e-mail : finetek-sales@umail.hinet.net
http: //www.fine-tek.com

## ■ INTRODUCTION

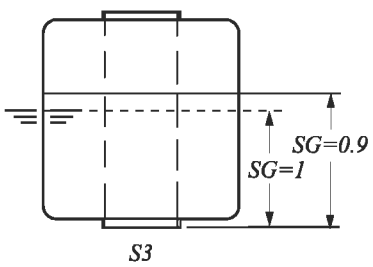
Since technologies of the product have more and more advance, the products need comply with a requirement for more safe, convenient and low cost. The float switches are extremely compact, simple and are easy to install on any small space. These switches are not effected by electrical inter ference. They 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 actua tion 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 causes the float rise with the liquid level. The reed switch inside the stationary stem will not be activated by the magnet inside the float.

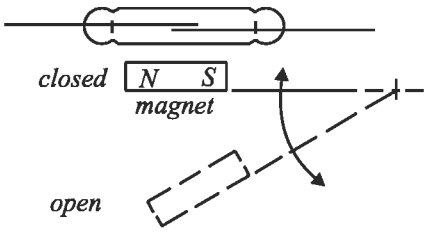
If your liquid has a high viscosity, you should specify largest size float that will provides a greatest buoy ant force to ensure the units operate normally. Because the float switches are activated by the mag netic field of permanent magnet inside the float, make sure the liquid is no iron powder or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




(Fig. 3)

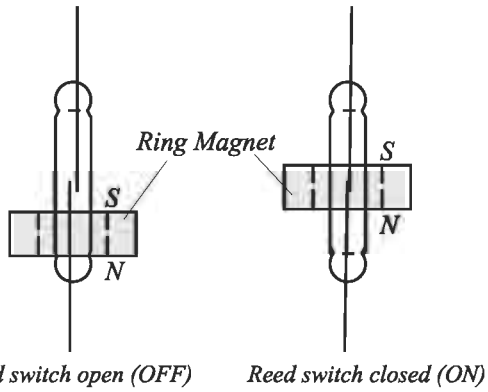
## ■ PRINCIPLE

Fig. 1 illustrates the method of pivot actuation (such as the FCH 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 electri cal 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 actu ation (such as the FC 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 cir cuit. When the magnetic field is moved away from the reed switch, the reed switch does not touch. The circuit is open.




(Fig. 2)

# PROPERTY OF PLASTIC

## ■ PROPERTY OF PLASTIC

| Material | Foodstuffs | Operation Temp. | Lubrication Oil | Solvent | Acid | Application |
|---|---|---|---|---|---|---|
| PVDF | OK | -30°C~120°C | OK | OK | OK | For use in electronics industry |
| Nylon | OK | -20°C~110°C | OK | OK | NO | For use in high temperature |
| Polysulfone | OK | -30°C~120°C | OK | NO | OK | For use in high temperature |
| PP | OK | -20°C~80°C | OK | OK | OK | Economical units |
| NBR | OK | -20°C~100°C | OK | OK | NO | Economical units |

## ■ PROPERTY OF GASKET

The gasket come in four materials, Please refer to the table below to choose a proper gasket to suit your application.

| | Physical Property | | | | Resistance to Solvent | | | | | | Resistance to Corrosion | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Material | Resistance to abrasion | Resistance to heat | Resistance to low temperature | Endurance | Gasoline | Benzene Toluene | Alcohol | Ether | Ketone | Ethyl acetate | Organic acid | Inorganic compound | Alkali |
| NBR | ◎ | 130°C | -10~ -20°C | ◎ | ◎ | X~△ | ◎ | X~△ | X | X~△ | X~△ | △ | ○ |
| EPDM | ○ | 150°C | -40~ -60°C | ◎ | X | △ | ◎ | ○ | ◎ | ◎ | X | ○ | ◎ |
| SILICON | △ ~ X | 200°C | -70~ -120°C | ◎ | X~△ | X~△ | ◎ | X~△ | ○ | △ | ○ | △ | ◎ |
| VITON | ○ | 200°C | -40°C | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ | ◎ |

◎ Excellent ○ Good △ Acceptable X Not good

# REED SWITCH PROTECTION

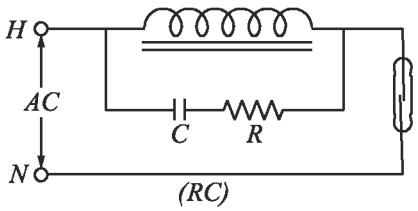
## ■ INDUCTIVE LOADS

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 (snub ber), varistor or clamping diodes are recom mended. (see Fig. 4a, Fig. 4b, Fig. 4c)

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

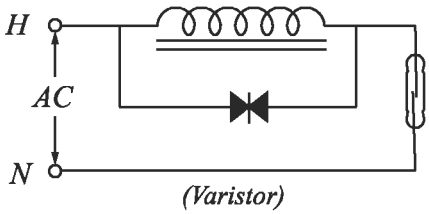
$$C=\frac{I^2}{10}\ (uF)$$

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



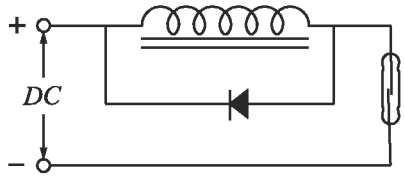

(RC)

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)

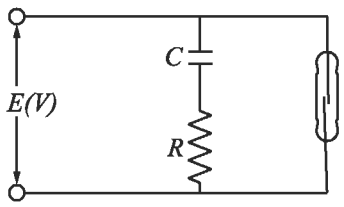



Fig. 5 (a)

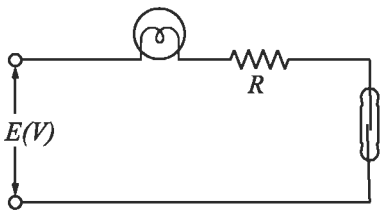
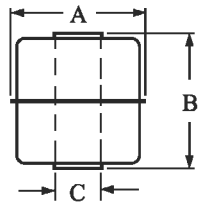
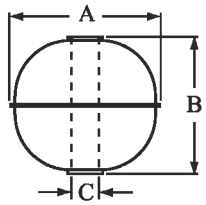
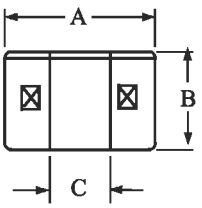
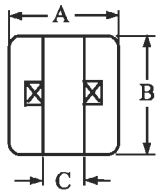
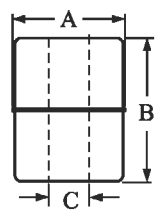


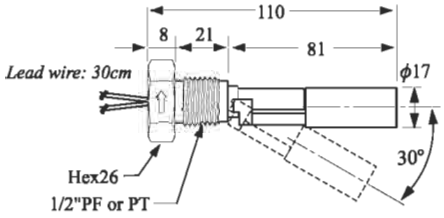

Fig. 5 (b)

# FLOAT SPECIFICATIONS

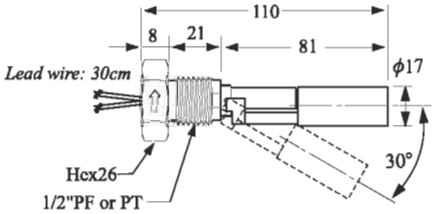
| MODEL | TYPE | ϕA × B × ϕC | S.G. | Max. Pressure (kg/cm²) | Weight ( g ) | Material / Color | Max. Temp. (°C) |
|---|---|---|---|---|---|---|---|
|   | S1 | 28 × 28 × 9.5 | E>0.8 | 10 | 8 | SUS316 | 200 |
| | S3 | 45 × 55 × 15 | E>0.65 | 12 | 36 | SUS316 | 200 |
| | S6 | 75 × 108 × 19 | E>0.5 | 10 | 145 | SUS 304 | 200 |
|   | S2 | 41 × 38 × 11 | E>0.7 | 45 | 19 | SUS 316 | 200 |
| | S4 | 52 × 52 × 15 | E>0.55 | 30 | 33 | SUS 316 | 200 |
| | S5 | 75 × 73 × 19 | E>0.55 | 30 | 103 | SUS 304 | 200 |
| | S7 | 30 × 29 × 9.5 | E>0.75 | 30 | 7 | SUS316 | 200 |
|   (hollow) | P1 | 25 × 15 × 10 | E>0.8 | 4 | 4 | PP / white black | 80 |
| | P2 | 25 × 25 × 10 | E>0.7 | 4 | 5 | PP / white black | 80 |
| | P3 | 48 × 45 × 18.5 | E>0.6 | 4 | 37 | PP / black | 80 |
| | P4 | 20 × 25 × 10 | E>0.8 | 4 | 5 | PP / black | 80 |
| | P5 | 20 × 20 × 8.1 | E>0.8 | 4 | 4 | PP / black | 80 |
| | | | | | | | |
|   (foam) | Q6 | 20 × 20 × 7.5 | E>0.8 | ATM | 3.5 | PP / white | 80 |
| | Q7 | 25 × 25 × 10 | E>0.8 | ATM | 6.5 | PP / white | 80 |
| | N1 | 25 × 15 × 10 | E>0.8 | ATM | 4.5 | NBR / black | 100 |
| | N2 | 18.5 × 26 × 10 | E>0.8 | ATM | 2.6 | NBR / black | 100 |
| | N3 | 19 × 20 × 10 | E>0.8 | ATM | 2.4 | NBR / black | 100 |
| | N4 | 17.5 × 25 × 10 | E>0.8 | ATM | 2.4 | NBR / black | 100 |
| | N5 | 30 × 45 × 10 | E>0.5 | ATM | 11.3 | NBR / black | 100 |
|   Order (hollow) | F1 | 55 × 70 × 22 | E>0.9 | 3 | 100 | PVDF | 120 |
| | F2 | 42 × 44 × 14 | E>0.8 | 3 | 20 | PP | 80 |
| | F3 | 45 × 45 × 20 | E>0.5 | 3 | 25 | PP | 80 |

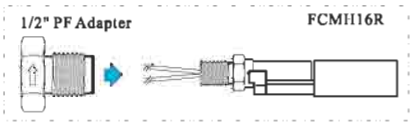
# METAL SINGLE SWITCH TYPES NEW

## ▶ FD MH16

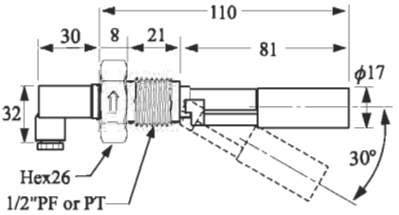



## ▶ FD MH16A (MH16R+Adapter)

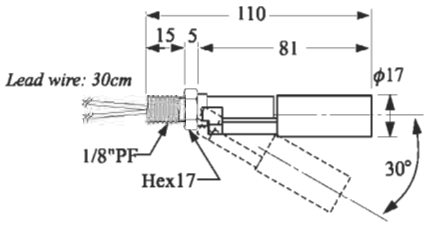


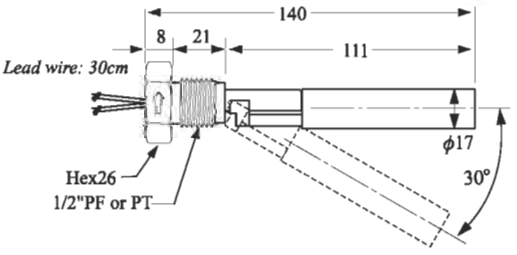

## ▶ FD MH16C




## ▶ FD MH16R




## ▶ FD MH26

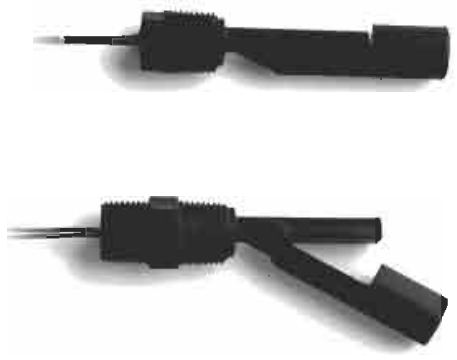



## ■ SPECIFICATIONS

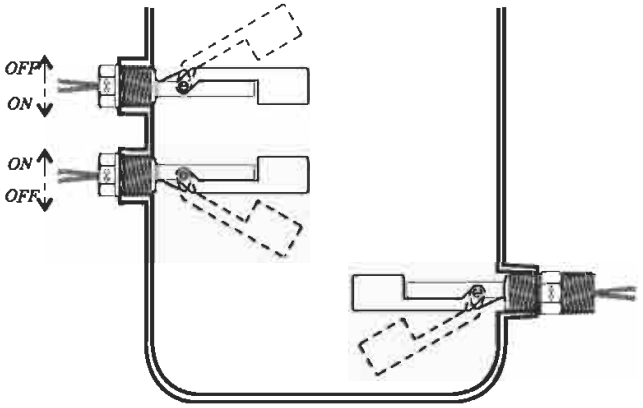
| Type | Material | Switching Capacity Max. | Switching Voltage Max. | Switching Current Max. | Carry Current Max. | Lead Wire | Max. Pressure | Operating Temp. | Suitable Sp. Gr. |
|---|---|---|---|---|---|---|---|---|---|
| FDMH16<br>FDMH26 | SUS304 | 50W/SPST | 240VAC<br>200VDC | 0.5A | 1A | XLPE or TEFLON | 5 kg/cm² | -10~120°C<br>(Max.200°C) | 0.8<br>0.7 |

# PLASTIC OH TYPES

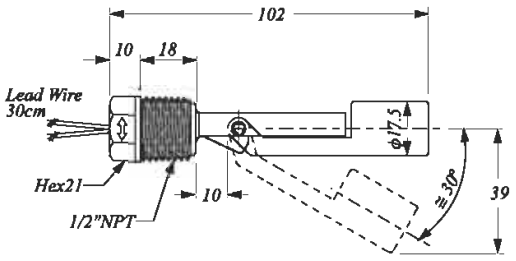
## ▶ FC H4 / H5

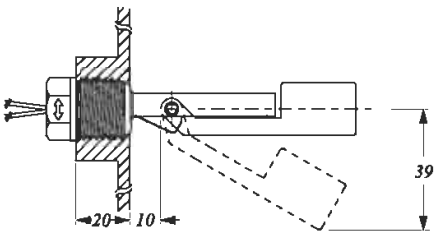


### ■ Installation / N.C. / N.O. Action Position



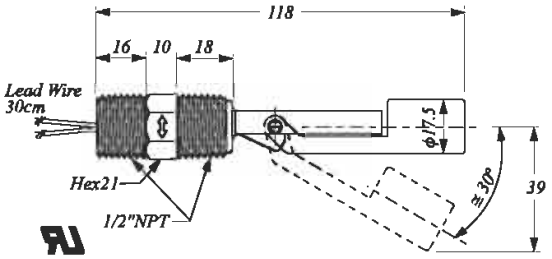

### ■ FC H41P

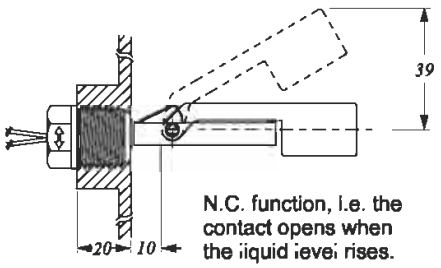



N.O. function, i.e. the contact closes when the liquid level rises.

### ■ FC H51P




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

## ■ SPECIFICATIONS

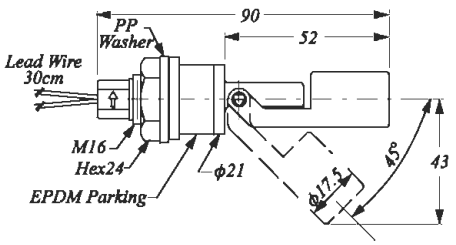
| Type | Material | Switching Capacity Max. | Switching Voltage Max. | Switching Current Max. | Carry Current Max. | Lead Wire | Max. Pressure | Operating Temp. | Suitable Sp. Gr. | Weight |
|---|---|---|---|---|---|---|---|---|---|---|
| FC H41PD<br>FC H51PD | PP | 50W/SPST | 240VAC<br>200VDC | 0.5A | 1A | XLPE | 4 kg/cm$^2$ | -20~80°C | 0.65 | 20g<br>25g |

# PLASTIC OH TYPES

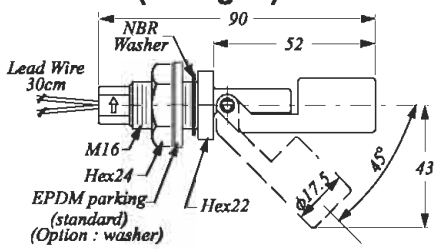
## ▶ FC H2 / H3

- For models FCH2 and FCH3, 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 8).
- OEM customers are welcome.

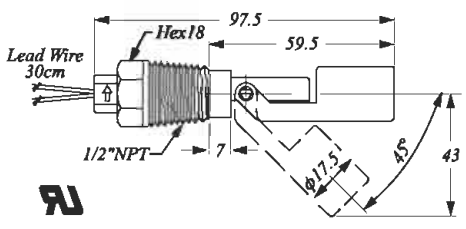
### ■ Optional
### FC H21PDO(Round)




### ■ Standard
### FC H21PDD (Hexagon)

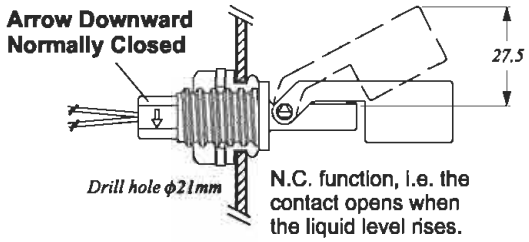



### ■ FC H31P

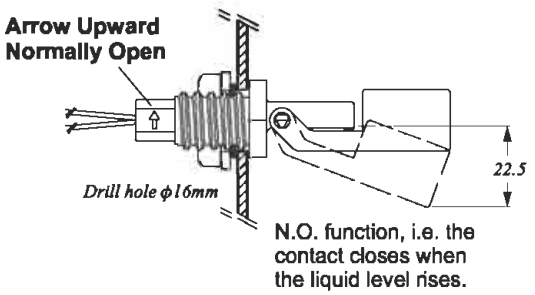



## ■ Installation / N.C. / N.O. Action Position

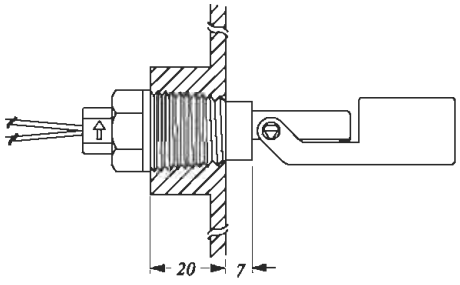
### [ External mounting ]




### [ Internal mounting ]

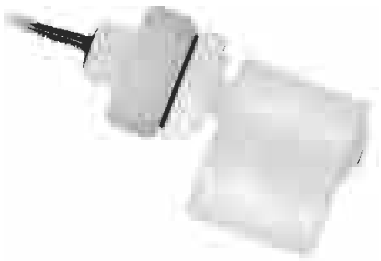


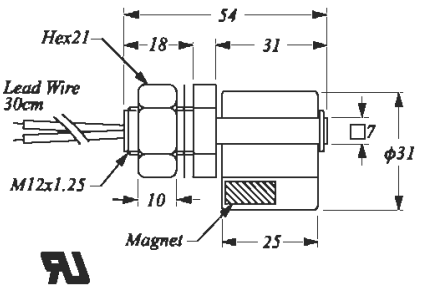

### [ External mounting ]



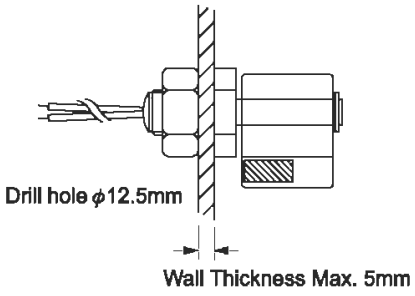
# PLASTIC OH TYPES

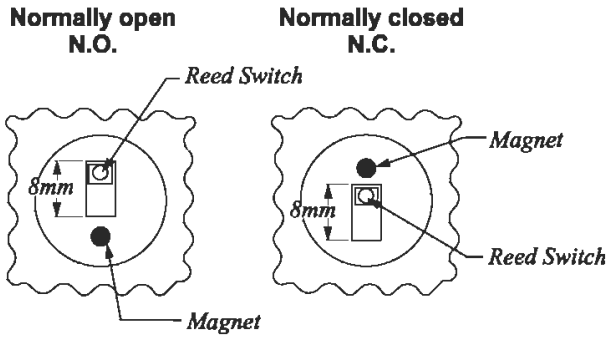
## ▶ FCH1






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



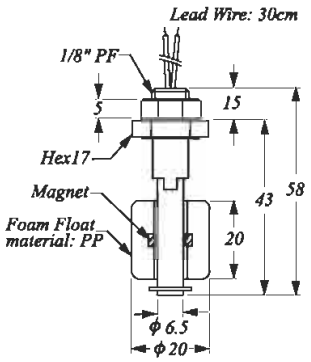

- All the products in this range come with the UL E161587 approval.
- All the products in this range are designed to be mounted on the side.
- For the specific gravity of water is used as a reference point in calculating specific gravity.

## ■ SPECIFICATIONS

| Description \ Type | FCH11PD | FCH21PD<br>FCH31PD | FCH23FD<br>FCH33FD | FCH24YD<br>FCH34YD |
|---|---|---|---|---|
| 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/cm²) | ATM | 4 | 2 | |
| Operating Temperature | -20~80°C | | -20~120°C | |
| Material | PP | | PVDF | Nylon |
| Suitable Specific Gravity | 0.78 | 0.75 | 0.85 | 0.8 |
| Weight | 25 g | H21: 22 g<br>H31: 21 g | 25 g | 23 g |

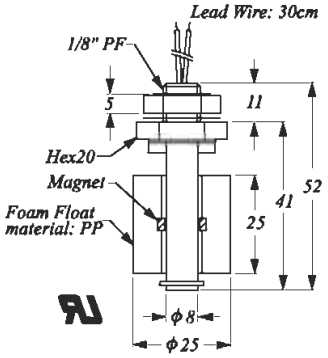
# PLASTIC OV TYPES

## ▶ FC V11



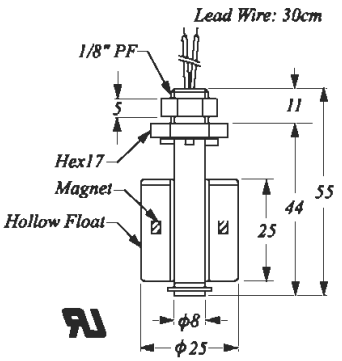

Drill hole $\phi$10mm

## ▶ FC V21




Drill hole $\phi$10mm

## ▶ FC V31, 33, 34



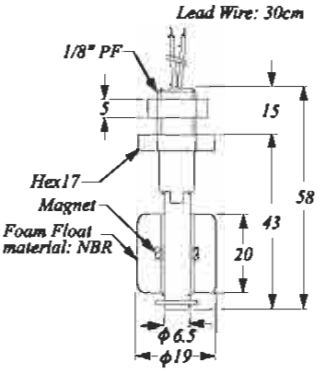

Drill hole $\phi$10mm

## ■ SPECIFICATIONS

| Description \ Type | FC V11PF | FC V21PD | FC V31PD | FC V33FD | FC V34YD |
|---|---|---|---|---|---|
| Switching Capacity Max. | 10W SPST | 50W SPST | 50W SPST | 50W SPST | |
| Switching Voltage Max. | 125VAC Break Down 250VAC | 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 | YES | | YES | | |
| Max. Pressure (Kg/cm²) | ATM | | 4 kg/cm² | 2 kg/cm² | |
| Operating Temperature | -20~80°C | | -20~80°C | -20~120°C | -20~110°C |
| Material | PP | | PP | PVDF | Nylon |
| Suitable Specific Gravity | 0.8 | | 0.7 | 0.85 | 0.8 |
| Weight (g) | 12 g | 18 g | 15 g | | |

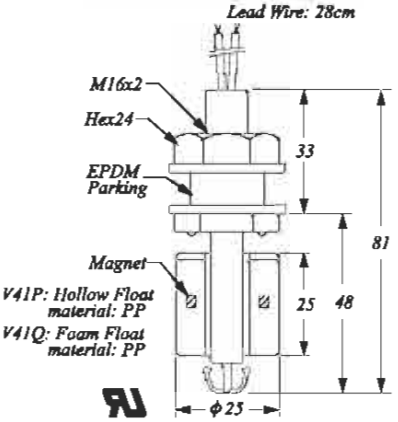
# PLASTIC OV TYPES

## ▶ FC V12



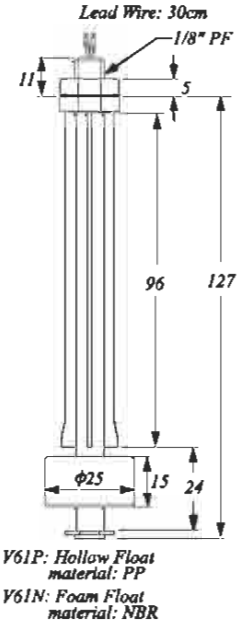

Drill hole ϕ10mm

## ▶ FC V41P, V41Q



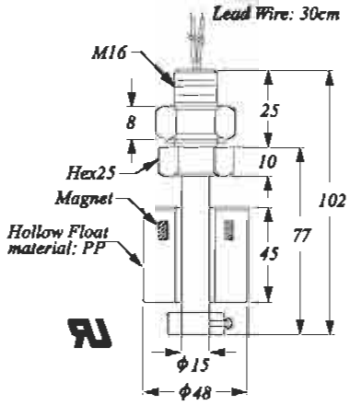

Drill hole ϕ16mm

## ▶ FC V61, V61N



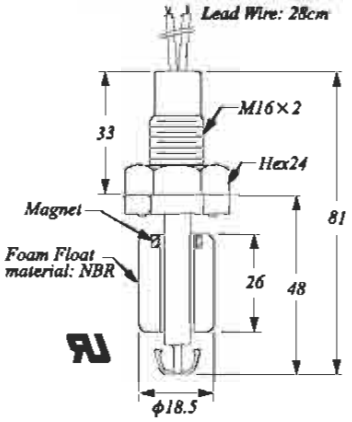

Drill hole ϕ10mm

## ▶ FC V81



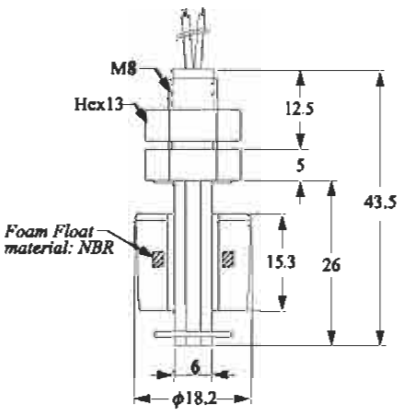

Drill hole ϕ16mm

## ▶ FC V41N




Drill hole ϕ16mm

## ▶ FC V51P



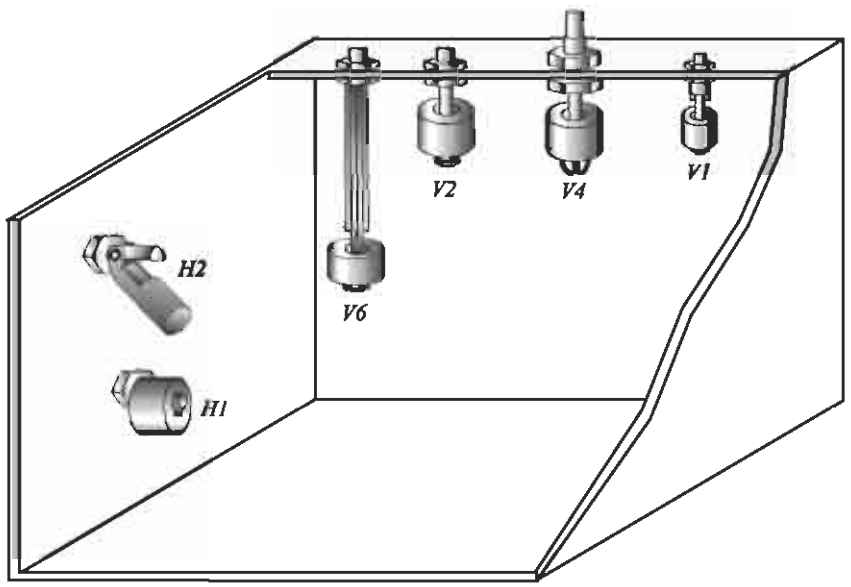

Drill hole ϕ8.5mm

# PLASTIC OV TYPES

## ■ SPECIFICATIONS

| Description \ Type | FC V11NF | FC V61PF<br>FC V61NF | FC V41PD<br>FC V41QD | FC V81PD | FC V41ND | FC V51PD |
|---|---|---|---|---|---|---|
| **Switching Capacity Max.** | 10W SPST | | 50W SPST | | | |
| **Switching Voltage Max.** | 125VAC<br>(Break Down 250VAC) | | 240VAC / 200VDC | | | |
| **Switching Current Max. (A)** | 0.5A | | | | | |
| **Carry Current Max. (A)** | 1A | | | | | |
| **Lead Wire** | XLPE<br>AWG22 | UL 1007 AWG22 PVC | | | XLPE AWG22 | |
| **Reversible Switch Action** | NO | NO | YES | NO | NO | NO |
| **Max. Pressure (kg/cm²)** | 2 kg/cm² | V61P: 4kg/cm²<br>V61N: ATM | V41P: 4kg/cm²<br>V41Q: ATM | 4 kg/cm² | ATM | 4 kg/cm² |
| **Operating Temperature** | -20 ~100°C | -20~80°C | | | -20 ~100°C | -20~80°C |
| **Material** | PP (except V11N, V61N, V41N: NBR float) | | | | | |
| **Suitable Specific Gravity** | 0.8 | 0.7 ~ 0.8 | | 0.6 | 0.8 | 0.8 |
| **Weight (g)** | 12 g | 19 g | 32 g | 180 g | | |

## ■ TYPICAL APPLICATION



# ORDER INFORMATION

**FC V21 P D A 03 P**

**Type**

**H1~H5** (Side Mounting ) **V1~V8** (Top or botton Mounting)

**Material of Wetted parts**

**1 :** PP
**3 :** PVDF
**4 :** Nylon

**Material of Float**

**P:** PP (hollow) **F:** PVDF **Y :** Nylon
**Q:** PP (foam) **N:** NBR

**Switching Capacity Max.**

**D :** 50W 200VDC/240VAC SPST
**F :** 10W 125VAC SPST
**H:** 3W 30VAC/60VDC SPDT
**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 (L: unit=10cm)**

**03:** 30cm (Standard length) ※except of (FCV4, V5 standard by 28cm)
**05:** 50cm
**10:** 100cm (1 Meter)
**15:** 150cm

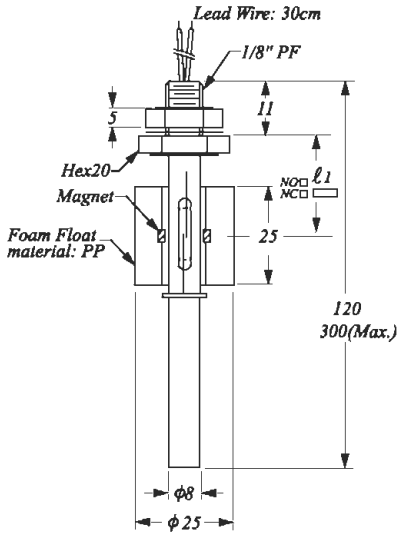
**Material of Lead wire**

**C :** PVC cable (80°C) ---- AWG22 x2C x$\phi$4
**D :** XLPVC (105°C) ---- AWG22
**F :** SILICON cable (200°C) ---- AWG24 x2C x$\phi$4
**P :** PVC (80°C) ---- AWG22
**S :** SILICON (200°C) ---- AWG22
**T :** TEFLON (200°C) ---- AWG24
**X :** XLPE (125°C) ---- AWG22

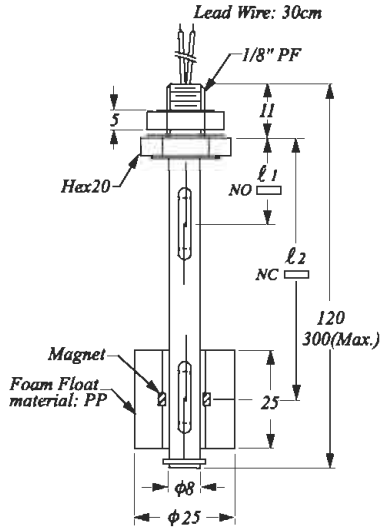
※"A" (Normal Open) contact form is our standard specified switch activation, others contact form and target lead wire length subject to above data, except of above, please refer pages 6, 8, 9 and 11.

# PLASTIC SPECIAL TYPES

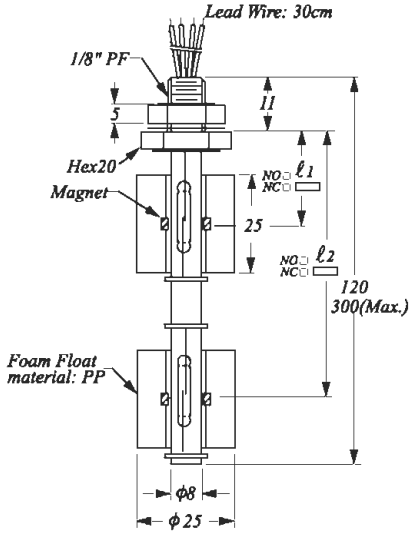
## ▶ FC PV1




## ▶ FC PV2




## ▶ FC PV3




● 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:

- FCPV1 One float for one level activation switch location by custom-order.
- FCPV2 One float with 2 reed switches, applicable for high / low two level activation, especial design by one float to drive two contacts activation.
- FCPV3 Two floats drive with two independent reed switches, the compared difference with FCPV2 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

**FC** **PV1** **2** **D** **A** **05** **P**

**Type**

**PV1** (Vertical Mounting, Single Float Single Switch)
**PV2** (Vertical Mounting, Single Float Dual Switch)
**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

**Switching Capacity Max.**

**D:** 50W 200VDC/240VAC SPST
**F :** 10W 125VAC SPST
**H:** 3W 30VAC/60VDC SPDT
**K:** 20W 150VAC/200VDC SPDT

**Contact Form**

**A:** Normally Open (N.O.) SPST
**B:** Normally Close (N.C.) SPST

**Lead wire Length** (L: Unit=10cm)

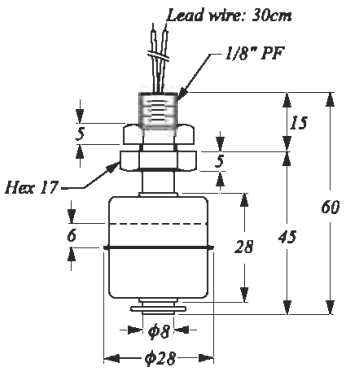
**03:** 30cm ( Standard length)
**05:** 50cm
**15:** 150cm
**20:** 200cm

**Material of Lead wire**

**P:** PVC ---- 80°C
**X:** XLPE ---- 125°C

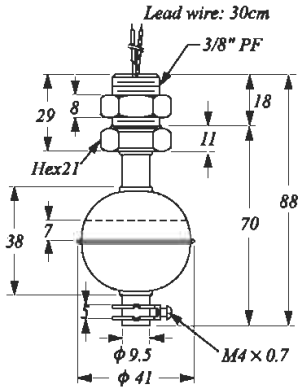
# METAL TYPES

## ▶ FD 30□1/ FD 3591



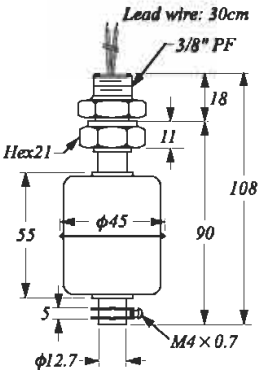

Drill hole ϕ10mm

## ▶ FD 40□1



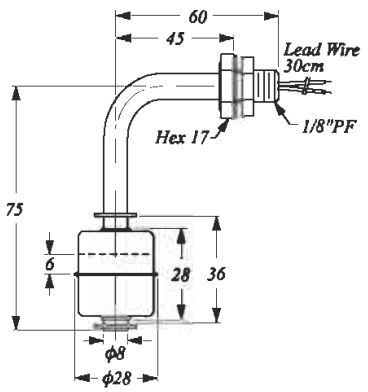

Drill hole ϕ17mm

## ▶ FD 45□1



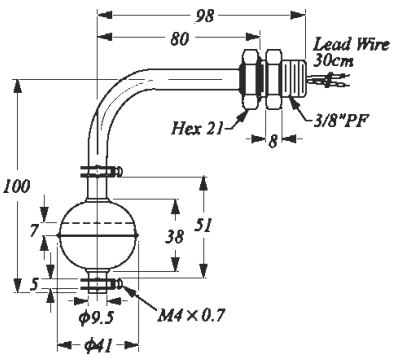

Drill hole ϕ17mm

## ▶ FD 30□2



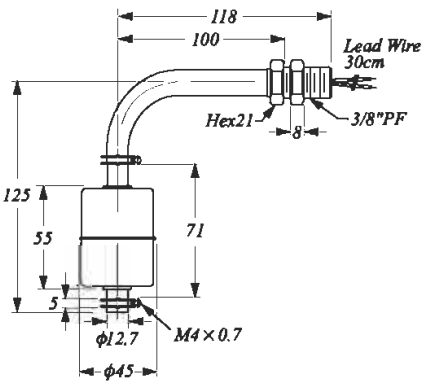

Drill hole ϕ10mm

## ▶ FD 40□2




Drill hole ϕ17mm

## ▶ FD 45□2



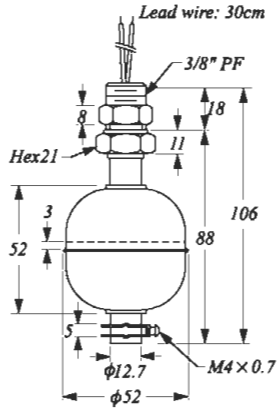

Drill hole ϕ17mm



FineTek

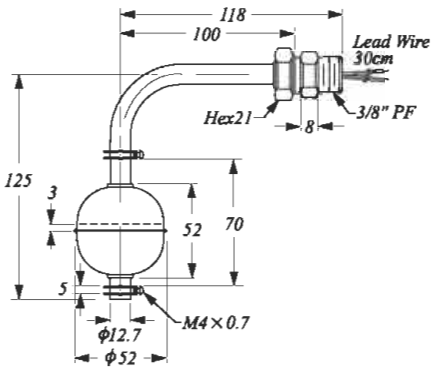
# METAL TYPES

## ▶ FD 50□1



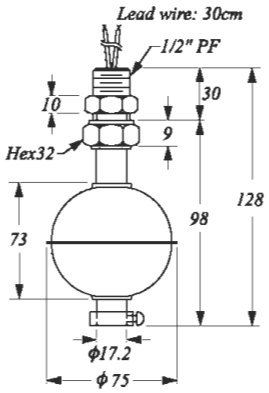

Drill hole ϕ17mm

## ▶ FD 50□2




Drill hole ϕ17mm

## ▶ FD 75□1




Drill hole ϕ21mm

## ■ SPECIFICATIONS

| Description \ Type | FD30□1D FD30□2D | FD40□1D FD40□2D | FD45□1D FD45□2D | FD50□1D FD50□2D | FD75□1G | FD10□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/cm²) | 10 | 30 | 12 | 30 | 30 | 10 |
| Operating Temperature | -10~120°C (OPTION 200°C) | | | | | |
| Material | Stainless Steel SUS304, 316 | | | | | |
| Suitable Specific Gravity | 0.8 | 0.7 | 0.65 | 0.55 | 0.55 | 0.5 |

# ORDER INFORMATION

**FD** **30** **6** **2** **D** **A** **10**

**Type**

**30** Float : $\phi$28x28, Screw : 1/8"PF
**35** Float : $\phi$30x29, Screw : 1/8"PF
**40** Float : $\phi$41x38, Screw : 3/8"PF
**45** Float : $\phi$45x55, Screw : 3/8"PF
**50** Float : $\phi$52x52, Screw : 3/8"PF
**75** Float : $\phi$75x70, Screw : 1/2"PF
**10** Float : $\phi$75x108, 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 200VDC/240VAC SPST
**F :** 10W 125VAC SPST
**G:** 60W 220VAC SPDT (only use for tude $\geqq\phi$12.7)
**H:** 3W 30VAC / 60VDC SPDT (only use for tude $\leqq\phi$9.5)
**K:** 20W 150VAC/200VDC SPDT

**Contact Form**

**A:** Normal Open (N.O.) SPST
**B:** Normal Close (N.C.) SPST
**C:** 1AB SPDT
**D:** N.C. Reversible
**E:** N.O. Reversible

**Lead wire Length** (XLPE 125°C) **L:** Unit=10cm

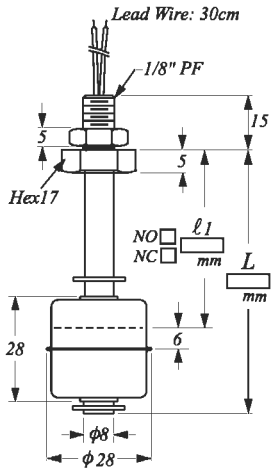
**03:** 30cm (Standard length)
**05:** 50cm
**15:** 150cm

# METAL SPECIAL TYPES

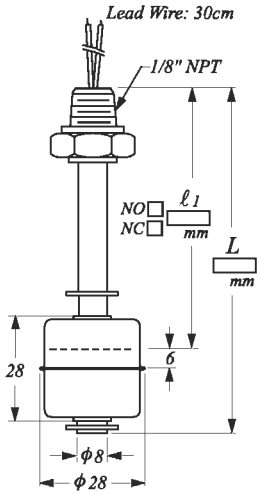
Below items are custom-built subject to special application place and existed equipment facilities. Their unique characters as follow:

- Any size measuring range, but $\phi$8mm stem Max. 500mm.
- Customized mounting thread specification are acceptable.
- Single or multiple contact form (point) are workable.

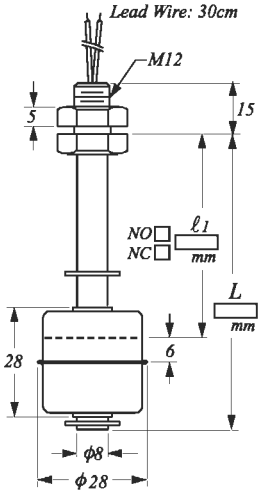
## ▶ FDSA□11



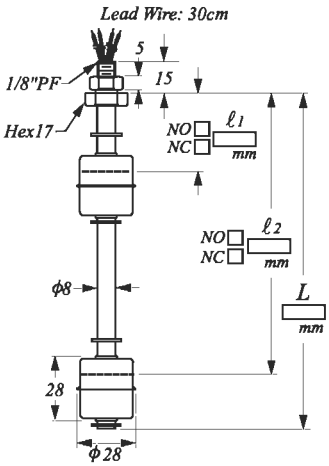

## ▶ FDSB□11



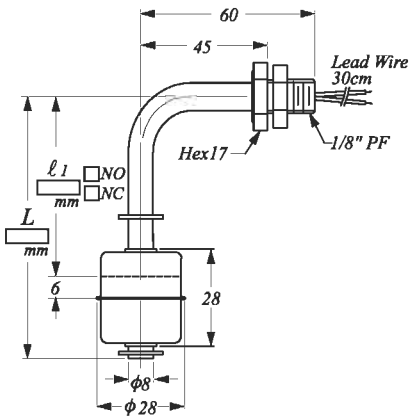

## ▶ FDSC□11



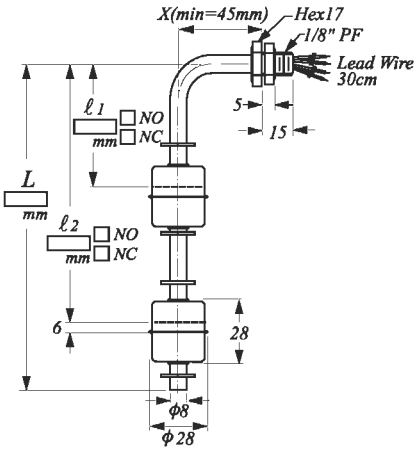

## ▶ FDSA□12




## ▶ FDSA□21




## ▶ FDSA□22

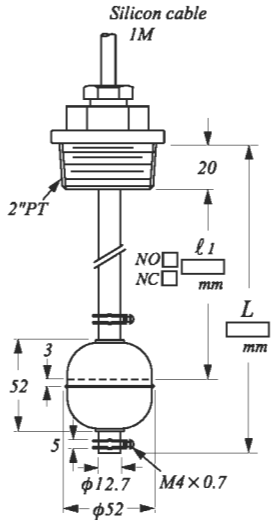


# METAL SPECIAL TYPES

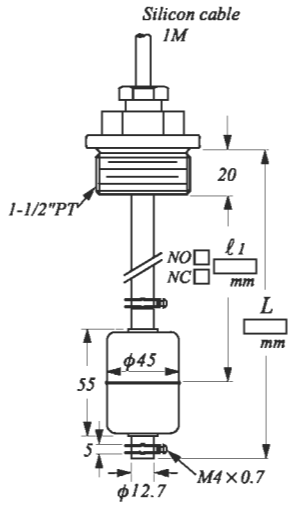
Below items are custom-built subject to special application place and existed equipment facilities. Their unique characters as follow:

- 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.

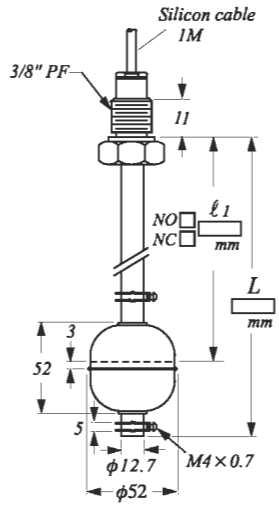
### ▶ FDSD□11




### ▶ FDCSE□11




### ▶ FDSF□11



# ORDER INFORMATION

**FD** **SA** **6** **1** **2** **D** **A** **05**

**Type**

**SA** Float : $\phi$28x28, Screw : 1/8"PF
**SB** Float : $\phi$28x28, Screw : 1/8"PT
**SC** Float : $\phi$28x28, Screw : M12
**SD** Float : $\phi$52x52, Screw : 2"PT
**SE** Float : $\phi$45x55, Screw : 1-1/2"PF
**SF** Float : $\phi$75x108, Screw : 3/8"PF

**Material of Wetted parts**

**0 :** SUS304
**6 :** SUS316
**B:** Brass

**Mounting**

**1 :** Top or Bottom Mourting (tube onlly)
**2 :** Side Mounting

**Float Number**

**1~2** floats

**Switching Capacity Max.**

**D:** 50W 200VDC/240VAC SPST
**F :** 10W 125VAC SPST Break Down 220VAC
**G:** 60W 220VAC SPDT (only use for tube $\geqq\phi$12.7)
**H:** 3W 30VAC / 60VDC SPDT (only use for tube $\leqq\phi$9.5)
**K:** 20W 30VAC / 60VDC SPDT (only use for tube $\leqq\phi$9.5)

**Contact Form**

**A:** Normal Open (N.O.) SPST
**B:** Normal Close (N.C.) SPST
**C:** 1AB SPDT

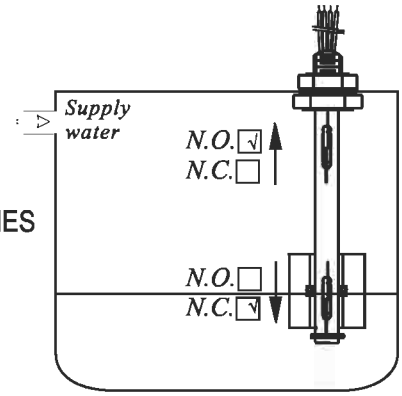
**Lead wire Length** (Silicon Cable) **L:** Unit=10cm

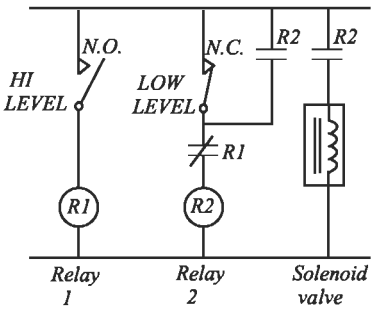
**03:** 30cm (SA, SB, SC, Standard length)
**05:** 50cm
**10:** 100cm (SD, SE, SF, Standard length)
**15:** 150cm

※ Tolerance of the total product length is ±5mm.
※ Characteristics, specifications and dimensions are subject to change without notice.
※ Please contact your nearest distributing office for further informations.

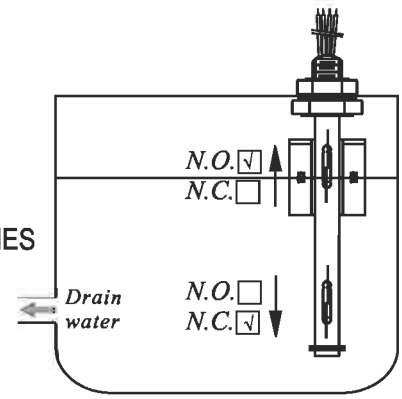
# TYPICAL WIRING DIAGRAMS

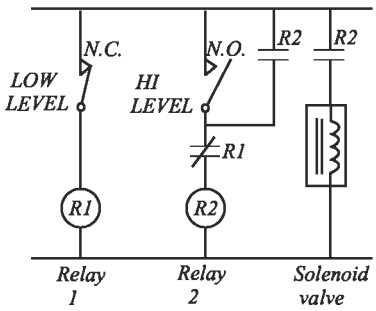
✻ AUTO SUPPLY CASE:
SINGLE FLOAT DUAL SWITCHES



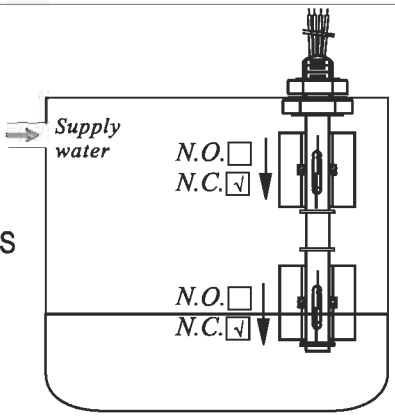



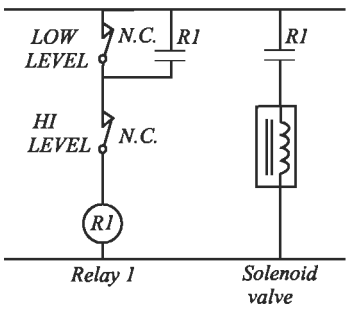

✻ AUTO DRAIN CASE:
SINGLE FLOAT DUAL SWITCHES




✻ AUTO SUPPLY CASE:
DUAL FLOATS DUAL SWITCHES




✻ AUTO DRAIN CASE:
DUAL FLOATS DUAL SWITCHES