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# Mini Float Level Switch

РусАвтоматизация®

FineTek

*Innovation · Quality · Sharing*

# PRODUCT INTRODUCTION

## ■ INTRODUCTION

The reed switch relies on two basic scientific principles namely: buoyancy and magnetism. Buoyancy causes the float (which contains a magnet) to rise with the liquid and magnetism helps open and close the switch.
Since this product's this product has been introduced to the market, it has seen significant improvement and advances with regards to convenience, safety and lowering costs.

The float switches are extremely compact, simple and are easy to install on any small locations.

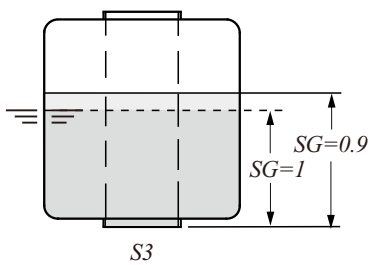
These switches are not affected by electrical interference and can withstand chemicals, high temperatures and pressures if the correct material of float switch is selected.

## ■ LIQUID PROPERTIES AND FLOATS

The switch's float should always have a specific gravity (SG) less than the liquid that holds the float.
(SG float < SG liquid)
When the liquid level rises the float will rise up due to its buoyancy. The float's upward movement will actuate the switch and close the circuit.

Different float materials can be used to ensure the float's SG level is less than the liquid. (Water's SG level is 1 while gasoline SG levels tend to be less than 1).

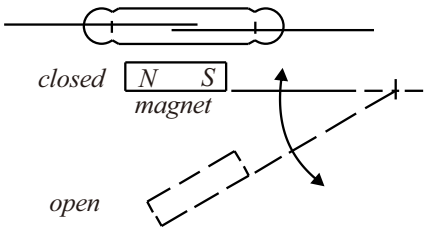
Because the float switches are activated by the magnetic field inside the float, make sure the liquid contains no iron traces or substances that can induce magnetic interference.




*(Fig. 3)*

## ■ WORKING PRINCIPLE

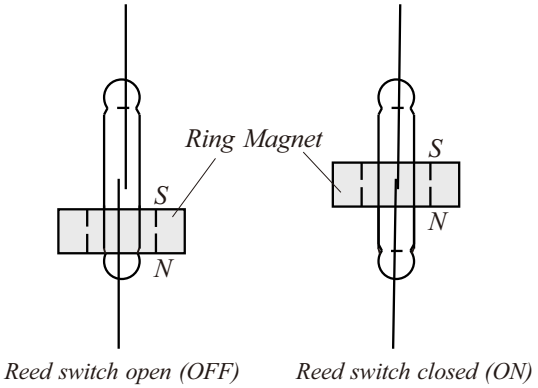
Fig. 1 illustrates the pivot activation (FCH Type reed switch). When float's magnet is moved close to the switch's stationary stem, the float magnet pushes the stem's switch circuit together and closes the electrical circuit. When the float magnet is moved away from the stem, the switch circuit separates and the circuit is opened.




*(Fig. 1)*

Fig. 2 illustrates perpendicular activation (FC V TYPE float reed switches). When the liquid level rises and pushes the float up, the float's ring magnet (sealed in the float) moves close to the switch's stationary stem.

The magnet pushes the circuit together and when it makes contact, it closes the electrical circuit. When the float magnet moves away from the switch, the circuit contact is released and the switch is opened.




*(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 | ● | ● | ● | ● | | | |
| $CH_3(CH_2)_2CH_3$ | | 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 °C | Temp °F | Plastic PVC | Plastic PP | Plastic PVDF | Plastic PTFE | Rubber NBR | Stainless 304 | Stainless 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 | | 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 | | △ | | ● | | | |
| $CH_3COC_2H_5$ | | 80 | 176 | | | | ● | | | |
| Potassium Chromate | | 40 | 104 | ● | ● | ● | ● | ● | | |
| $K_2CrO_4$ | | 80 | 176 | | ○ | ● | ● | ○ | | |

# REED SWITCH PROTECTION

## ■ INDUCTIVE LOADS

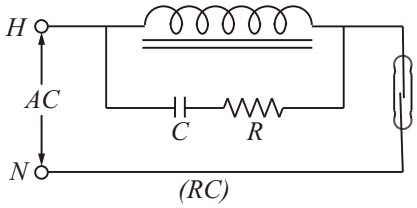
When using reed switches for inductive loads such as motors, relay coil, solenoids, etc., the contact points will sometimes be subjected to high voltages. Such high induced voltages may damage the reed switch or significantly reduce its life.

Therefore, circuit protectors such as: RC snubbers, varistors or clamping diodes are recommended. (see Fig. 4a, Fig. 4b, Fig. 4c)

■ Do not directly connect the solenoid valve,motor or magnetic switch.

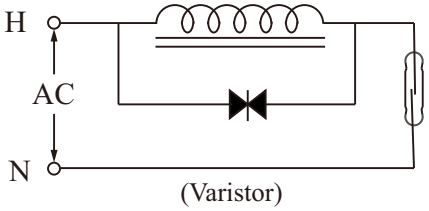
$$C=\frac{I^2}{10}\ (uF)$$

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



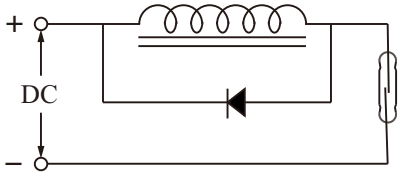

*(RC)*

*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 contact points will be subjected to electrical surges.Therefore, protective circuits such as: surge suppressors or current limiting resistors are recommended. (Fig. 5a, Fig. 5b)

Therefore, circuit protectors such as: RC snubbers, varistors or clamping diodes are recommended (Fig. 5a, Fig. 5b)

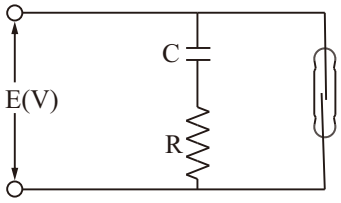



Fig. 5 (a)

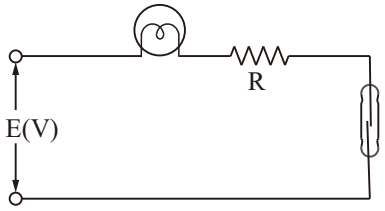
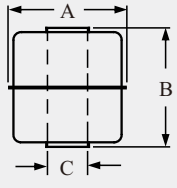
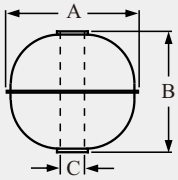
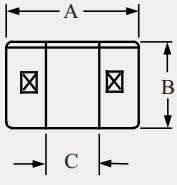
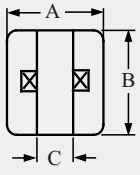
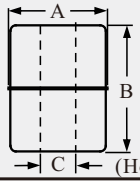
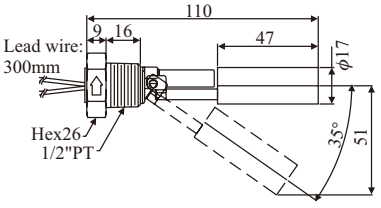



Fig. 5 (b)

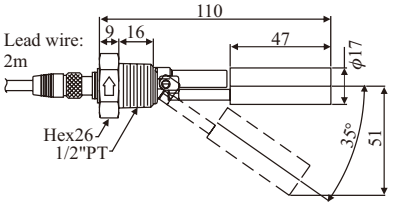
# FLOAT SPECIFICATIONS

| MODEL | TYPE | $\phi$A xB x$\phi$C | S.G. | Max. Pressure ($kg/cm^2$) | Weight (g) | Material/Color | Max. Temp. (°C) |
|---|---|---|---|---|---|---|---|
|  | **S1** | 28x28x9.5 | E>0.7 | 10 | 8 | SUS 316 / 316L | 200 |
| | **S3** | 45x55x15 | E>0.65 | 12 | 37.6 | SUS 316 | 200 |
| | **S6** | 75x108x20 | E>0.5 | 10 | 165 | SUS 316 | 200 |
| | **S13** | 38x50x15 | E>0.62 | 12 | 22.9 | SUS 316L | 200 |
|  | **S2** | 41x38x11 | E>0.7 | 35 | 19.5 | SUS 316 | 200 |
| | **S4** | 52x52x15 | E>0.55 | 30 | 33.4 | SUS 316 | 200 |
| | **S5** | 75x73x20 | E>0.70 | 30 | 102.4 | SUS 316 | 200 |
| | **S7** | 30x28x9.5 | E>0.75 | 25 | 8 | SUS 316 / 316L | 200 |
| | **S8** | 100x100x20 | E>0.5 | 15 | 249.7 | SUS 304 | 200 |
| | **S9** | 150x150x30 | E>0.45 | 15 | 534 | SUS 304 | 200 |
| | **S10** | 30x32x9.5 | E>0.75 | 50 | 8.6 | SUS 316 | 200 |
| | **S11** | 28x32x9.5 | E>0.82 | 30 | 8.1 | SUS 316 | 200 |
|  (Hollow) | **P1** | 25x15x10 | E>0.65 | 4 | 3.5 | PP / white / black | 80 |
| | **P2** | 25x25x10 | E>0.7 | 4 | 5 | PP / white / black | 80 |
| | **P3** | 48x45x18.5 | E>0.6 | 5 | 35.5 | PP / black | 80 |
| | **P4** | 20x25x10 | E>0.7 | 4 | 3.7 | PP / black | 80 |
| | **P5** | 20x20x8.1 | E>0.75 | 4 | 4 | PP / black | 80 |
| | **P8** | 18.2x15.3x7.2 | E>0.8 | 4 | 1.82 | PP / black | 80 |
|  (Foam) | **Q6** | 20x20x7.5 | E>0.75 | ATM | 3.5 | PP / white | 80 |
| | **Q7** | 25x25x8.8 | E>0.7 | ATM | 6.7 | PP / white | 80 |
| | **N1** | 25x15x10 | E>0.5 | ATM | 2.7 | NBR / black | 100 |
| | **N2** | 18.5x26x10 | E>0.7 | ATM | 3.3 | NBR / black | 100 |
| | **N4** | 17.5x25x10 | E>0.65 | ATM | 2.5 | NBR / black | 100 |
| | **N5** | 30x45x12.8 | E>0.5 | ATM | 11.5 | NBR / black | 100 |
|  (Hollow) | **F2** | 42x44x14 | E>0.45 | 5 | 18.5 | PP | 80 |
| | **F3** | 45x45x20 | E>0.65 | 5 | 35.7 | PP | 80 |
| | **F4** | 48x62x18 | E>0.8 | 5 | 65.3 | PVDF | 120 |

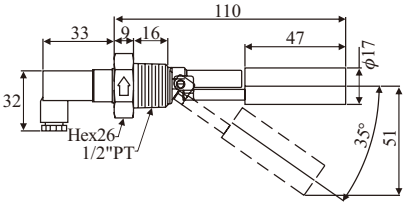
### ▶ FD MH50/ 56



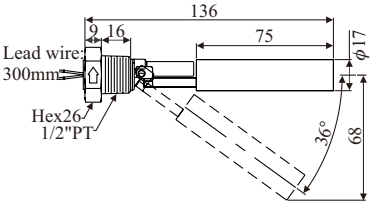

### ▶ FD MH50A /56A



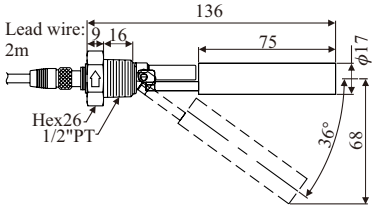

### ▶ FD MH50C /56C



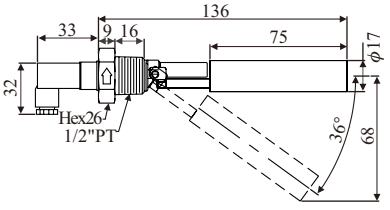

### ▶ FD MH60/ 66




### ▶ FD MH60A/ 66A




### ▶ FD MH60C/ 66C



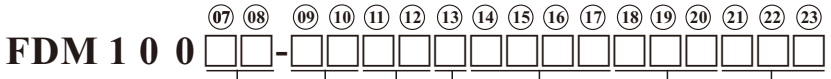

## ■ SPECIFICATIONS

| Type | Material | Switching Capacity Max. | Switching Voltage Max. | Switching Current Max. | Carry Current Max. | Lead Wire | Max. Pressure | Operating Temp. | Suitable Sp. Gr. |
|---|---|---|---|---|---|---|---|---|---|
| **FDMH50/56**<br>**FDMH60/66** | SUS 304<br>SUS 316L | 50W/SPST | 240Vac<br>200Vdc | 0.5A | 1A | XLPE or TEFLON | 5 kg/cm$^2$ | -20~120°C<br>(Max.200°C) | FDMH5:0.92<br>FDMH6:0.75 |
| **FDMH50A/56A**<br>**FDMH60A/66A** | SUS 304<br>SUS 316L | 50W/SPST | 240Vac<br>200Vdc | 0.5A | 1A | PVC or PUR | 5 kg/cm$^2$ | 80°C | FDMH5:0.92<br>FDMH6:0.75 |
| **FDMH50C/56C**<br>**FDMH60C/66C** | SUS 304<br>SUS 316L | 50W/SPST | 240Vac<br>200Vdc | 0.5A | 1A | NA | 5 kg/cm$^2$ | -20~120°C | FDMH5:0.92<br>FDMH6:0.75 |

# MODEL / NUMBER ORDER CODE COMPARISON TABLE

| Model Number | Order Code |
|---|---|
| FDMH50 | FDM10000-05MA |
| FDMH56 | FDM10000-05MC |
| FDMH60 | FDM10000-06MA |
| FDMH66 | FDM10000-06MC |
| FDMH50A | FDM10000-05MAA |
| FDMH56A | FDM10000-05MCA |
| FDMH60A | FDM10000-06MAA |
| FDMH66A | FDM10000-06MCA |
| FDMH50C | FDM10000-05MAB |
| FDMH56C | FDM10000-05MCB |

# ORDER INFORMATION (STAINLESS STEEL SWITCHES)




⑦⑧ **Certification**

00：None
3A：UL

⑨⑩ **Type**

05：$\phi$17x47L (SG: 0.92)
06：$\phi$17x75L (SG: 0.75)

⑪⑫ **Material**

MA：SUS 304
MB：SUS 316
MC: SUS316L

⑬ **Wiring**

A: M12
B: DIN
C: Cable wire type 1

⑭⑮⑯⑰ **Connection**

A503：1/2"PF
A501：1/2"PT
A507：1/2"NPT
A505：1/2"BSP

⑱⑲⑳ **Material of Lead wire**

000: None
210：Teflon(200°C AWG24)
220：PUR(For M12)
250：Silicon(150°C AWG24 Cable)
291：XLPE(125°C AWG22)

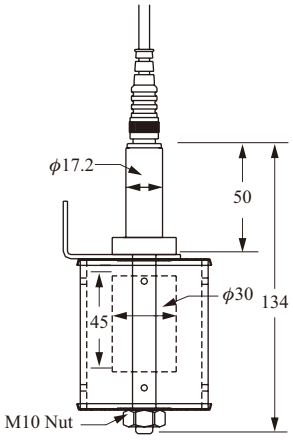
㉑㉒㉓ Lead wire Length

001：100mm
002：200mm
003：300mm
004：400mm
005：500mm
006：600mm
007：700mm
008：800mm
009：900mm
010：1000mm
020：2000mm
100：10m
000：None

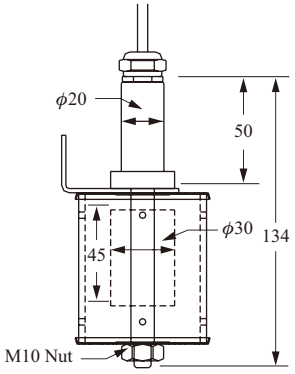
※Connector M12 whose standard wire length is 2m ,5m,10m,15m

# MARINE LEVEL SWITCHES

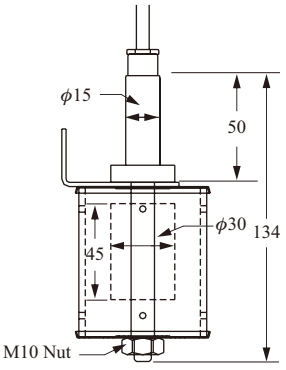
## ▶ FDMRN5A0B



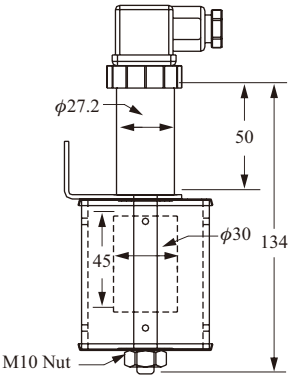

## ▶ FDMRN5B0B




## ▶ FDMRN5COB




## ▶ FDMRN5D0B

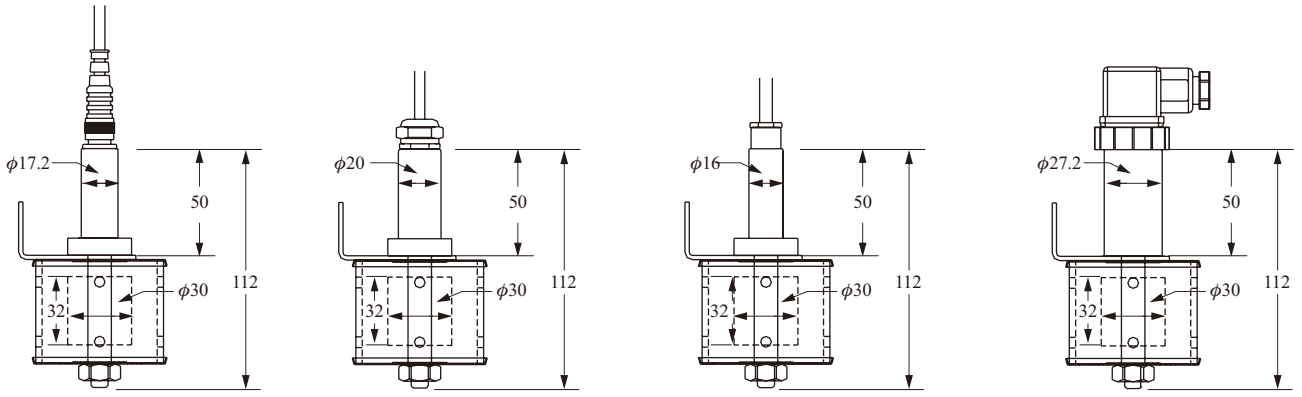



## ■ SPECIFICATIONS

| Type | Material | Switching Capacity Max. | Switching Voltage Max. | Switching Current Max. | Carry Current Max. | Lead Wire | Max. Pressure | Operating Temp. | Suitable Sp. Gr. |
|---|---|---|---|---|---|---|---|---|---|
| **FDMRN5A0B** | SUS 304 (Float:NBR) | 50W/SPST | 240Vac 200Vdc | 0.5A | 1A | M12, 2 meter | ATM | Max. 80°C | 0.5 |
| **FDMRN5B0B** | SUS 304 (Float:NBR) | 50W/SPST | 240Vac 200Vdc | 0.5A | 1A | PVC,22 AWG | ATM | Max. 80°C | 0.5 |
| **FDMRN5C0B** | SUS 304 (Float:NBR) | 50W/SPST | 240Vac 200Vdc | 0.5A | 1A | Silicon | ATM | Max. 100°C | 0.5 |
| **FDMRN5D0B** | SUS 304 (Float:NBR) | 50W/SPST | 240Vac 200Vdc | 0.5A | 1A | DIN 43650 | ATM | Max. 80°C | 0.5 |

# MARINE LEVEL SWITCHES

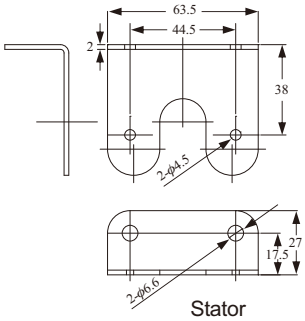
## ▶ FDMRN8A0B ▶ FDMRN8B0B ▶ FDMRN8C0B ▶ FDMRN8D0B



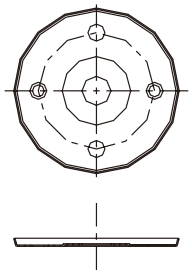

## ■ SPECIFICATIONS

| Type | Material | Switching Capacity Max. | Switching Voltage Max. | Switching Current Max. | Carry Current Max. | Lead Wire | Max. Pressure | Operating Temp. | Suitable Sp. Gr. |
|---|---|---|---|---|---|---|---|---|---|
| **FDMRN8A0B** | SUS 304 (Float:NBR) | 50W/SPST | 240Vac 200Vdc | 0.5A | 1A | M12, 2 meter | ATM | Max. 80℃ | 0.7 |
| **FDMRN8B0B** | SUS 304 (Float:NBR) | 50W/SPST | 240Vac 200Vdc | 0.5A | 1A | PVC,22 AWG | ATM | Max. 80℃ | 0.7 |
| **FDMRN8C0B** | SUS 304 (Float:NBR) | 50W/SPST | 240Vac 200Vdc | 0.5A | 1A | Silicon | ATM | Max. 100℃ | 0.7 |
| **FDMRN8D0B** | SUS 304 (Float:NBR) | 50W/SPST | 240Vac 200Vdc | 0.5A | 1A | DIN 43650 | ATM | Max. 80℃ | 0.7 |

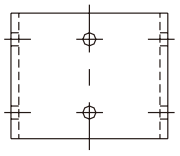
## ■ FDB-0450 PARTS OF SLOSH SHIELD

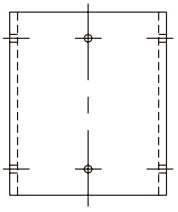



Stator



Acrylic for case Upper/Lower

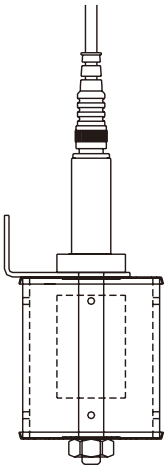




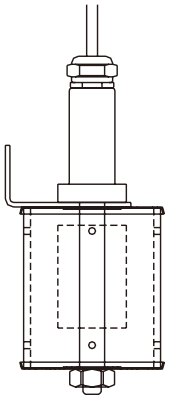
Acrylic cover

# HOW TO ORDER MARINE LEVEL SWITCHES

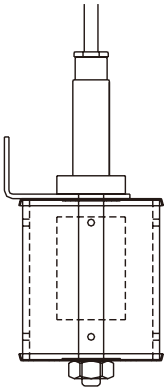
▶ **FDMRN5A** ▶ **FDMRN5B** ▶ **FDMRN5C** ▶ **FDMRN5D** ▶ **FDMRN8C**



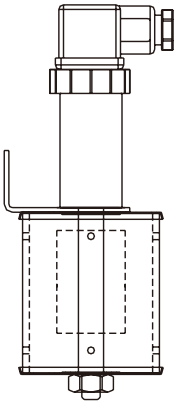
A TYPE



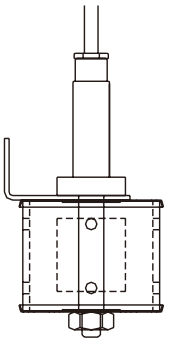
B TYPE



C TYPE



D TYPE

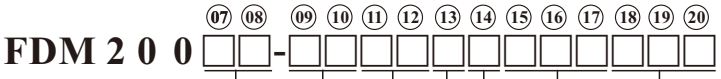


C TYPE

# MODEL / NUMBER ORDER CODE COMPARISON TABLE

| Model Number | Order Code |
|---|---|
| FDMRN5A0B | FDM20000-N5MAAB |
| FDMRN5B0B | FDM20000-N5MACB |
| FDMRN5C0B | FDM20000-N5MADB |
| FDMRN5D0B | FDM20000-N5MABB |
| FDMRN8A0B | FDM20000-N8MAAB220 |
| FDMRN8B0B | FDM20000-N8MACB233 |
| FDMRN8C0B | FDM20000-N8MADB250 |
| FDMRN8D0B | FDM20000-N8MABB |

# ORDER INFORMATION (MARINE LEVEL SWITCHES)




**⑦⑧ Certification**

00：None

**⑨⑩ The material of the float**

N5：$\phi$30x45L (NBR)

N8：$\phi$30x32L (NBR)

**⑪⑫ The material of the probe**

MA：SUS 304

MC：SUS 316L

**⑬ Wiring**

A：M12

B：DIN

C：Cable wire type 1 (B type)

D：Cable wire type 2 (C Type)

**⑭ Contact type**

A: NO

B: NC

**⑮⑯⑰ Material of Lead wire**

000：None

220：PUR (for M12)

231：PVC (80°C AWG22 Cable)

250：Silicon (150°C AWG24 Cable)

**⑱⑲⑳ Lead wire Length**

001：100mm

002：200mm

003：300mm

004：400mm

005：500mm

006：600mm

007：700mm

008：800mm

009：900mm

010：1000mm

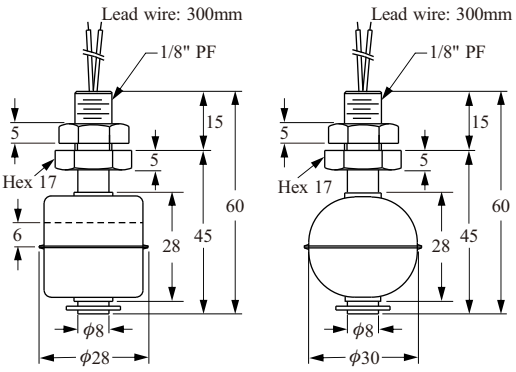
020：2000mm

100：10m

000： None

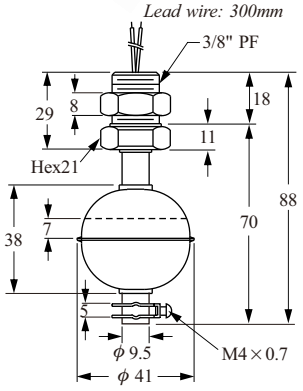
# STAINLESS STEEL MODELS

## ▶ FD 30□1/ FD 35□1



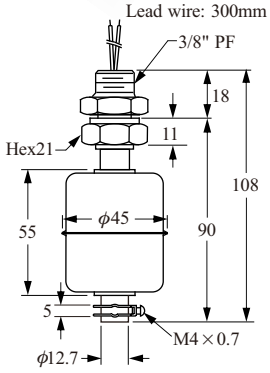

Washer: NBR
Drill hole ϕ10mm

## ▶ FD 40□1



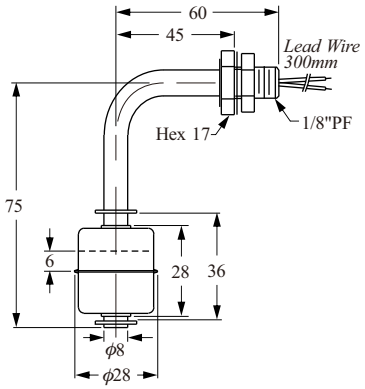

Washer: NBR
Drill hole ϕ17mm

## ▶ FD 45□1



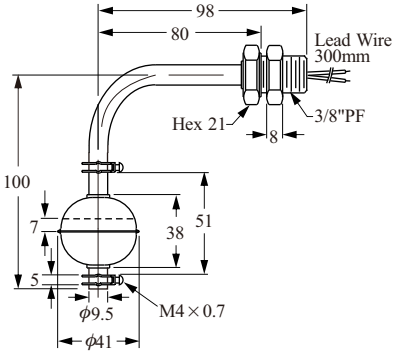

Washer: NBR
Drill hole ϕ17mm

## ▶ FD 30□2



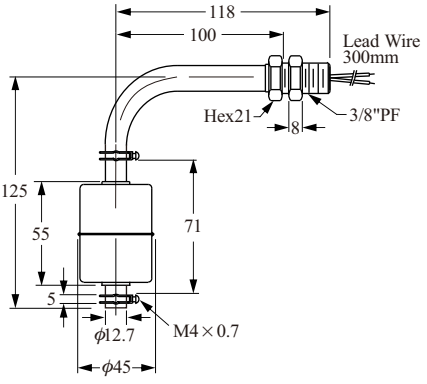

Washer: NBR
Drill hole ϕ10mm

## ▶ FD 40□2




Washer: NBR
Drill hole ϕ17mm

## ▶ FD 45□2



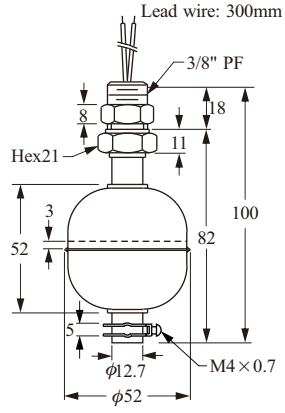

Washer: NBR
Drill hole ϕ17mm



FineTek

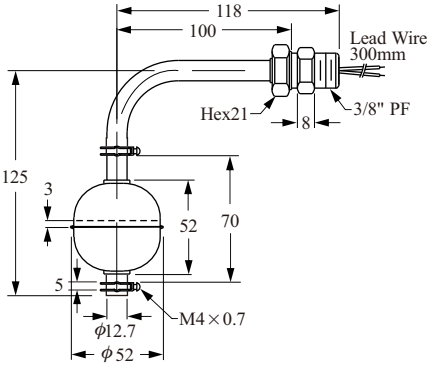
# METAL TYPES

## ▶ FD 50□1



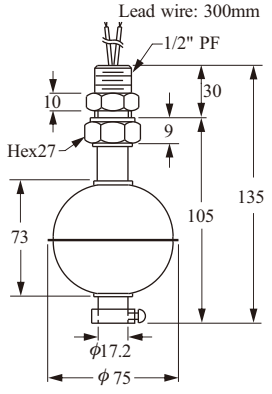

Washer: NBR
Drill hole ϕ17mm

## ▶ FD 50□2




Washer: NBR
Drill hole ϕ17mm

## ▶ FD 75□1




Washer: NBR
Drill hole ϕ21mm

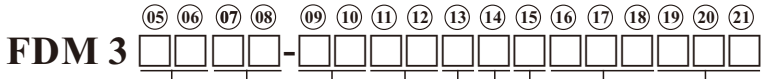
## ■ SPECIFICATIONS

| Description \ Type | FD30□1D FD30□2D | FD40□1D FD40□2D | FD45□1D FD45□2D | FD50□1D FD50□2D | FD75□1D | FD10□1D |
|---|---|---|---|---|---|---|
| **Material** | Stainless Steel SUS304, 316 | | | | | |
| **Switching Capacity Max.** | 50W SPST | 50W SPST | 50W SPST | 50W SPST | 50W SPST | |
| **Switching Voltage Max.** | 240Vac/200Vdc | | | | 220Vac | |
| **Switching Current Max. (A)** | 0.5A | 0.5A | 0.5A | 0.5A | 1A | |
| **Carry Current Max. (A)** | 1A | 1A | 1A | 1A | 2A | |
| **Lead Wire** | XLPE (UL3266, AWG22) | | | | | |
| **Reversible Switch Action** | YES / below 80°C, NO / UP 80°C | | | | NO | NO |
| **Max. Pressure (Kg/cm²)** | 10 | 30 | 12 | 30 | 30 | 10 |
| **Operating Temperature** | -20~120°C (OPTION 200°C) | | | | | |
| **Suitable Specific Gravity** | 0.7 | 0.7 | 0.65 | 0.55 | 0.65 | 0.5 |

# MODEL / NUMBER ORDER CODE COMPARISON TABLE

| Model Number | Order Code |
|---|---|
| FD30□1D | FDM30000-30□□VD |
| FD30□2D | FDM30000-30□□HD |
| FD40□1D | FDM30000-40□□VD |
| FD40□2D | FDM30000-40□□HD |
| FD45□1D | FDM30000-45□□VD |
| FD45□2D | FDM30000-45□□HD |
| FD50□1D | FDM30000-50□□VD |
| FD50□2D | FDM30000-50□□HD |
| FD75□1D | FDM30000-75□□VD |
| FD10□1D | FDM30000-10□□VD |

# ORDER INFORMATION (STAINLESS STEEL SWITCHES)




**⑤⑥ Model**

00：Standard
02：Hi-temperature

**⑦⑧ Certification**

00：None
3A：UL

**⑨⑩ Type**

| | | |
|---|---|---|
| 10：$\phi$75x108 ,1/2"PF | 35：$\phi$30x28,1/8"PF | 45：$\phi$45x55,3/8"PF |
| 30：$\phi$28x28,1/8"PF | 36：$\phi$30x28,1/8"NPT | 50：$\phi$52x52,3/8"PF |
| 31：$\phi$28x28,1/8"NPT | 40：$\phi$41x38,3/8"PF | 75：$\phi$75x73,1/2"PF |

**⑪⑫ Probe material**

MA：SUS 304
MB：SUS 316

**⑬ Mounting**

V：Top or Bottom Mounting
H：Side Mounting

**⑭ Switching Capacity Max.**

D：50W 240VAC/200VDC SPST
F：10W 125VAC SPST
K：20W 150VAC/200VDC SPDT

**⑮ Contact Mode**

A：SPST, Normal Open
B：SPST, Normal Closed
C：SPDT
D：Normal Closed Reversible
E：Normal Open Reversible

**⑯⑰⑱ Material of Lead wire**

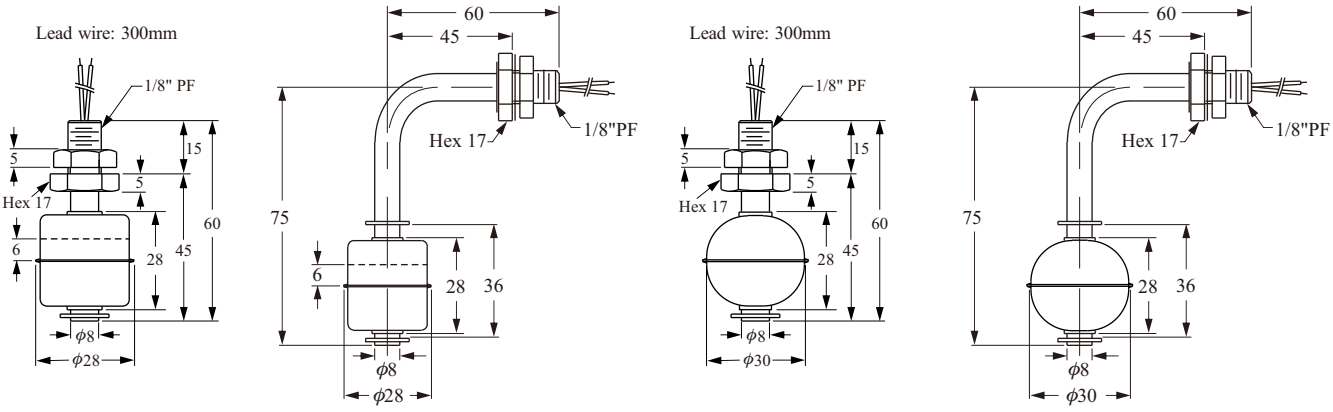
210：Teflon (200°C AWG24)
230：PVC (80°C AWG22 )
231：PVC (80°C AWG22 Cable)
232：PVC (80°C AWG24 Cable)
250：Silicon (150°C AWG24 Cable)
291：XLPE (125°C AWG22)
300：XLPVC (105°C AWG24)

**⑲⑳㉑ Lead wire Length**

| | | |
|---|---|---|
| 001：100mm | 005：500mm | 009：900mm |
| 002：200mm | 006：600mm | 010：1000mm |
| 003：300mm | 007：700mm | 020：2000mm |
| 004：400mm | 008：800mm | 100：10m |

# STAINLESS STEEL MODELS (EX-PROOF TYPE) TS Ex mb IIB T6 Gb

▶ FDM3005C-30□□V ▶ FDM3005C-30□□H ▶ FDM3005C-35□□V ▶ FDM3005C-35□□H




Washer: NBR
Drill hole ϕ10mm

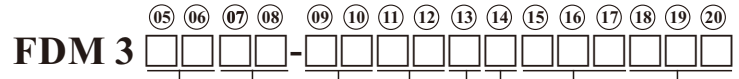
Washer: NBR
Drill hole ϕ10mm

## ■ SPECIFICATIONS

**(Utilizing special glue which is graded for Ex-proof to seal sensing components perfectly)**

| Description \ Type | FDM3005C-30□□V<br>FDM3005C-30□□H<br>FDM3005C-31□□V<br>FDM3005C-31□□H | FDM3005C-35□□V<br>FDM3005C-35□□H<br>FDM3005C-36□□V<br>FDM3005C-36□□H |
|---|---|---|
| Switching Capacity Max. | 45W SPST | |
| Switching Voltage Max. | 240Vac/200Vdc | |
| Switching Current Max. (A) | 0.5A | |
| Lead Wire | XLPE (UL3266, AWG22) | |
| Reversible Switch Action | YES | |
| Max. Pressure (Kg/cm$^2$) | 10 | 25 |
| Operating Temperature | -20 ~65°C | |
| Material | SUS304, 316, 316L | |
| Suitable Specific Gravity | 0.7 | 0.75 |

# ORDER INFORMATION (EX-PROOF TYPE)




**⑤⑥ Model**

00: Standard

**⑦⑧ Certification**

5C: TS-Ex d

**⑨⑩ Type**

30: $\phi$28x28,1/8"PF
31: $\phi$28x28,1/8"NPT
35: $\phi$30x28,1/8"PF
36: $\phi$30x28,1/8"NPT

**⑪⑫ Probe material**

MA: SUS 304
MB: SUS 316
MC: SUS 316L

**⑬ Mounting**

V: Top or Bottom Mounting
H: Side Mounting

**⑭ Contact Mode**

A: SPST, Normal Open
B: SPST, Normal Closed
D: Normal Closed Reversible
E: Normal Open Reversible

**⑮⑯⑰ Material of Lead wire**

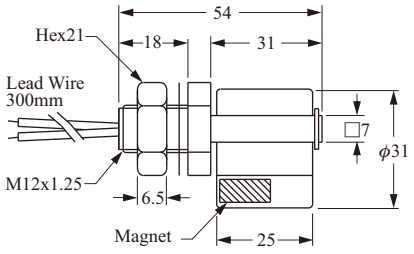
210: Teflon (200°C AWG24)
231: PVC (80°C AWG22 Cable)
232: PVC (80°C AWG24 Cable)
291: XLPE (125°C AWG22)
300: XLPVC (105°C AWG24)

**⑱⑲⑳ Lead wire Length**

| | | |
|---|---|---|
| 001: 100mm | 005: 500mm | 009: 900mm |
| 002: 200mm | 006: 600mm | 010: 1000mm |
| 003: 300mm | 007: 700mm | 020: 2000mm |
| 004: 400mm | 008: 800mm | 100: 10m |

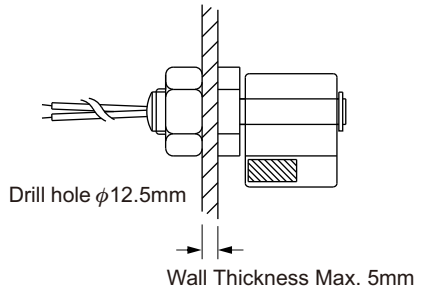
# PLASTIC OH MODELS

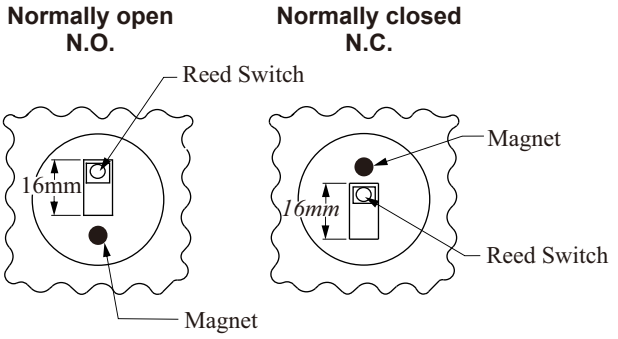
## ▶ F CH11QD




Washer: NBR

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




- All the products in this range come with UL .
- All the products in this range are designed to be side mounted.
- Water's specific gravity is used as the reference point for calculations.

## ■ SPECIFICATIONS

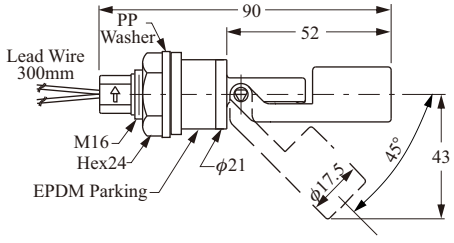
| Description \ Type | F CH11QD | F CH21PD<br>F CH31PD | F CH23FD<br>F CH33FD | F CH25GD<br>F CH35GD |
|---|---|---|---|---|
| **Switching Capacity Max.** | 50W SPST | | | |
| **Switching Voltage Max.** | 240VAC / 200Vdc | | | |
| **Switching Current Max. (A)** | 0.5A | | | |
| **Carry Current Max. (A)** | 1A | | | |
| **Lead Wire** | PVC AWG22 | XLPE AWG22 | | |
| **Max. Pressure (Kg/cm²)** | ATM | 4 kg/cm² | 2 kg/cm² | |
| **Operating Temperature** | -20~80°C | | -20~120°C | |
| **Material** | PP | | PVDF | Polysulfone |
| **Suitable Specific Gravity** | 0.6 | 0.65 | 0.85 | 0.85 |
| **Weight** | 25 g | H21: 22 g<br>H31: 21 g | 25 g | 25.4 g |

# PLASTIC OH MODELS

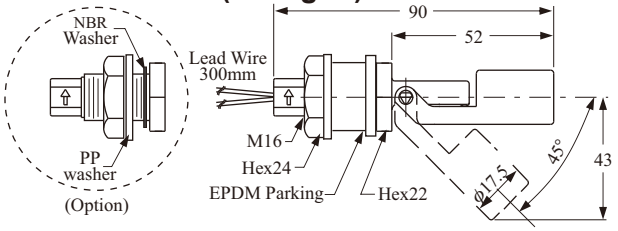
## ▶ F CH21PD / F CH31PD

- F CH2 and F CH3 models have UL certification.
- F CH2 and F CH3 models are available in PP and PVDF.
- Special lead wire/cable are available on request.
- Different reed switches are available for selection.
- OEM designs are welcome.

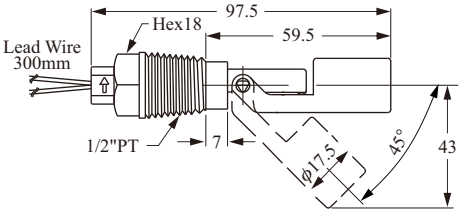
### ■ Optional
### F CH21PDO(Round)




### ■ Standard
### F CH21PDD (Hexagon)

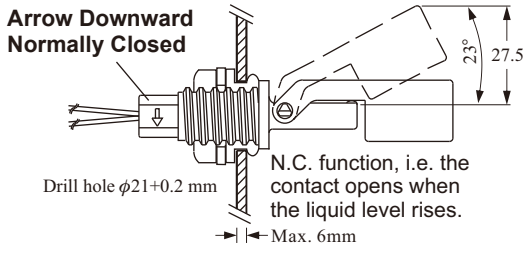



### ■ F CH31PD

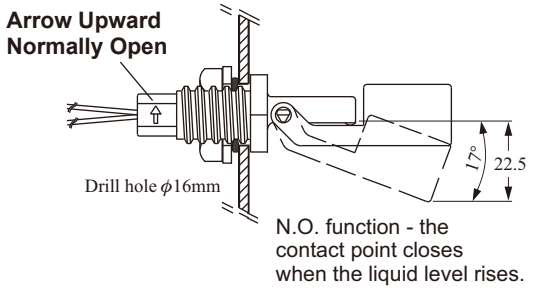



### ■ Installation / N.C. / N.O. Action Position

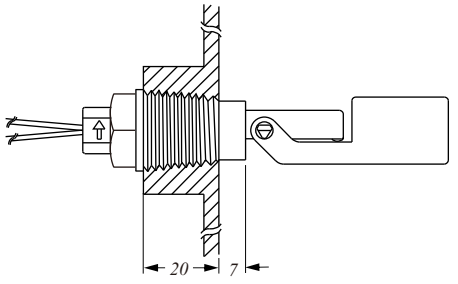
**[ External mounting ]**




**[ Internal mounting ]**




**[ External mounting ]**



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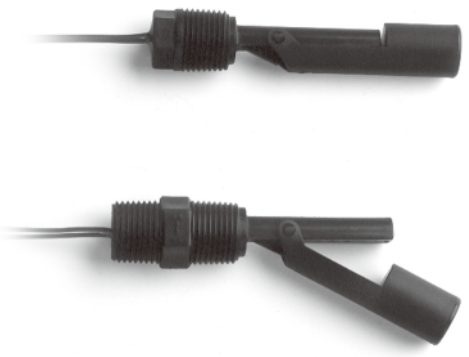
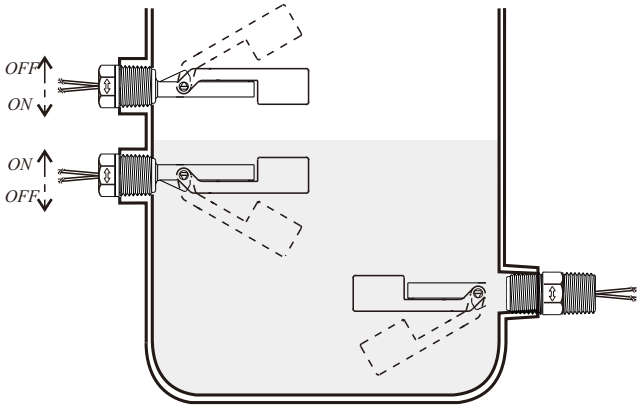
# PLASTIC OH MODELS

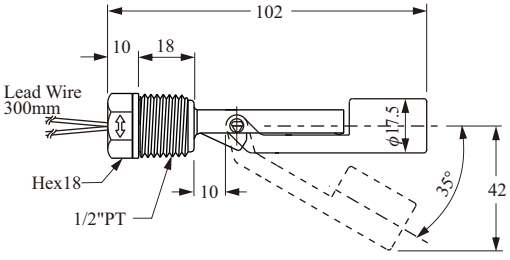
## ▶ F CH41PD / H51PD

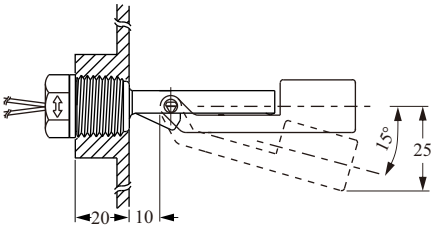


## ■ Installation / N.C. / N.O. Action Position



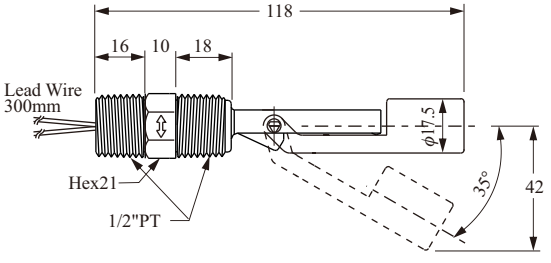

## ■ F CH41PD

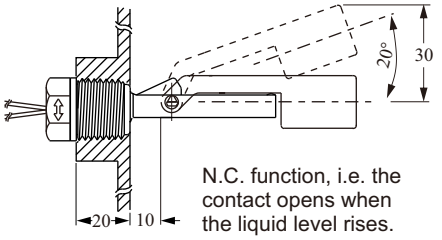



N.O. function, i.e. the contact closes when the liquid level rises.

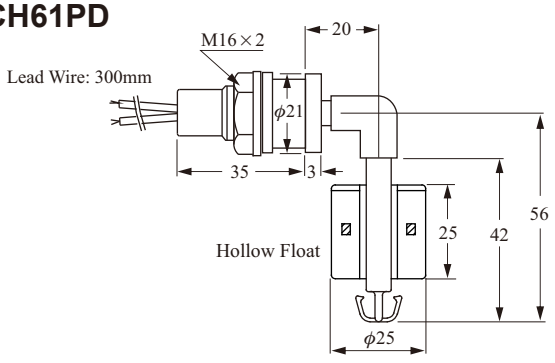
## ■ F CH51PD




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

## ■ F CH61PD



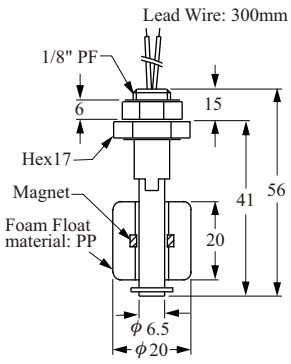

● F CH4 and F CH5 models have UL certification.

## ■ 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 |
|---|---|---|---|---|---|---|---|---|---|---|
| F CH41PD | PP | 50W/SPST | 240Vac 200Vdc | 0.5A | 1A | XLPE | 4 kg/cm$^2$ | -20~80℃ | 0.55 | 20g |
| F CH51PD | | | | | | | | | | 25g |
| F CH61PD | | | | | | PVC | | | | 31g |

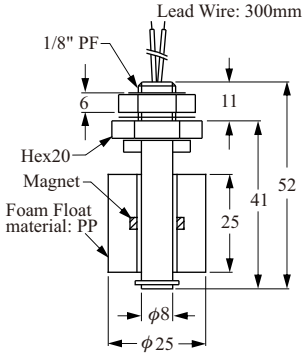
# PLASTIC OV MODELS

## ▶ F CV11QF



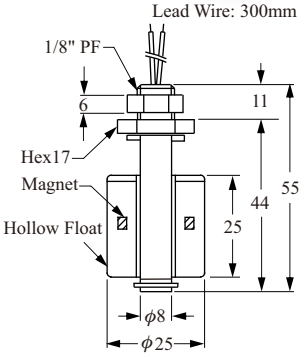

Washer: NBR
Drill hole $\phi$10mm

## ▶ F CV21QD



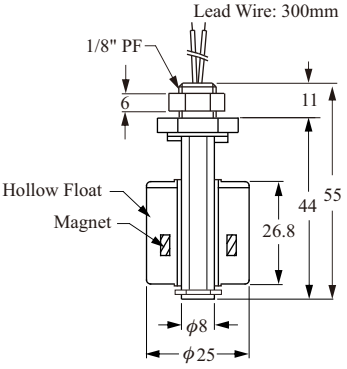

Washer: NBR
Drill hole $\phi$10mm

## ▶ F CV31PD




O-ring: VITON
Drill hole $\phi$10mm

## ▶ F CV33FD, F CV35GD




O-ring: VITON
Drill hole $\phi$10mm

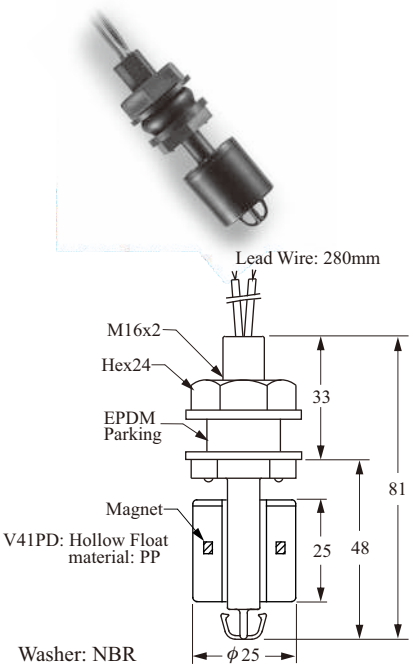
- F CV1 /F CV2 /F CV3 models have UL certification.

## ■ SPECIFICATIONS

| Description \ Type | F CV11QF | F CV21QD | F CV31PD | F CV33FD | F CV35GD |
|---|---|---|---|---|---|
| **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** | YES | NO | 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 | Polysulfone |
| **Suitable Specific Gravity** | 0.75 | 0.7 | 0.7 | 0.85 | 0.85 |
| **Weight (g)** | 12 g | 18 g | 12.8 g | 18 g | 18 g |

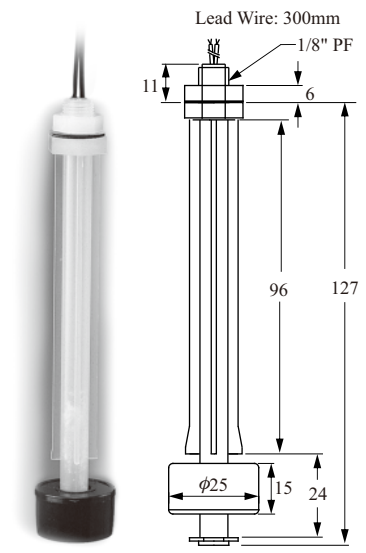
# PLASTIC OV MODELS

## ▶ F CV41PD




Washer: NBR
Drill hole ϕ16mm

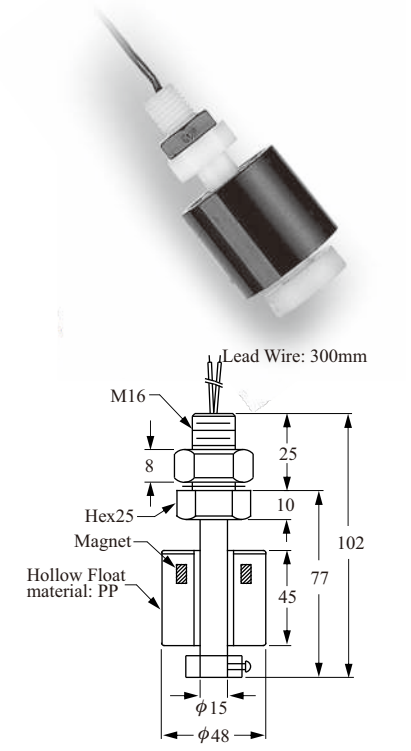
## ▶ F CV61PF, F CV61NF




V61PF: Hollow Float
Material: PP
V61NF: Foam Float
Material: NBR

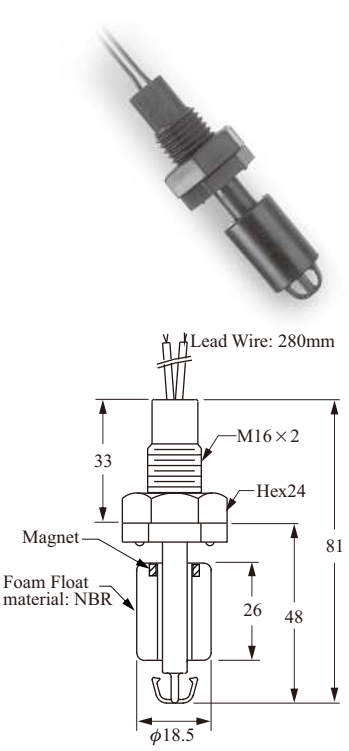
Washer: NBR
Drill hole ϕ10mm

## ▶ F CV81PD



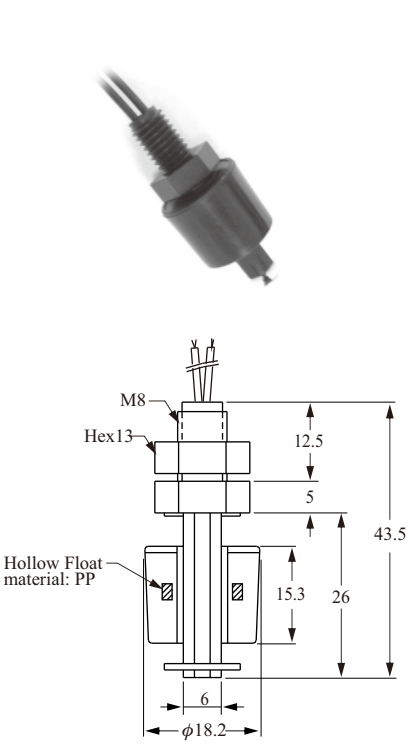

Washer: NBR
Drill hole ϕ16mm

## ▶ F CV41ND




Washer: NBR
Drill hole ϕ16mm

## ▶ F CV51PD




O-Ring: VITON
Drill hole ϕ8.5mm

- F CV4 /F CV5 /F CV6 /F CV8 models have UL certification.



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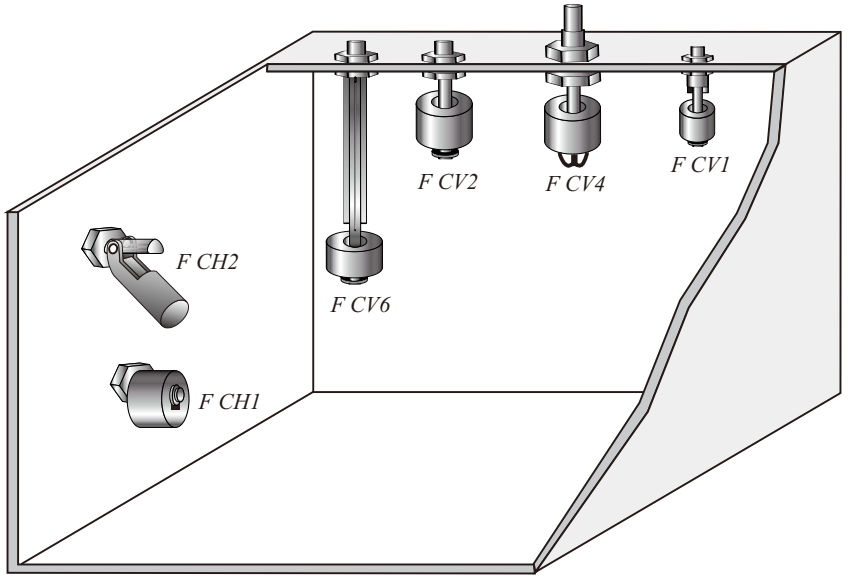
# PLASTIC OV MODELS

## ■ SPECIFICATIONS

| Type / Description | F CV61PF<br>F CV61NF | F CV41PD | F CV81PD | F CV41ND | F CV51PD |
|---|---|---|---|---|---|
| **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** | UL 1007 AWG22 PVC | | | | |
| **Reversible Switch Action** | NO | YES | NO | NO | NO |
| **Max. Pressure (kg/cm²)** | V61P: 4kg/cm²<br>V61N: ATM | 4kg/cm² | 4 kg/cm² | ATM | 4 kg/cm² |
| **Operating Temperature** | -20~80℃ | | | | 80℃ |
| **Material** | PP (except V61N, V41N: NBR float) | | | | |
| **Suitable Specific Gravity** | 0.65<br>0.5 | 0.55 | 0.6 | 0.7 | 0.8 |
| **Weight (g)** | 16 g | 23 g | 180 g | 17 g | 8.2 g |



# MODEL / NUMBER ORDER CODE COMPARISON TABLE

| Model Number | Order Code |
|---|---|
| F CH11QD | FCM10000-H1181DD |
| F CH21PD | FCM10000-H2180D |
| F CH31PD | FCM10000-H3180DD |
| F CH23FD | FCM10000-H2240D |
| F CH33FD | FCM10000-H3240DD |
| F CH25GD | FCM10000-H2 |
| F CH35GD | FCM10000-H3 |
| F CH41PD | FCM10000-H4180DD |
| F CH51PD | FCM10000-H5180DD |
| F CH61PD | FCM10000-H6180D |

| | |
|---|---|
| F CV11QF | FCM10000-V1181F |
| F CV21QD | FCM10000-V2181D |
| F CV31PD | FCM10000-V3180D |
| F CV33FD | FCM10000-V3240D |
| F CV35GD | FCM10000-V3 |
| F CV61PF | FCM10000-V6180F |
| F CV61NF | FCM10000-V6070F |
| F CV41PD | FCM10000-V4180D |
| F CV81PD | FCM10000-V8180D |
| F CV41ND | FCM10000-V4070D |
| F CV51PD | FCM10000-V5180D |

# ORDER INFORMATION (PLASTIC MODELS)

⑦ ⑧ ⑨ ⑩ ⑪ ⑫ ⑬ ⑭ ⑮ ⑯ ⑰ ⑱ ⑲ ⑳ ㉑

**FCM 1 0 0 □□-□□□□□□□□□□□□□□**

**⑦⑧ Certification**

00：None
3A：UL

**⑨ Mounting**

V：Top or bottom mounting
H：Side mounting

**⑩ Type**

1：Type 1　4：Type 4　7：Type 7
2：Type 2　5：Type 5　8：Type 8
3：Type 3　6：Type 6

**⑪⑫⑬ Material of Wetted parts**

070：NBR(Float), PP(Floating pole)
180：PP(Hollow float), PP(Floating pole)
181：PP(Foam float), PP(Floating pole)
240：PVDF(Float), PVDF(Floating pole)

**⑭ Switching Capacity Max.**

D：50W 240VAC/200VDC SPST
F：10W 125VAC SPST
K：20W 150VAC/200VDC SPDT

**⑮ Contact Mode**

A：SPST, Normal Open
B：SPST, Normal Closed
D：Normal Closed Reversible
E：Normal Open Reversible
C：SPDT
※Side mounted types(FCH2,3,4,5) are only available with D mode.
NO or NC depends on the installation direction.

**⑯⑰⑱ Material of Lead wire**

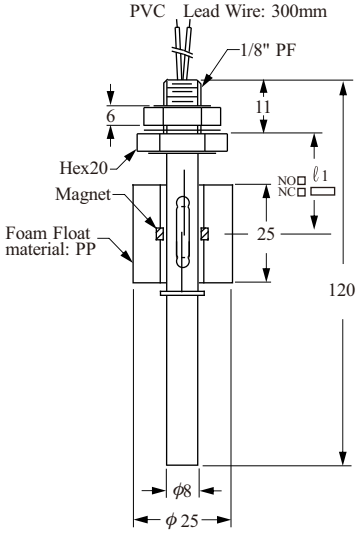
210: Teflon (200°C AWG24)
230: PVC (80°C AWG22 )
231: PVC (80°C AWG22 Cable)
232: PVC (80°C AWG24)
233: PVC (80°C AWG24 Cable)
234: PVC(80°C AWG18)
250: Silicon(150°C AWG24 Cable)
290: XLPE (125°C AWG22)
300: XLPVC (105°C AWG24)

**⑲⑳㉑ Lead wire Length**

001：100mm　003：300mm　005：500mm　008：800mm　010：1000mm
002：200mm　004：400mm　006：600mm　009：900mm　020：2000mm

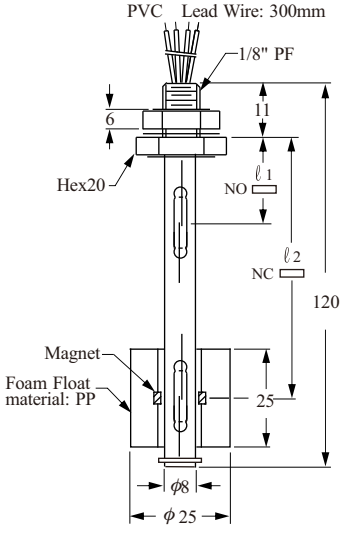
# CUSTOMIZED PLASTIC MODELS

## ▶ FC PV1



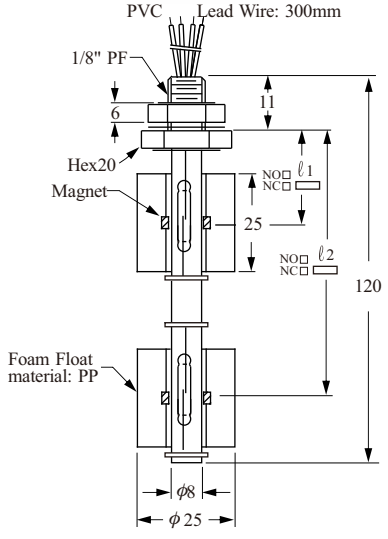

O-Ring: VITON

## ▶ FC PV2




O-Ring: VITON

## ▶ FC PV3




O-Ring: VITON

- NOTE: Float material's are optional.

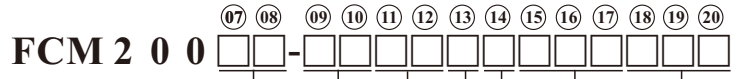
The above items are custom-built when client demands are unique. The benefits are listed below:

- FCPV1 One float for one level activation.
  FCPV2 One float with 2 reed switches.
- Applicable for conditions where 1 float can actuate switches at high and low levels.
- FCPV3 Two floats actuate two independent reed switches: Each float unit's default setting can be either N.O. or N.C. as per cus

# MODEL / NUMBER ORDER CODE COMPARISON TABLE

| Model Number | Order Code |
|---|---|
| FCPV1 | FCM20000-V118 |
| FCPV2 | FCM20000-V2 |
| FCPV3 | FCM20000-V318 |

# ORDER INFORMATION (PLASTIC MODELS)




**⑦⑧ Certification**

00：None

**⑨⑩ Mounting**

V1：Single float single switch
V2：Single float dual switch
V3：Dual float dual switch

**⑪⑫ Probe material**

07：NBR Float, PP(Floating pole)
18：PP Float
24：PVDF, PP(Floating pole)

**⑬ Switching Capacity Max.**

D：50W 240VAC/200VDC SPST
F：10W 125VAC SPST
K：20W 150VAC/200VDC SPDT

**⑭ Contact Mode**

A：SPST, Normal Open
B：SPST, Normal Closed
C：SPDT
H：Double reed switch 1-NO ,1-NC

**⑮⑯⑰ Material of Lead wire**

000: None
230: PVC (80°C AWG22)
231: PVC (80°C AWG22 Cable)
232:PVC(80°C AWG24 Cable) When 2 floats
291: XLPE (125°C AWG22)

**⑱⑲⑳ Lead wire Length**

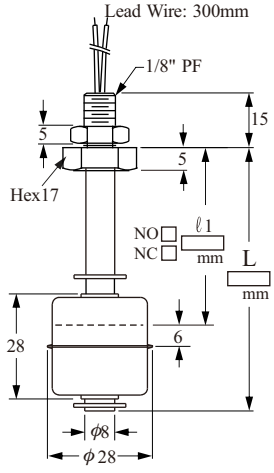
001：100mm　　006：600mm
002：200mm　　008：800mm
003：300mm　　009：900mm
004：400mm　　010：1000mm
005：500mm　　020：2000mm

# CUSTOMIZED STAINLESS STEEL MODELS

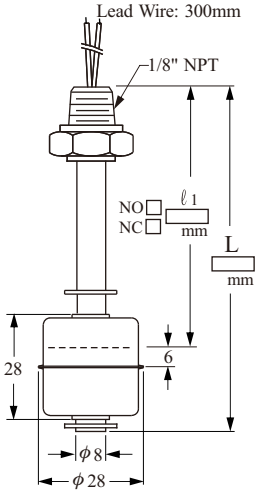
Items below are custom-built models for special applications or placement on existing facilities. Their unique characteristics are as follows:

- Any size measuring range, but $\phi$8mm stem Max. 500mm.
- Customized mounting thread specifications are acceptable.
- Single or multiple contact points are workable.
- Switch activation N.O. or N.C. choices are available.

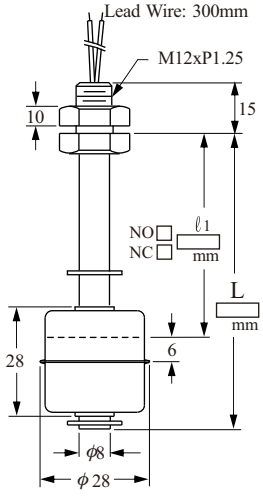
### ▶ FDSA□11



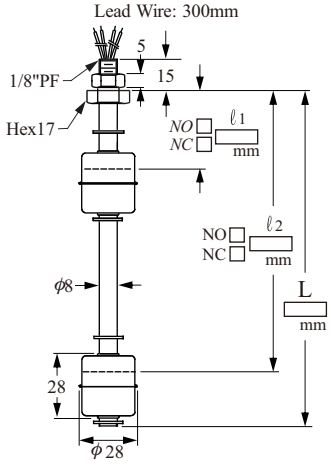

### ▶ FDSB□11



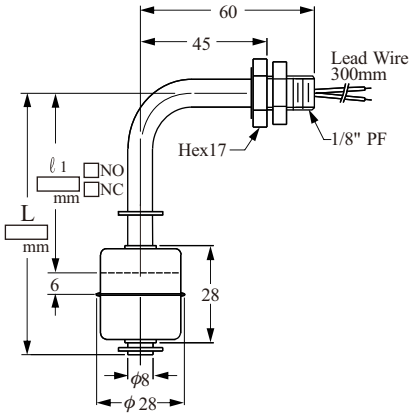

### ▶ FDSC□11



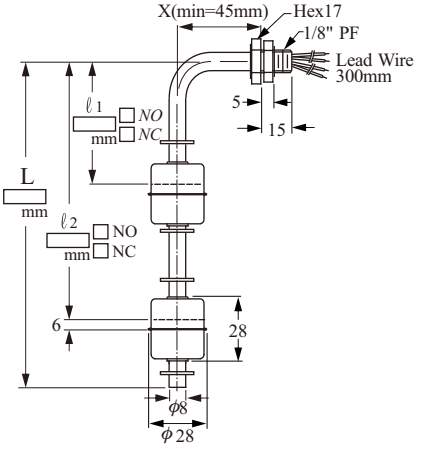

### ▶ FDSA□12




### ▶ FDSA□21




### ▶ FDSA□22



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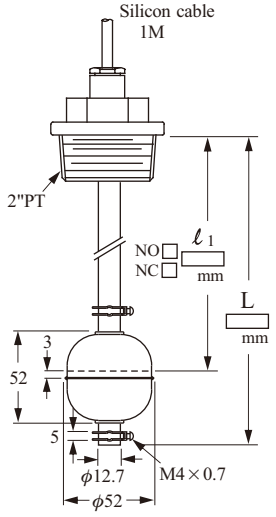
# CUSTOMIZED STAINLESS STEEL MODELS

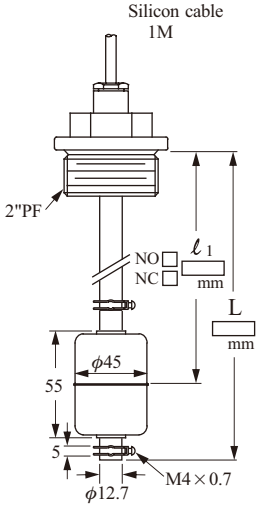
Items below are custom-built models for special application and location on existing equipment facilities. Their unique characteristics are as follows:

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

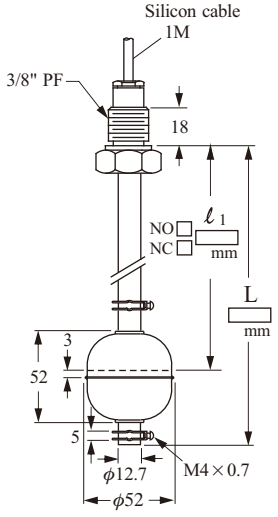
## ▶ FDSD□11



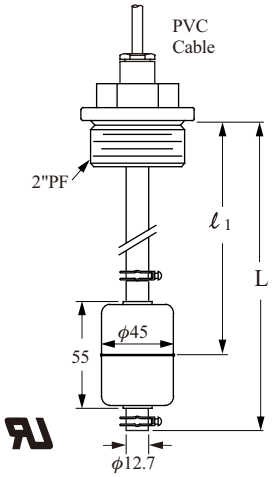

## ▶ FDSE□11



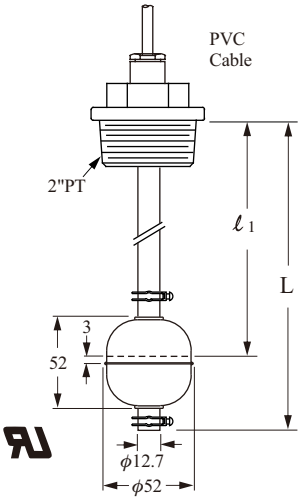

## ▶ FDSF□11



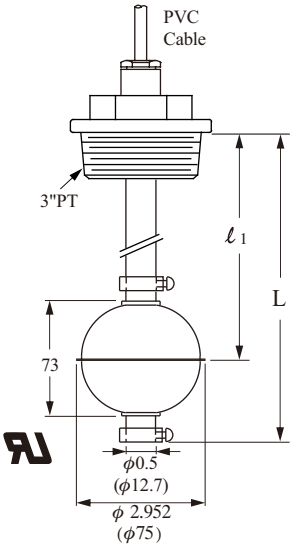

## ▶ FD4503D




## ▶ FD5003G




## ▶ FD7503G



# MODEL / NUMBER ORDER CODE COMPARISON TABLE

| Model Number | Order Code |
|---|---|
| FDSA□11 | FDM40000-SA |
| FDSB□11 | FDM40000-SB |
| FDSC□11 | FDM40000-SC |
| FDSA□12 | FDM40000-SA |
| FDSA□21 | FDM40000-SA |
| FDSA□22 | FDM40000-SA |
| FDSD□11 | FDM40000-SD |
| FDSE□11 | FDM40000-SE |
| FDSF□11 | FDM40000-SF |

# ORDER INFORMATION
# (CUSTOMIZED STAINLESS STEEL MODELS)

⑦ ⑧ ⑨ ⑩ ⑪ ⑫ ⑬ ⑭ ⑮ ⑯ ⑰ ⑱ ⑲ ⑳ ㉑ ㉒

**FDM 4 0 0 □□-□□□□□□□□□□□□□□**

**⑦⑧ Certification**

00：None
3A：UL

**⑨⑩ Type**

SA：Float $\phi$ 28x28, 1/8"PF
SB：Float $\phi$ 28x28, 1/8"NPT
SC：Float $\phi$ 28x28, M12
SD：Float $\phi$ 52x52, 2"PT
SE：Float $\phi$ 45x45, 2"PF
SF：Float $\phi$ 52x52, 3/8"PF
SG：Float $\phi$ 75x73, 3"PT

**⑪⑫ Probe material**

MA：SUS304
MB：SUS316

**⑬ Mounting**

V：Top or Bottom Mounting
H：Side Mount

**⑭ Float Number**

1: 1 float
2: 2 floats

**⑮ Switching Capacity Max.**

D：50W 240VAC/200VDC SPST
K：20W 150VAC/200VDC SPDT

**⑯ Contact Mode**

A：NO
B：NC
C：SPDT
H：1 NO, 1NC

**⑰⑱⑲ Material of Lead wire**

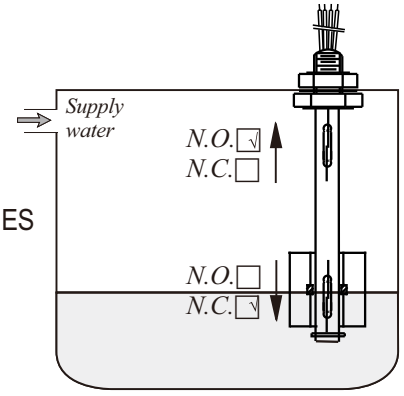
210: Teflon (200°C AWG24)
250: Silicon(150°C AWG24 Cable)
291: XLPE (125°C AWG22)
230: PVC (80°C AWG22)
231: PVC(80°C AWG22 Cable)

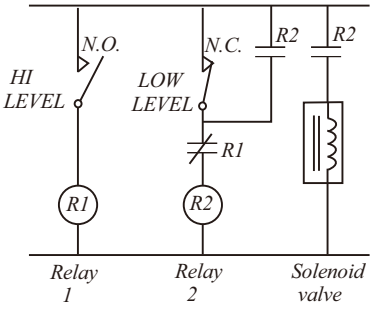
**⑳㉑㉒ Lead wire Length**

001：100mm　003：300mm　005：500mm　008：800mm　010：1000mm
002：200mm　004：400mm　006：600mm　009：900mm　020：2000mm

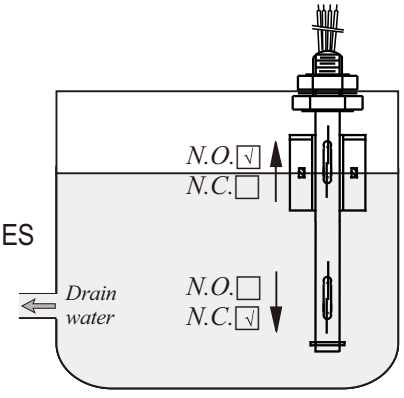
# TYPICAL WIRING DIAGRAMS

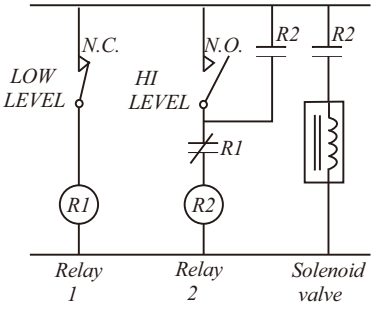
✻ AUTO SUPPLY CASE:
SINGLE FLOAT DUAL SWITCHES



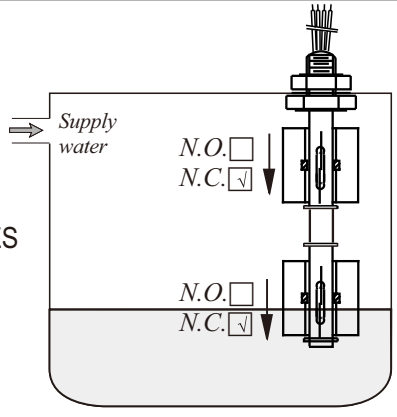



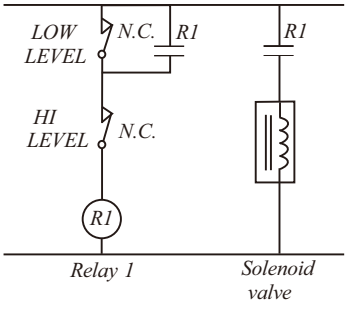

✻ AUTO DRAIN CASE:
SINGLE FLOAT DUAL SWITCHES



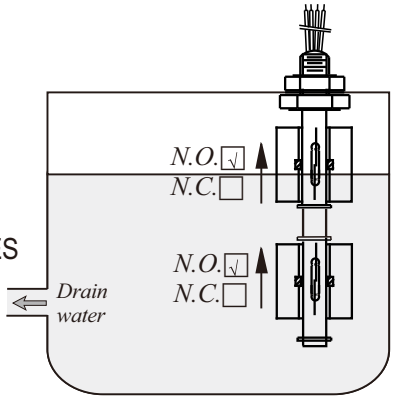



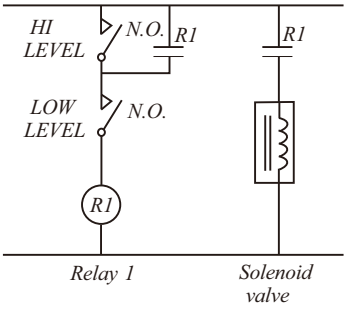

✻ AUTO SUPPLY CASE:
DUAL FLOATS DUAL SWITCHES




✻ AUTO DRAIN CASE:
DUAL FLOATS DUAL SWITCHES



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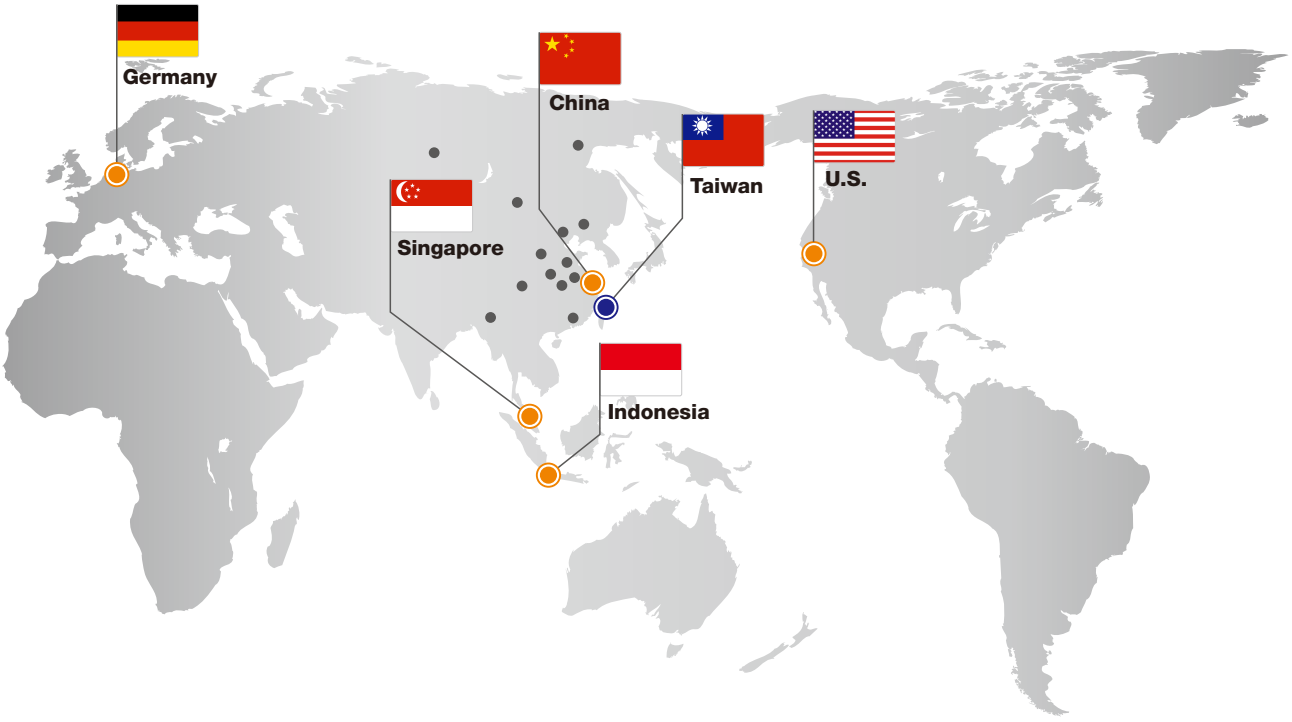
# Global Network

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