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INTRODUCTION

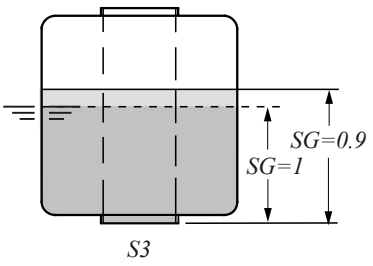
Since technologies of the product have more and more advance, the products need comply with a requirement for more safe, convenient and low cost.
The float switches are extremely compact, simple and are easy to install on any small space.
These switches are not effected by electrical interference. They can withstand to chemicals, high temperatures and pressures if the correct material of float switch is selected by the customers.

LIQUID PROPERTIES AND FLOATS

When the liquid specific gravity is less or more than the water, the float on the switch will either increase or decrease the immersion depth. The switch actuation level will also change.

All actuation levels are assumed with the water (SG=1). If your liquid has a different specific gravity, you should not specify the float specific gravity more than liquid, that will not cause the float rise with the liquid level. The reed switch inside the stationary stem will not be activated by the magnet inside the float.

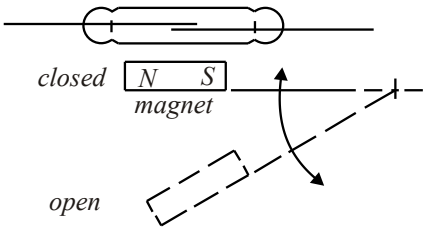
If your liquid has a high viscosity, you should specify largest size float that will provide a greatest buoyant force to ensure the units operate normally.
Because the float switches are activated by the magnetic field of permanent magnet inside the float, make sure the liquid is no iron powder or magnetic material to avoid magnetic interference.



(Fig. 3)

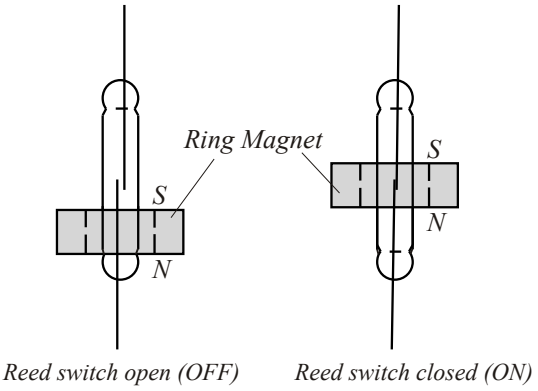
PRINCIPLE

Fig. 1 illustrates the method of pivot actuation (such as the YFCH TYPE float switches). When the magnetic field of permanent magnet inside the float is moved into to the proximity of the reed switch inside the stationary stem, the reed switch "snaps" the contact together and closes the electrical circuit. When the magnetic field is moved away from the reed switch, the reed switch does not touch. The circuit is open.



(Fig. 1)

Fig. 2 illustrates the method of perpendicular actuation (such as the YFC V TYPE float switches). When the magnetic field of ring magnet inside the float is moved into the proximity of reed switch inside the stationary stem, the reed switch "snaps" the contact together and closes the electrical circuit. When the magnetic field is moved away from the reed switch, the reed switch does not touch.
The circuit is open.



(Fig. 2)

CHEMICAL RESISTANCE

● Excellent ○ Good △ Fair × Corroded

Chemical	Concentration %	Temp °C	Temp °F	Plastic PVC	PP	PVDF	PTFE	Rubber NBR	Stainless 304	316
Ammonia Water	10	40	104	●	●	●	●	○		
NH_4OH	10	80	176		○	●	●			
Aque Regia	10	40	104	△	△	●	●			
$3HCl+HNO_3$	10	80	176			●	●			
Benzene	Pure	40	104	×	△	○	●			
C_6H_6		80	176			△	●			
Bleaching Liquor	5	40	104	●		●	●			
$Ca(ClO)_2$	5	80	176			●	●			
	20	40	104	●		●	●			
	20	80	176			●	●			
Boric Acid	Satu	40	104	●	●	●	●	●		
H_3BO_3		80	176		●	●	●	○		
Brine		40	104	●	●	●	●	●		
		80	176		●	●	●			
Butadiene	Gas	40	104	●		●	●			
$CH_2=CH=CH=CH_2$		80	176			●	●			
Butane	Gas	40	104	●	●	●	●			
$CH(CH)_2CH_3$		80	176		●	●	●			
Nitric Acid	10	40	104	●	●	●	●	●	●	●
HNO_3	10	80	176	×	○	●	●		●	
	30	40	104	●	●	●	●		●	●
	30	80	176	×	○	●	●		●	●
	50	40	104	○	○	●	●		●	●
	50	80	176	×	×	○	●			
	70	40	104	○	×	●	●		○	●
	70	80	176	×		○	●			
	98	40	104			○	○			
	98	80	176				△			
Oxalic Acid	20	40	104	●	●	●	●	●		△
HOOCCOOH	20	80	176		●	●	●			
	50	40	104	●	●	●	●			△
	50	80	176		●	●	●			
Phosphoric Acid	10	40	104	●	●	●	●	●	●	●
H_3PO_4	10	80	176		○	●	●	△	●	●
	50	40	104	●	●	●	●	●	●	●
	50	80	176		△	●	●	×	●	●
	80	40	104	●	●	●	●	○	●	●
	80	80	176		△	●	●		●	●
Sodium	15	40	104	●	●	●	●	●	●	●
Hydroxide	15	80	176		○	△	●	△	×	×
NaOH	30	40	104	●	●	●	●	●	●	●
	30	80	176		○	△	●	●	×	×
	50	40	104	●	●	○	●	●	●	●
	50	80	176		○	×	●	●	×	×
	70	40	104	○	○	○	●			
	70	80	176		○	×	●			

Chemical	Concentration %	Temp °C	Temp °F	Plastic PVC	PP	PVDF	PTFE	Rubber NBR	Stainless 304	316
Sodium	3	40	104	●	○	●	●		△	○
Hypochlorite	3	80	176							
NaClO	5	40	104	●	○	●	●		△	○
	5	80	176							
	7	40	104	●	△	○	●		×	×
	7	80	176							
	10	40	104	●	△	●	●		×	×
	10	80	176							
	13	40	104	●	△	●	●		×	×
	13	80	176							
Sulfuric Acid	10	40	104	●	●	●	●	●	●	●
H_2SO_4	10	80	176		●	●	●	○	○	○
	30	40	104	●	●	●	●	●	×	×
	30	80	176		●	●	●	○	×	×
	50	40	104	●	●	●	●	○	×	×
	50	80	176		●	●	●	△	×	×
	60	40	104	●	●	●	●	●	×	×
	60	80	176		○	●	●	○	×	×
	70	40	104	●	●	●	●	○	×	×
	70	80	176		○	●	●	△	×	×
	80	40	104	●	●	●	●	●	×	×
	80	80	176		○	●	●	△		
	90	40	104	○	●	●	●	△	×	×
	90	80	176		○	●	●	△		
	98	40	104	△		●	○		○	○
	98	80	176			△	○			
Toluene		40	104		△	△	●			
$C_6H_5CH_3$		80	176				○			
Chlorine Gas	Wet	40	104	○		●	●			
Cl_2	Wet	80	176			△	●			
	Dry	40	104	●		●	●			
	Dry	80	176			●	●			
Chromic Acid	10	40	104	●		●	●			
H_2CrO_4	10	80	176			●	●			
	20	40	104	△		●	●			
	20	80	176			●	●			
	40	40	104	△		●	●			
	40	80	176			●	●			
	50	40	104	×		●	●			
	50	80	176			△	●			
Hydrochloric	15	40	104	●	●	●	●	○		
Acid	15	80	176		●	●	●			
HCl	25	40	104	●	●	●	●	×		
	25	80	176		●	●	●			
	35	40	104	●	●	●	●	×		
	35	80	176		○	●	●			
	38	40	104	●	●	●	●	×		
	38	80	176		○	●	○			

● Excellent ○ Good △ Fair × Corroded

Chemical	Concentration	Temp		Plastic				Rubber	Stainless	
	%	°C	°F	PVC	PP	PVDF	PTFE	NBR	304	316
Citric Acid	10	40	104	●	●	●	●	●	●	●
$C_6H_8O_7$	10	80	176		○	●	●	●		
Gasoline	10	40	104	●		●	●			
	10	80	176			●	●			
Diesel Fuels		40	104			●	●		●	●
		80	176			●	●		●	●
Ethyl Alchol	Pure	40	104	●	●	●	●	●	○	○
C_2H_5OH	Pure	80	176		○	●	●	○		
Formic Acid	90	40	104	○	○	●	●			
HCOOH	90	80	176			●	●			
Hydrofluric Acid	Dilute	40	104	●	○	●	●			
	Dilute	80	176		○	●	●			
HF	30	40	104	○	○	●	●			
	30	80	176	×	○	●	●			
	40	40	104	△	○	●	●			
	40	80	176		○	●	●			
	50	40	104	△	○	●	●			
	50	80	176		○	●	●			
Hydrogen peroxide	5	40	104	●	●	●	●		○	●
	5	80	176		○	●	●			
H_2O_2	20	40	104	●	●	●	●			
	20	80	176		○	●	●			
	30	40	104	○	○	●	●			
	30	80	176		△	●	●			
	50	40	104	△	×	●	●			
	50	80	176			●	●			
	90	40	104			●	●			
	90	80	176			●	●			
Isopropyl Alcohol	Pure	40	104	●	●	●	●	○		
$(CH_3)CHOH$	Pure	80	176			●	●			
Kerosene		40	104	●	○	●	●			
		80	176			●	●			
Methyl Alcohol		40	104	○	●	●	●	△		
CH_3OH		80	176		○	●	●			
Methyl Ethyl Ketone		40	104		△		●			
$CH_3CO\ C_2H_5$		80	176				●			
Potassium Chromate		40	104	●	●	●	●	●		
K_2CrO_4		80	176		○	●	●	○		

REED SWITCH PROTECTION

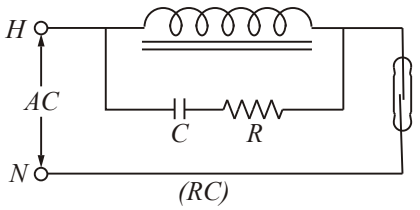
INDUCTIVE LOADS

When using reed switches for inductive loads such as motors, relay coil, solenoids, etc., the contacts will be subjected to high induced voltages during opening of the contacts (load circuit). Such high induced voltages (transients) may cause damage to the reed switch or significantly reduce its life.
Therefore, protective circuits such as: RC (snubber), varistor or clamping diodes are recommended. (see Fig. 4a, Fig. 4b, Fig. 4c)

It is prohibited to drive directly solenoid valve, motor or magnetic switch.

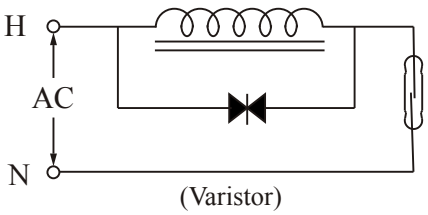
$$C=\frac{I^2}{10}\ (uF)$$

$$R=\frac{E}{10I(1+\frac{E}{50})}$$



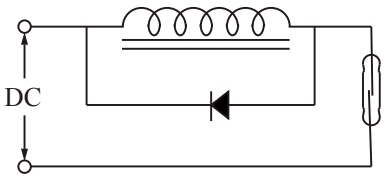
(RC)

Fig. 4 (a)



(Varistor)

Fig. 4 (b)



(Diode)

Fig. 4 (c)

CAPACITIVE LOADS

When using reed switches for capacitive loads such as capacitors, incandescent lamps or long cables, the contacts will be subjects to high surge (inrush) current.

Therefore, protective circuits such as: surge suppressors or current limiting resistors are recommended. (Fig. 5a, Fig. 5b)

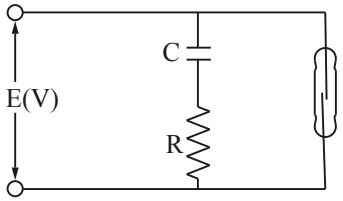


Fig. 5 (a)

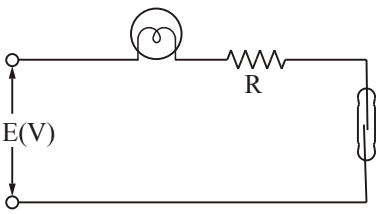
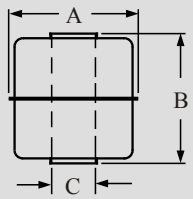
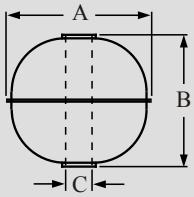
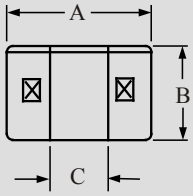
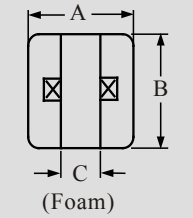
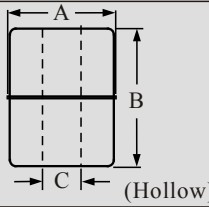


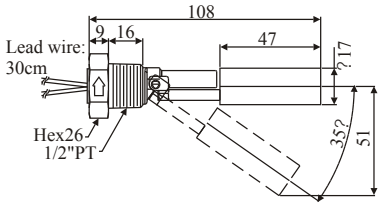
Fig. 5 (b)

FLOAT SPECIFICATIONS

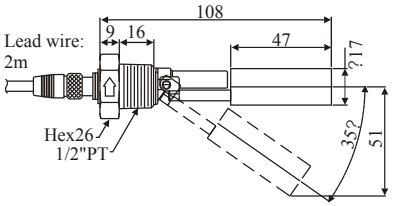
MODEL	TYPE	ϕAxBxϕC	S.G.	Max. Pressure (kg/cm^2)	Weight (g)	Material/Color	Max. Temp. (℃)
	**S1**	28x 28x 9.5	E>0.7	10	8	SUS 304 / 316L	200
	S3	45x 55x 15	E>0.65	12	37.6	SUS 316	200
	S6	75x 108x 20	E>0.5	10	165	SUS 304	200
	**S2**	41x 38x 11	E>0.7	35	19.5	SUS 316	200
	S4	52x 52x 15	E>0.55	30	33.4	SUS 316	200
	S5	75x 73x 19	E>0.65	30	102.4	SUS 304	200
	S7	30x 28x 9.5	E>0.82	30	8	SUS 304 / 316L	200
	S8	100x 100x 20	E>0.5	15	249.7	SUS 304	200
	S9	150x 150x 30	E>0.45	15	534	SUS 304	200
	S11	28x 32x 9.5	E>0.82	30	8.1	SUS 304	200
 (Hollow)	**P1**	25x 15x 10	E>0.65	4	3.5	PP / white black	80
	P2	25x 25x 10	E>0.55	4	5	PP / white black	80
	P3	48x 45x 18.5	E>0.6	5	35.5	PP / black	80
	P4	20x 25x 10	E>0.7	4	3.7	PP / black	80
	P5	20x 20x 8.1	E>0.75	4	4	PP / black	80
	P8	18.2x 15.3x 7.2	E>0.8	4	1.82	PP / black	80
 (Foam)	**Q6**	20x 20x 7.5	E>0.75	ATM	3.5	PP / white	80
	Q7	25x 25x 8.8	E>0.7	ATM	6.7	PP / white	80
	N1	25x 15x 10	E>0.5	ATM	2.7	NBR / black	100
	N2	18.5x 26x 10	E>0.7	ATM	3.3	NBR / black	100
	N3	19x 20x 10	E>0.55	ATM	2.4	NBR / black	100
	N4	17.5x 25x 10	E>0.65	ATM	2.5	NBR / black	100
	N5	30x 45x 12.8	E>0.5	ATM	11.5	NBR / black	100
 (Hollow)	**F2**	42x 44x 14	E>0.63	5	18.5	PP	80
	F3	45x 45x 20	E>0.65	5	35.7	PP	80
	F4	48x 62x 18	E>0.8	5	65.3	PVDF	120

METAL SINGLE SWITCH TYPES

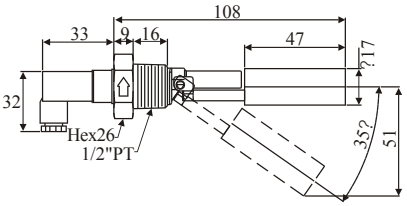
▶ YFD MH50/ 56



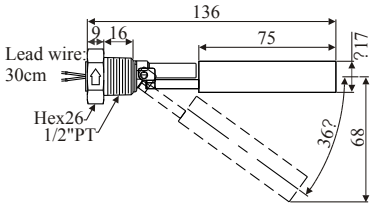
▶ YFD MH50A /56A



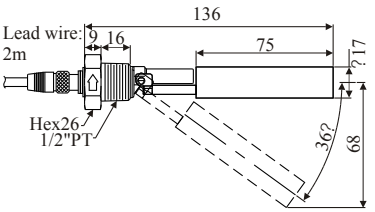
▶ YFD MH50C /56C



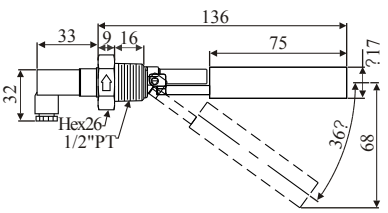
▶ YFD MH60/ 66



▶ YFD MH60A/ 66A



▶ YFD MH60C/ 66C



SPECIFICATIONS

Type	Material	Switching Capacity Max.	Switching Voltage Max.	Switching Current Max.	Carry Current Max.	Lead Wire	Max. Pressure	Operating Temp.	Suitable Sp. Gr.
YFDMH50/56 **YFDMH60/66**	SUS 304 SUS 316L	50W/SPST	240Vac 200Vdc	0.5A	1A	XLPE or TEFLON	5 kg/cm^2	-20~120℃ (Max.200℃)	YFDMH5:0.92 YFDMH6:0.75
YFDMH50A/56A **YFDMH60A/66A**	SUS 304 SUS 316L	50W/SPST	240Vac 200Vdc	0.5A	1A	XLPE or TEFLON	5 kg/cm^2	80℃	YFDMH5:0.92 YFDMH6:0.75
YFDMH50C/56C **YFDMH60C/66C**	SUS 304 SUS 316L	50W/SPST	240Vac 200Vdc	0.5A	1A	XLPE or TEFLON	5 kg/cm^2	-20~120℃	YFDMH5:0.92 YFDMH6:0.75

ORDER INFORMATION FOR METAL SINGLE SWITCH TYPES

YFDMH 5 0 A B R (0 5 F)

Type

5: ϕ17x47L (SG: 0.92) **6:** ϕ17x75L (SG: 0.75)

Material

0: SUS304 **6:** SUS316L

Connection

- : without, **A:** ASI, **C:** DIN

Connecting Type

BR:1/2"PF, **BQ:** 1/2"PT, **BU:** 1/2"NPT, **BT:** 1/2"BSP

Lead wire Length (Unit=100mm)

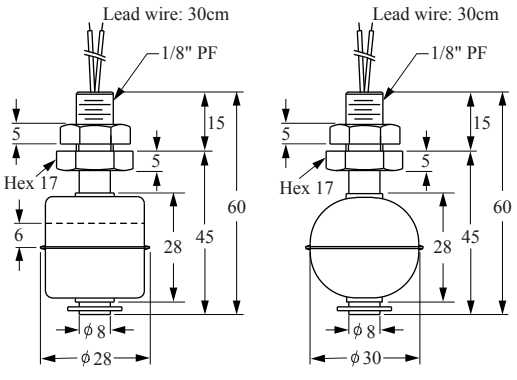
05: 500mm (below 500mm) ※ 500mm per Unit
10: 1000mm (501~1000mm) ※ 300mm (Standard length)
15: 1500mm (1001~1500mm)
⋮

Material of Lead wire

F: SILICON (200˚C) AWG24 X ϕ4
T: TEFLON (200˚C) AWG24
X: XLPE (125˚C) AWG22 (Standard)
※ Material of Wetted parts"SUS304"。

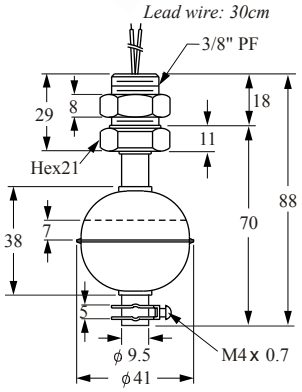
METAL TYPES

▶ YFD 30□1/ FD 35□1



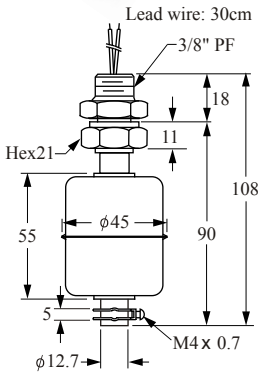
Washer: NBR
Drill hole ϕ10mm

▶ YFD 40□1



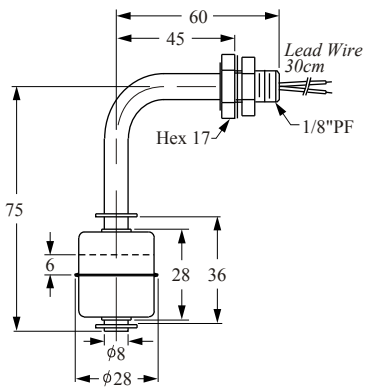
Washer: NBR
Drill hole ϕ17mm

▶ YFD 45□1



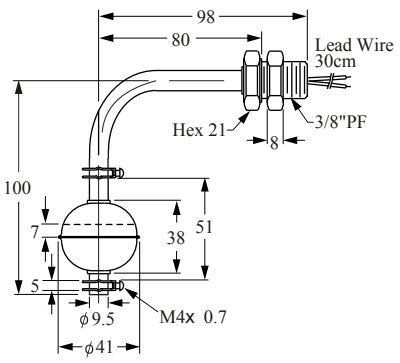
Washer: NBR
Drill hole ϕ17mm

▶ YFD 30□2



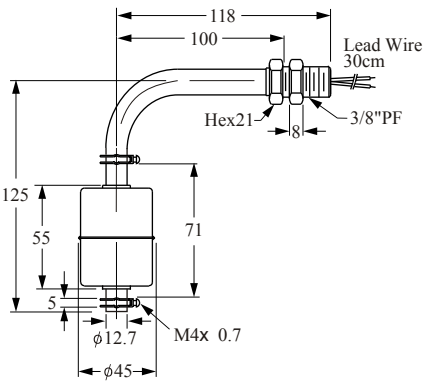
Washer: NBR
Drill hole ϕ10mm

▶ YFD 40□2



Washer: NBR
Drill hole ϕ17mm

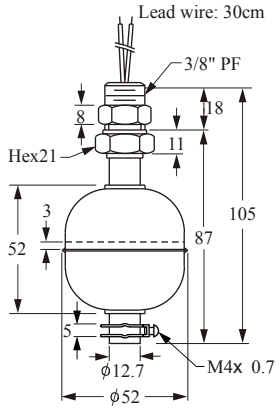
▶ YFD 45□2



Washer: NBR
Drill hole ϕ17mm

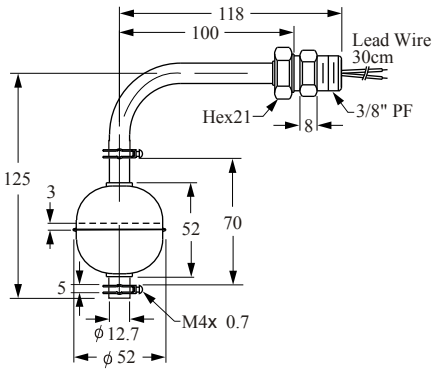
METAL TYPES

▶ YFD 50□1



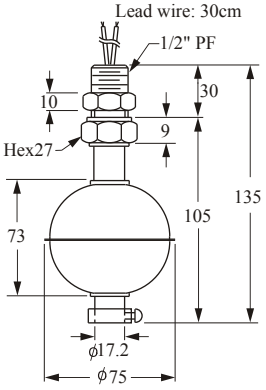
Washer: NBR
Drill hole ϕ17mm

▶ YFD 50□2



Washer: NBR
Drill hole ϕ17mm

▶ YFD 75□1



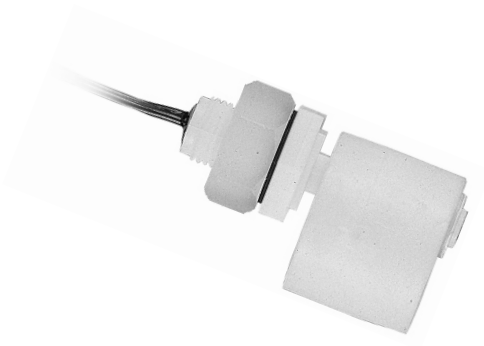
Washer: NBR
Drill hole ϕ21mm

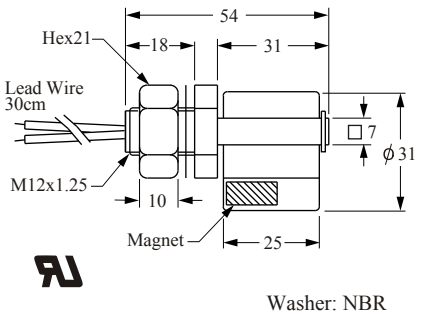
■ SPECIFICATIONS

Description \ Type	YFD30□1D YFD30□2D	YFD40□1D YFD40□2D	YFD45□1D YFD45□2D	YFD50□1D YFD50□2D	YFD75□1G	YFD10□1G
Switching Capacity Max.	50W SPST	50W SPST	50W SPST	50W SPST	60W SPDT	
Switching Voltage Max.	240Vac/200Vdc				220Vac	
Switching Current Max. (A)	0.5A	0.5A	0.5A	0.5A	2A	
Carry Current Max. (A)	1A	1A	1A	1A	3A	
Lead Wire	XLPE (UL3266, AWG22)					
Reversible Switch Action	YES	YES	YES	YES	NO	NO
Max. Pressure (Kg/cm^2)	10	30	12	30	30	10
Operating Temperature	-20~120°C (OPTION 200°C)					
Material	Stainless Steel SUS304, 316					
Suitable Specific Gravity	0.8	0.7	0.65	0.55	0.55	0.5

PLASTIC OH TYPES

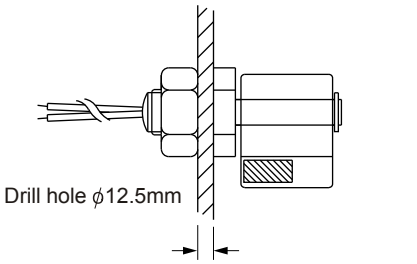
▶ YFCH11QD

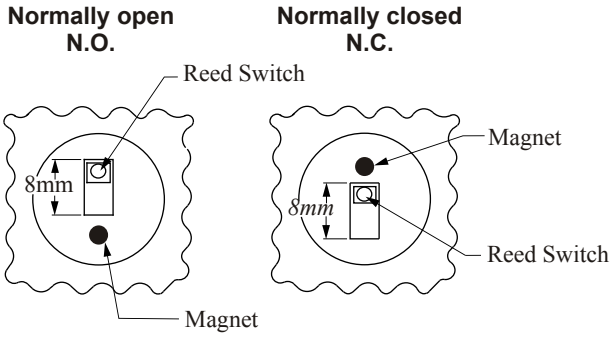




Washer: NBR

■ Installation / N.C./ N.O. Action Position





- All the products in this range come with the UL E161587 approval.
- All the products in this range are designed to be mounted on the side.
- For the specific gravity of water is used as a reference point in calculating specific gravity.

■ SPECIFICATIONS

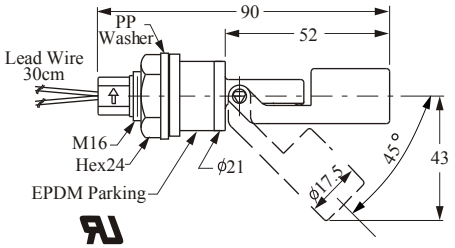
Description \ Type	YFCH11QD	YFCH21PD YFCH31PD	YFCH23FD YFCH33FD	YFCH24YD YFCH34YD	YFCH25GD YFCH35GD
Switching Capacity Max.	50W SPST				
Switching Voltage Max.	240VAC / 200Vdc				
Switching Current Max. (A)	0.5A				
Carry Current Max. (A)	1A				
Lead Wire	PVC AWG22	XLPE AWG22			
Max. Pressure (Kg/cm^2)	ATM	4 kg/cm^2	2 kg/cm^2		
Operating Temperature	-20~80℃		-20~120℃		
Material	PP		PVDF	Nylon	Polysuphone
Suitable Specific Gravity	0.78	0.75	0.85	0.8	0.85
Weight	25 g	H21: 22 g H31: 21 g	25 g	23 g	25.4 g

PLASTIC OH TYPES

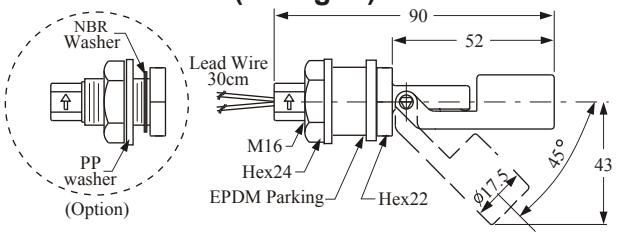
▶ YFC H21PD / H31PD

- For models YFCH2 and YFCH3, three different types of material are available PP, Nylon, and PVDF.
- The special lead wire or cable can be supplied according to the requirement of the customer.
- The customer can select the type of reed switch which their requires.
- For specifications of the standard design see catalog (page 10).
- OEM customers are welcome.

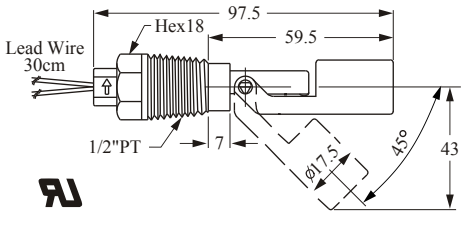
■ Optional
YFC H21PDO(Round)



■ Standard
YFC H21PDD (Hexagon)

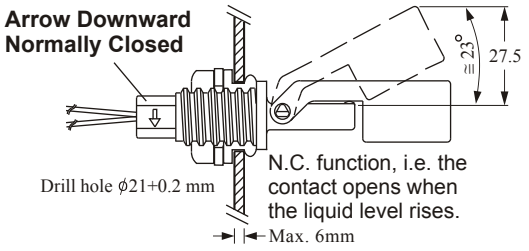


■ YFC H31PD

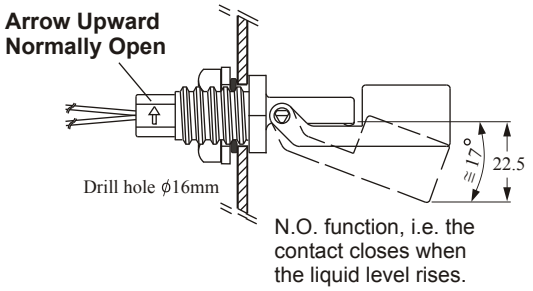


■ Installation / N.C. / N.O. Action Position

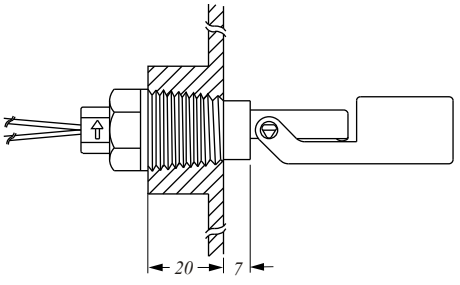
[External mounting]



[Internal mounting]

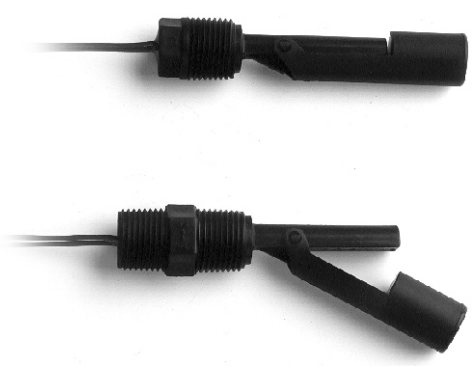


[External mounting]

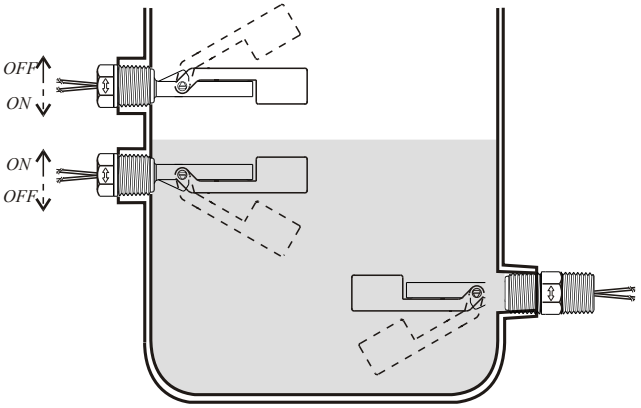


PLASTIC OH TYPES

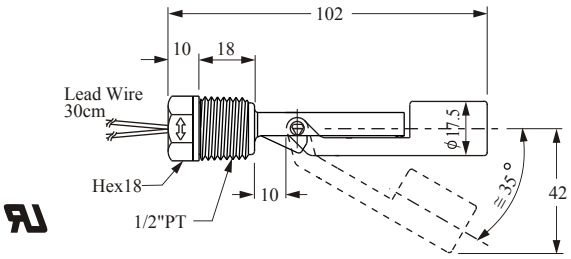
▶ YFC H41PD / H51PD

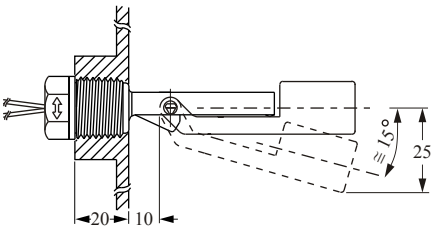


■ Installation / N.C. / N.O. Action Position



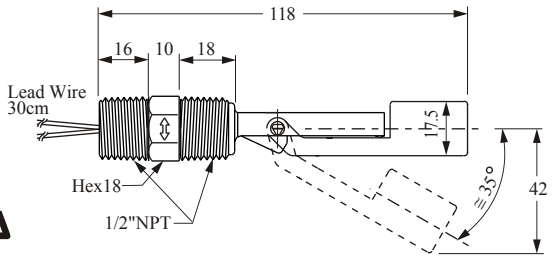
■ YFC H41PD

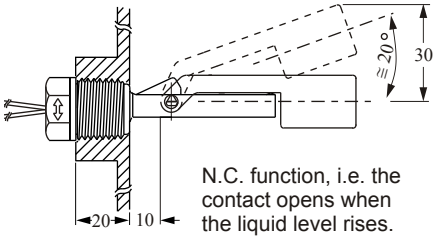




N.O. function, i.e. the contact closes when the liquid level rises.

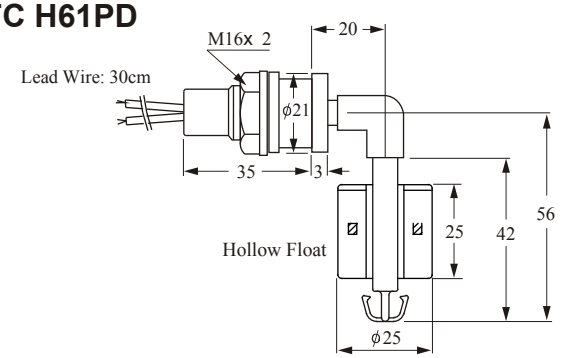
■ YFC H51PD





N.C. function, i.e. the contact opens when the liquid level rises.

■ YFC H61PD

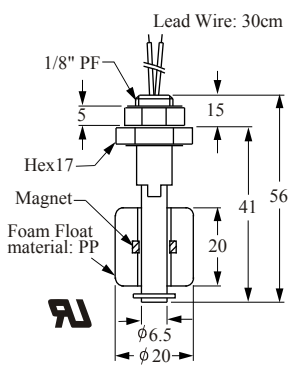


■ SPECIFICATIONS

Type	Material	Switching Capacity Max.	Switching Voltage Max.	Switching Current Max.	Carry Current Max.	Lead Wire	Max. Pressure	Operating Temp.	Suitable Sp. Gr.	Weight
YFCH41PD YFCH51PD YFCH61PD	PP	50W/SPST	240Vac 200Vdc	0.5A	1A	XLPE	4 kg/cm^2	-20~80℃	0.65 0.65 0.7	20g 25g 31g

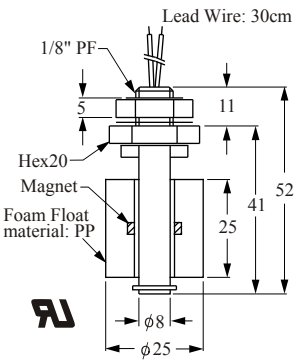
PLASTIC OV TYPES

▶ YFC V11QF



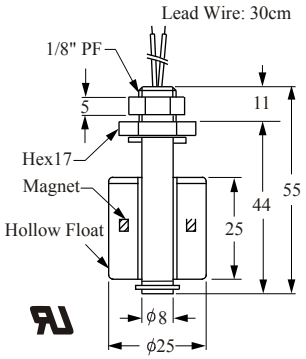
Washer: NBR
Drill hole ϕ10mm

▶ YFC V21QD



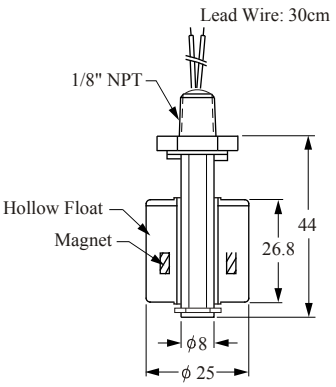
Washer: NBR
Drill hole ϕ10mm

▶ YFC V31PD



O-ring: VITON
Drill hole ϕ10mm

▶ YFC V33FD, 34YD, 35GD



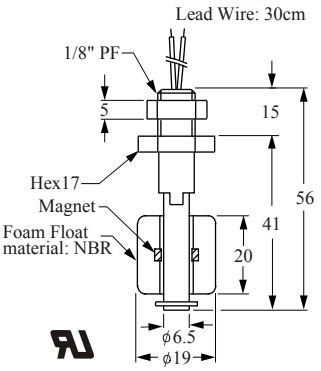
O-Ring: VITON
Drill hole ϕ10mm

■ SPECIFICATIONS

Description \ Type	YFC V11QF	YFC V21QD	YFC V31PD	YFC V33FD	YFC V34YD	YFC V35GD
Switching Capacity Max.	10W SPST	50W SPST	50W SPST			
Switching Voltage Max.	125Vac	240Vac / 200Vdc	240Vac / 200Vdc			
Switching Current Max. (A)	0.5A		0.5A			
Carry Current Max. (A)	1A		1A			
Lead Wire	UL 1007 AWG22 PVC		UL 1007 AWG22 PVC	XLPE AWG22		
Reversible Switch Action	NO	YES/ 80°C down	YES/ 80°C down			
Max. Pressure (Kg/cm^2)	ATM		4 kg/cm^2	2 kg/cm^2		
Operating Temperature	-20~80°C		-20~80°C	-20~120°C		
Material	PP		PP	PVDF	Nylon	Polysuphone
Suitable Specific Gravity	0.8		0.7	0.85	0.8	0.75
Weight (g)	12 g	18 g	12.8 g	18 g	15 g	18 g

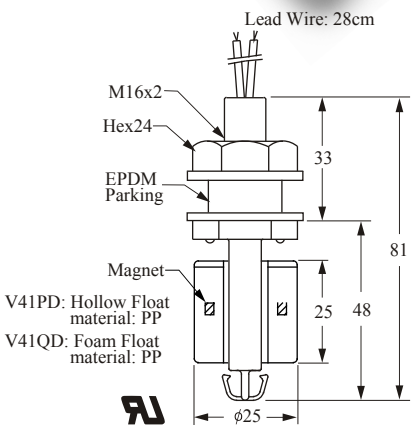
PLASTIC OV TYPES

▶ YFC V11NF



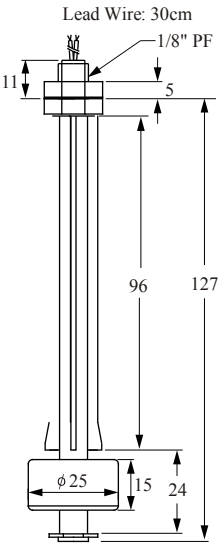
Washer: NBR
Drill hole ϕ10mm

▶ YFC V41PD, V41QD



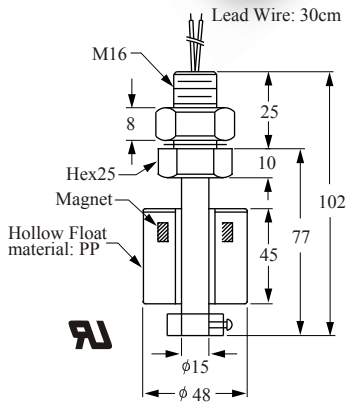
Washer: NBR
Drill hole ϕ16mm

▶ YFC V61PF, V61NF



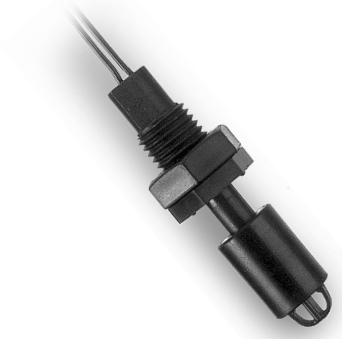
Washer: NBR
Drill hole ϕ10mm

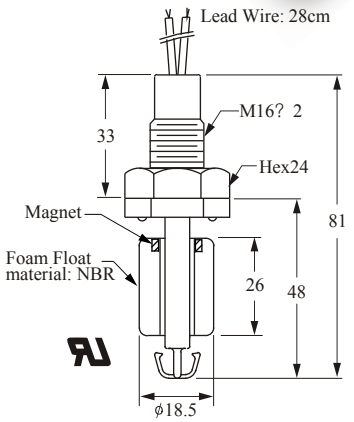
▶ YFC V81PD



Washer: NBR
Drill hole ϕ16mm

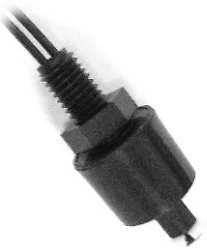
▶ YFC V41ND

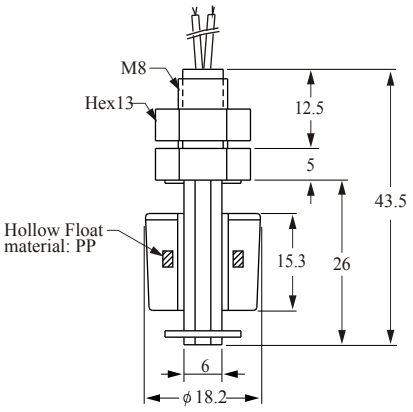




Washer: NBR
Drill hole ϕ16mm

▶ YFC V51PD



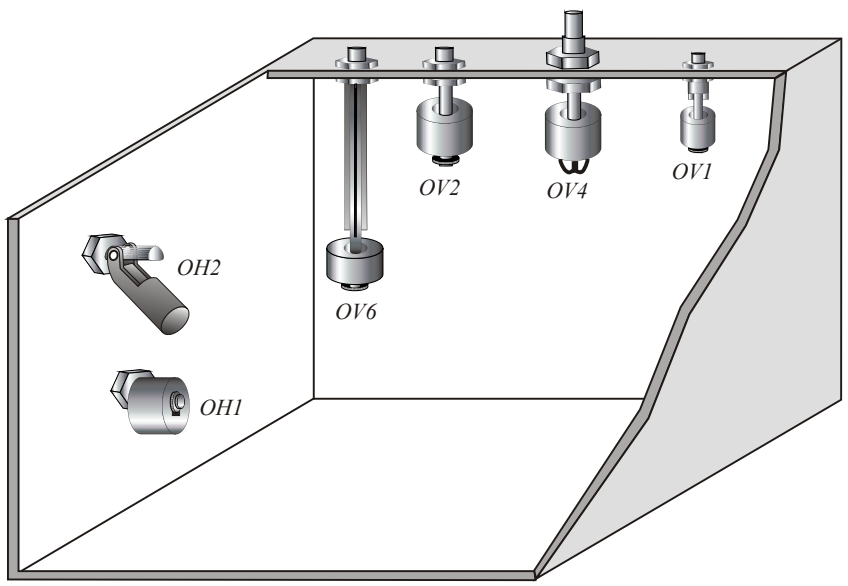


O-Ring: VITON
Drill hole ϕ8.5mm

PLASTIC OV TYPES

■ SPECIFICATIONS

Description \ Type	YFC V11NF	YFC V 61PF YFC V 61NF	YFC V41P D YFC V41Q D	YFC V81PD	YFC V41ND	YFC V51PD
Switching Capacity Max.	10W SPST		50W SPST			
Switching Voltage Max.	125Vac (Break Down 250Vac)		240Vac / 200Vdc			
Switching Current Max. (A)	0.5A					
Carry Current Max. (A)	1A					
Lead Wire	XLPE AWG22	UL 1007 AWG22 PVC				
Reversible Switch Action	NO	NO	YES	NO	NO	NO
Max. Pressure (kg/cm^2)	ATM	V61P: 4kg/cm^2 V61N: ATM	V41P: 4kg/cm^2 V41Q: ATM	4 kg/cm^2	ATM	4 kg/cm^2
Operating Temperature	-20~80℃					-20 ~100℃
Material	PP (except V11N, V61N, V41N: NBR float)					
Suitable Specific Gravity	0.8	0.65 0.5	0.55 0.7	0.6	0.8	0.8
Weight (g)	11 g	16 g	23 g	180 g	17 g	8.2 g



ORDER INFORMATION FOR PLASTIC OH/OV TYPES

YFC **V2** **3** **F** **D** **A** **(** **05** **P** **)**

Order No./ Model

YFC H1~H6: RF-OH Side Mounting
YFC V1~V9 RF-OV Top or bottom Mounting

Material of Wetted parts

1 : PP
3 : PVDF
4 : Nylon
5 : Polysuphone
6 : PPS

Material of Float

F : PVDF
N : NBR
G: Polysuphone
P : PP (hollow)
Q : PP (foam)
Y : Nylon
(Unsuitable for use in water application for long term)
K : PPS

Switching Capacity Max.

D : 50W 240Vac /200Vdc SPST
F : 10W 125Vac SPST
K : 20W 150Vac/200Vdc SPDT

Contact Form

A : Normally Open (N.O.) SPST
B : Normally Close (N.C.) SPST
C : 1AB SPDT
D : NC Reversible
E : NO Reversible

Lead wire Length (Unit=100mm)

05: 500mm (below 500mm)
10: 1000mm (501~1000)
15: 1500mm (1001~1500)
⋮

※ 500mm per Unit
※ 300mm (Standard length)

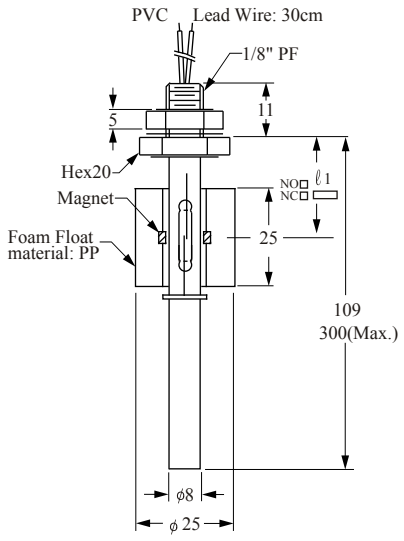
Material of Lead wire

B : PVC (80℃) ---- AWG24
C : PVC cable (80℃) ---- AWG22 X φ4
D : XLPVC (105℃) ---- AWG24
F : SILICON cable (200℃) ---- AWG24X φ4
P : PVC (80℃) ---- AWG22
T : TEFLON (200℃) ---- AWG24
X : XLPE (125℃) ---- AWG22
S : Others

※"A" (Normal Open) contact form is our standard specified switch activation, others contact form and target lead wire length subject to above data, except of above, please refer pages 6, 7, 9, 10and 12.

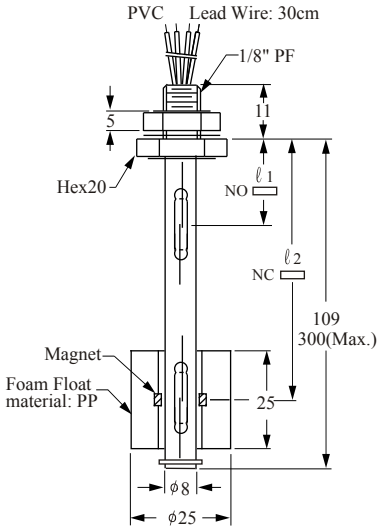
PLASTIC SPECIAL TYPES

▶ YFC PV1



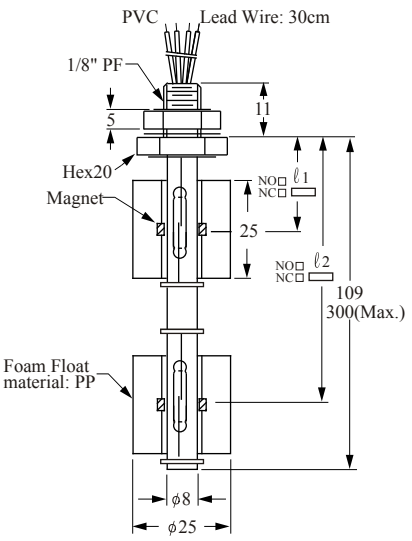
O-Ring: VITON

▶ YFC PV2



O-Ring: VITON

▶ YFC PV3



O-Ring: VITON

NOTE: Float material can be optional.

- Above items are done by custom-built when the standard specification is unable to be coped with their unique demand. There are with below special benefits:
  - YFCPV1 One float for one level activation switch location by custom-order.
  - YFCPV2 One float with 2 reed switches, applicable for high / low two level activation, especial design by one float to drive two contacts activation.
  - YFCPV3 Two floats drive with two independent reed switches, the compared difference with YFCPV2 base on below character : Each one float unit can be performed by N.O. or N.C. level activation as per customer's option.

ORDER INFORMATION FOR PLASTIC SPECIAL TYPE

YFC [PV1] [2] [D] [A] ([05] [P])

Order No./ Model

PV1: RF-PV1 Vertical Mounting, Single Float Single Switch
PV2: RF-PV2 Vertical Mounting, Single Float Dual Switch
PV3: RF-PV3 Vertical Mounting, Dual Float Dual Switch

Material of Wetted parts

1 : PP; Lead wire---PVC---Temp. 80°C
2 : NBR (only float); Lead wire---PVC---Temp. 60°C
Lead wire---XLPE---Temp. 100°C
3 : PVDF; Lead wire---XLPE---Temp. 125°C
4 : Nylon; Lead wire---XLPE---Temp. 125°C
(Unsuitable for use in water application for long term)

Switching Capacity Max.

D: 50W 240Vac /200Vdc SPST
F : 10W 125Vac SPST
K: 20W 150Vac/200Vdc SPDT

Contact Form

A: Normally Open (N.O.) SPST
B: Normally Close (N.C.) SPST
C: SPDT
F : 1 float 2 points.
H: 1-N.O.,1-N.C.(2 floats)

Lead wire Length (Unit=100mm)

05: 500mm (below 500mm) ※ 500mm per Unit
10: 1000mm (501~1000mm) ※ 300mm (Standard length)
15: 1500mm (1001~1500mm)
⋮

Material of Lead wire

C : PVC cable (80°C) ---- AWG22 X φ4
P : PVC (80°C) ---- AWG22 (Standard)
X : XLPE (125°C) ---- AWG22

ORDER INFORMATION FOR METAL TYPE

YFD [3 0] [6] [2] [D] [A] ([1 0] [ ] [H])

Order No./ Model

10 Float : ϕ75x108, Screw : 1/2"PF
30 Float : ϕ28x28, Screw : 1/8"PF
31 Float : ϕ28x28, Screw : 1/8"NPT
35 Float : ϕ30x28, Screw : 1/8"PF
36 Float : ϕ30x28, Screw : 1/8"NPT
40 Float : ϕ41x38, Screw : 3/8"PF
45 Float : ϕ45x55, Screw : 3/8"PF
50 Float : ϕ52x52, Screw : 3/8"PF
75 Float : ϕ75x70, Screw : 1/2"PF

Material of Wetted parts

0 : SUS304
6 : SUS316

Mounting

1 : Top or Bottom Mounting
2 : Side Mounting

Switching Capacity Max.

D: 50W 240Vac /200Vdc SPST
F : 10W 125Vac SPST
G: 60W 220Vac SPDT (only use for tude ≧ϕ12.7)
S: Others

Contact Form

A: Normal Open (N.O.) SPST ※ High Temp only available for A or B Type
B: Normal Close (N.C.) SPST
C: 1C SPDT
D: N.C. Reversible
E: N.O. Reversible

Lead wire Length (Unit=100mm)

05: 500mm (below 500mm) ※ 500mm per Unit
10: 1000mm (501~1000mm) ※ 300mm (Standard length)
15: 1500mm (1001~1500mm)
⋮

Material of Lead wire

B: PVC cable (80℃) ---- AWG24
C: PVC cable (80℃) ---- AWG22 X ϕ4
D: XLPVC (105℃) ---- AWG22
F : SILICON cable (200℃) ---- AWG24X ϕ4
P : PVC (80℃) ---- AWG22
T : TEFLON (200℃) ---- AWG24
X : XLPE (125℃) ---- AWG22 (Standard)

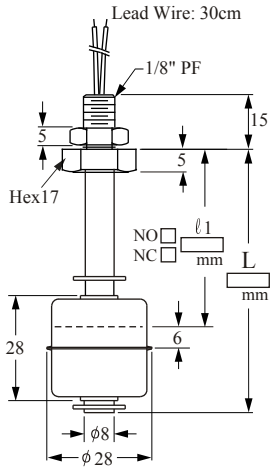
High Temp. (200℃)

METAL SPECIAL TYPES

Below items are custom-built subject to special application place and existed equipment facilities. Their unique characters as follow:

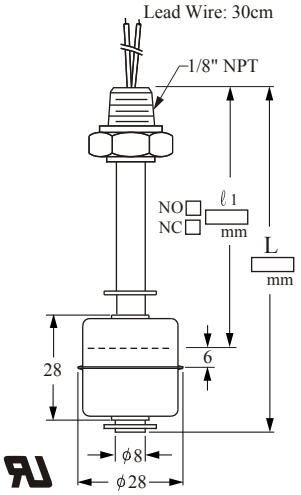
- Any size measuring range, but ϕ8mm stem Max. 500mm.
- Customized mounting thread specification are acceptable.
- Single or multiple contact form (point) are workable.
- Switch activation N.O. or N.C. are available.

▶ YFDSA□11



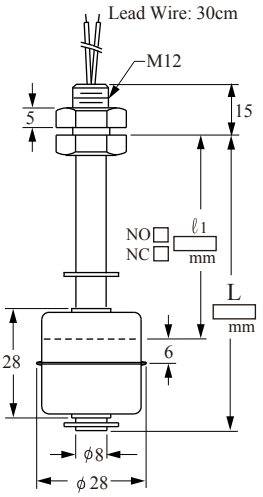
Washer: NBR

▶ YFDSB□11



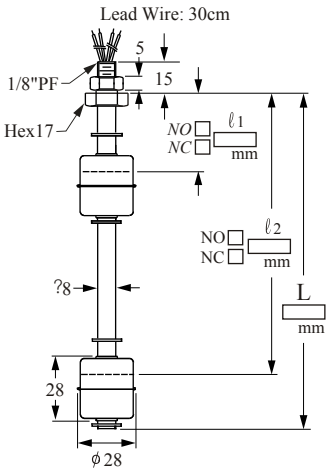
Washer: NBR

▶ YFDSC□11



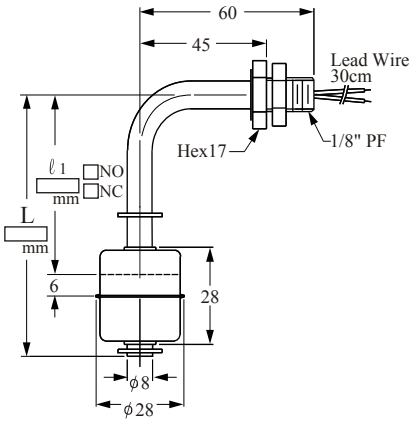
Washer: NBR

▶ YFDSA□12



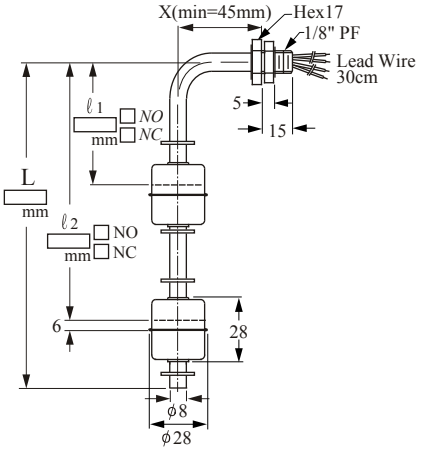
Washer: NBR

▶ YFDSA□21



Washer: NBR

▶ YFDSA□22



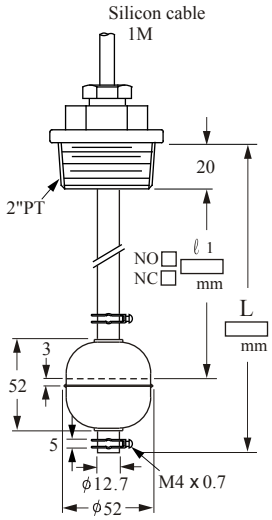
Washer: NBR

METAL SPECIAL TYPES

Below items are custom-built subject to special application place and existed equipment facilities. Their unique characters as follow:

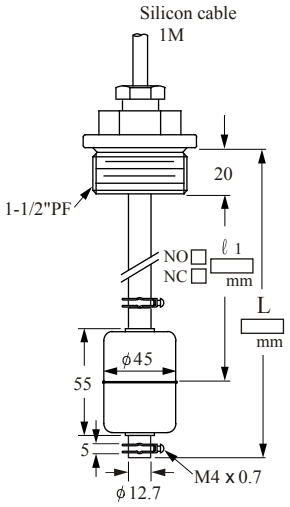
- Any size measuring range.
- Customized mounting thread specification are acceptable.
- Single or multiple contact form (point) are workable.
- Switch activation N.O. or N.C. are available.

▶ YFDSD □11



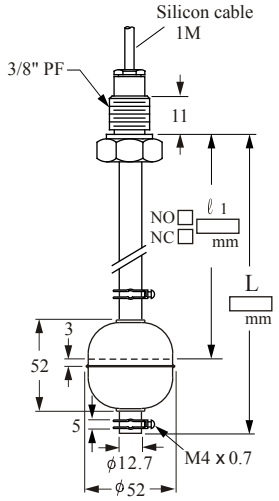
Washer: NBR

▶ YFDSE □11



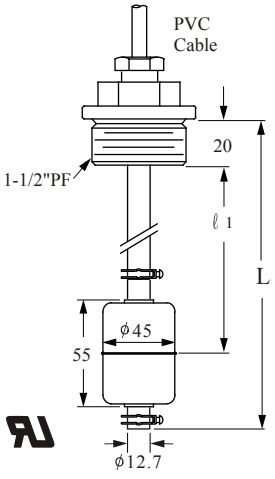
Washer: NBR

▶ YFDSF □11



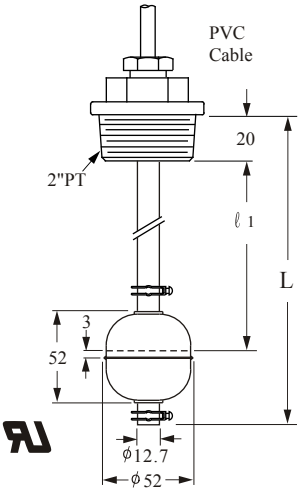
Washer: NBR

▶ YFD4503D



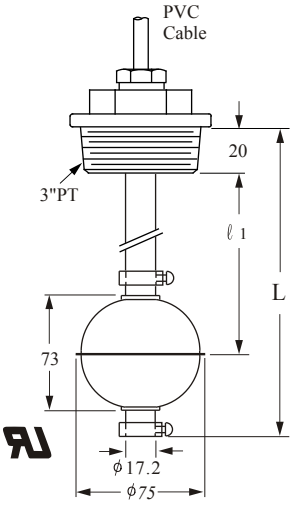
Washer: NBR

▶ YFD5003G



Washer: NBR

▶ YFD7503G



Washer: NBR

ORDER INFORMATION FOR METAL SPECIAL TYPE

YFD [S][A] [6] [1] [2] [D] [A] [0][5] [ ]

Type

FDSA Float : **RF-SA** φ28x28, Screw : 1/8"PF
FDSB Float : **RF-SB** φ28x28, Screw : 1/8"NPT
FDSC Float : **RF-SC** φ28x28, Screw : M12
FDSD Float : **RF-SD** φ52x52, Screw : 2"PT
FDSE Float : **RF-SE** φ45x55, Screw : 1-1/2"PF
FDSF Float : **RF-SF** φ52x52, Screw : 3/8"PF

Material of Wetted parts

0 : SUS304
6 : SUS316

Mounting

1 : Top or Bottom Mounting
2 : Side Mounting

Float Number

1~4 floats

Switching Capacity Max.

D: 50W 240Vac /200Vdc, SPST
G: 60W 220Vac, SPDT (only use for tube≧φ12.7)
K: 20W 150Vac /200Vdc, SPDT

Contact Form

A: Normal Open (N.O.) SPST **F :** 1 float 2 points
B: Normal Close (N.C.) SPST **H:** 1-N.O.,1-N.C.(2 floats)
C: 1AB SPDT

Lead wire Length (Unit=100mm)

03: 300mm (SA, SB, SC, Standard length) ※ 500mm per Unit
05: 500mm (below 500mm)
10: 1000mm (SD, SE, SF, Standard length)
15: 1500mm (1001~1500mm)

Material of Lead wire

C: PVC cable (80°C) ---- AWG22 X 2C X φ4
F : SILICON cable (200°C) ---- AWG24 X 2C X φ4
P : PVC (80°C) ---- AWG22
T : TEFLON (200°C) ---- AWG24 → For SA, SB, SC Type
X : XLPE (125°C) ---- AWG22 (Standard)