch*
				* Multiple selections possible e.g. 'SSO'

3B	...	Switch point level 1	...	Switch point level 2	...	Switch point level 3 (last)
.../.../...	...	**Switch point 1** from lower face of process connection	...	**Switch point 2** from lower face of process connection	...	**Switch point 3** from lower face of process connection

4	...	Guide tube length
L .../...	L...	Length in mm

5	...	Number of floats	...	Float type
.../...		1 or 2	SVK44/15/A	44mm OD
				Other float types available on request

6		**Options** (if applicable)
.../...	VE	Adjustable threaded fitting (for multi switchpoint VE not recommended)
	MK240	Omron relay 240VAC
	MK24	Omron relay 24VDC

Order example

Bintech Float Switch, Aluminium box, 2" BSP downwards (SS), 800mm long, using 2 x SVK44/15/A SS floats L1=150 mm (closing on rising), L2=250 mm (closing on rising), L3=700 mm (opening on rising), adjustable.

	Electrical & process connection	Threaded connection size	Level switch functions	Switchpoint levels	Guide tube length / OD	Float	Options
Code	1	2	3A	3B	4	5	6
	AVR	2"	VSSO	(150/250/700)	L800	2/SVK44/15/A	VE

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