

MAGNETIC FLOAT LEVEL SWITCH OPERATION MANUAL



PRINCIPLE

The single unit or multiple reed switch units are housed tightly in stainless steel or engineering plastic stem and the permanent magnet is interlined into the middle of the specified float balls. You Can mount the float ball to penetrate through the stem, then the liquid buoyancy will deliver the float up and down at the specified position by graduating rings. When the reed switch is induction the float internal magnet, then it will actuate the reed switch contact point to create an open or close circuit. We can apply such on-off output signal to reach liquid level controlling and monitoring purpose. The figures below show the float orientations on N.O. (Normal Open) and N.C. (Normal Close).

SPECIFICATION

Working Temp. : 120°C(PVDF), 80°C(PP), 200°C (SUS).
Pressure Rating : 5kg/cm²(PP, PVDF), 30kg/cm²(SUS)
Lead Wire : XLPE (UL3266, AWG22)

SPECIFICATION

Tube Type	Material	Switching Contact from	Switching Capacity Max.	Switching Voltage Max.	Switching Current Max.	Carry Current Max.
OD8	SUS	SPST	50W	300Vac/350Vdc	0.5A	2.5A
	PVC	SPDT	20W	150Vac/200Vdc	1A	2A
OD9.5	SUS	SPST	50W	300Vac/350Vdc	0.5A	2.5A
		SPDT	20W	150Vac/200Vdc	1A	2A
OD12.7	SUS	SPST	60W	220Vac/500Vdc	3A	4A
		SPDT	60W	400Vac/1000Vdc	1A	2A
OD16	PVDF	SPST	60W	220Vac/500Vdc	3A	4A
		SPDT	60W	400Vac/1000Vdc	1A	2A
OD17.2	PP	SPST	60W	220Vac/500Vdc	3A	4A
		SPDT	60W	400Vac/1000Vdc	1A	2A

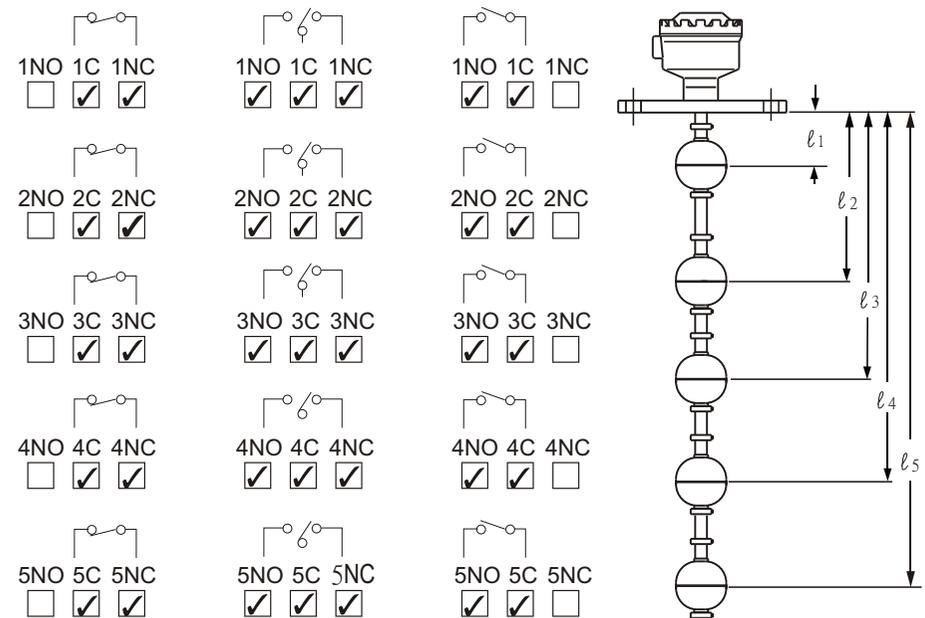
INDUCTIVE / CAPACITIVE LOADS

- Inductive :** When using a reed switch with inductive loads such as motors, relays, solenoids..etc, the contact will be subjected to a high induced voltage during opening of the contact(load circuit). Such high induced voltage(transients) may cause damages to the reed switch or significantly reduce it life. Therefore, protective circuits such as : RC(snubber), varistors or clamping diodes are recommended.
- Capacitive :** When using a reed switch with capacitive loads such as capacitors, incandescent lamps or long cables, the contact will be subjected to a high surge(inrush) current. Therefore, protective circuits such as: surge suppressors or current limiting resistors are recommended.

CONNECTION INFORMATION

- 1) Open the cap of housing, connect the wire onto terminal through the conduit.
- 2) Check the terminal wire connection is correct for each float.
- 3) Connection Type : Please refer to Fig.1 below.
- A) 1NO : Meaning that the NO-C circuit will be close while liquid level higher than the float ball by mark of " ↑ ON".
- B) 1NC : Meaning that the B-C circuit will be close while liquid level lower than the float ball by mark of " ↓ ON".
- C) 1C : Meaning that the NO-C circuit will be close while liquid level higher than the float ball and NC-C circuit will be close while liquid level lower than the float ball.
- 4) Please screw up the housing cap and fix the conduit outlet to prevent the moisture to soak in.

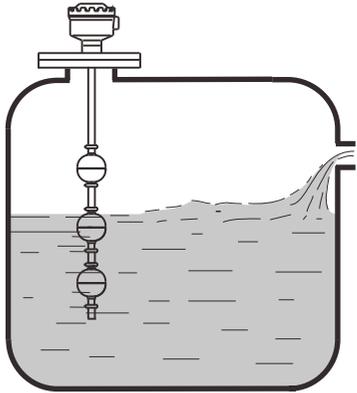
WIRING



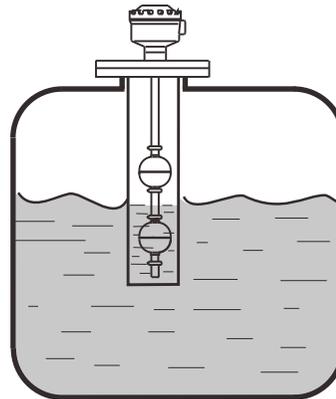
(Fig.1)

INSTALLATION

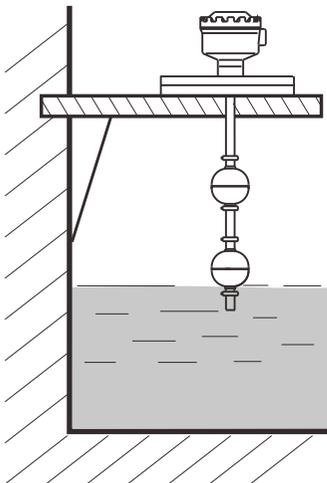
※ The float level switch should be mounted far away from liquid inlet, any strong liquid fluctuation will produce error output signals.



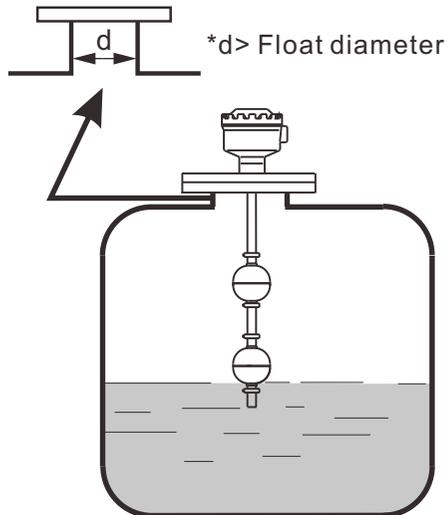
※ There better be an L type supporter, when the switch is mounted in concrete wall tank as figure below.



※ It is requested a pipe shield or equivalent device to normalize the switch actuation if the switch is used with any agitator application.



※ It is recommended to select the standpipe with diameter larger than the float ball for installation process.



TROUBLE SHOOTING

Trouble	Possible cause	Solution
Float Doesn't Work	The float's S.G. is bigger than liquid	Confirm the S.G. Again.
	The float leaks.	Contact us to change the float.
	The granule blocks float	Clean the granule.
No Signal	The float is out of position	Adjust float position.
	The reed switch is malfunction.	To change reed.
Un-Normal Signal	Interfered by magnetic field.	Solve Magnetic field problem.

★ Please contact us if there are any queries. ★

MAINTAIN

- 1) Please clean the impurity from pivot & float regularly.
- 2) Please check if the stopper's screws are loose.

BEFORE USE

- 1) Please check the packing situation.
- 2) Please contact us while find the damage.
- 3) Please check carton content :
 - a) One set of Complete Product.
 - b) One set Operation Manual.
 - c) One set Quality Approval.



FineTek Co., Ltd.

No.16, Tzuchiang St., Tucheng Industrial Park, New Taipei City 23678, Taiwan.
Tel: 886-2-22696789 Fax: 886-2-22686682
Email: info@fine-tek.com http://www.fine-tek.com



08-FD-B0-EM.08/19/2013

