

PRODUCT INTRODUCTION

DESCRIPTION

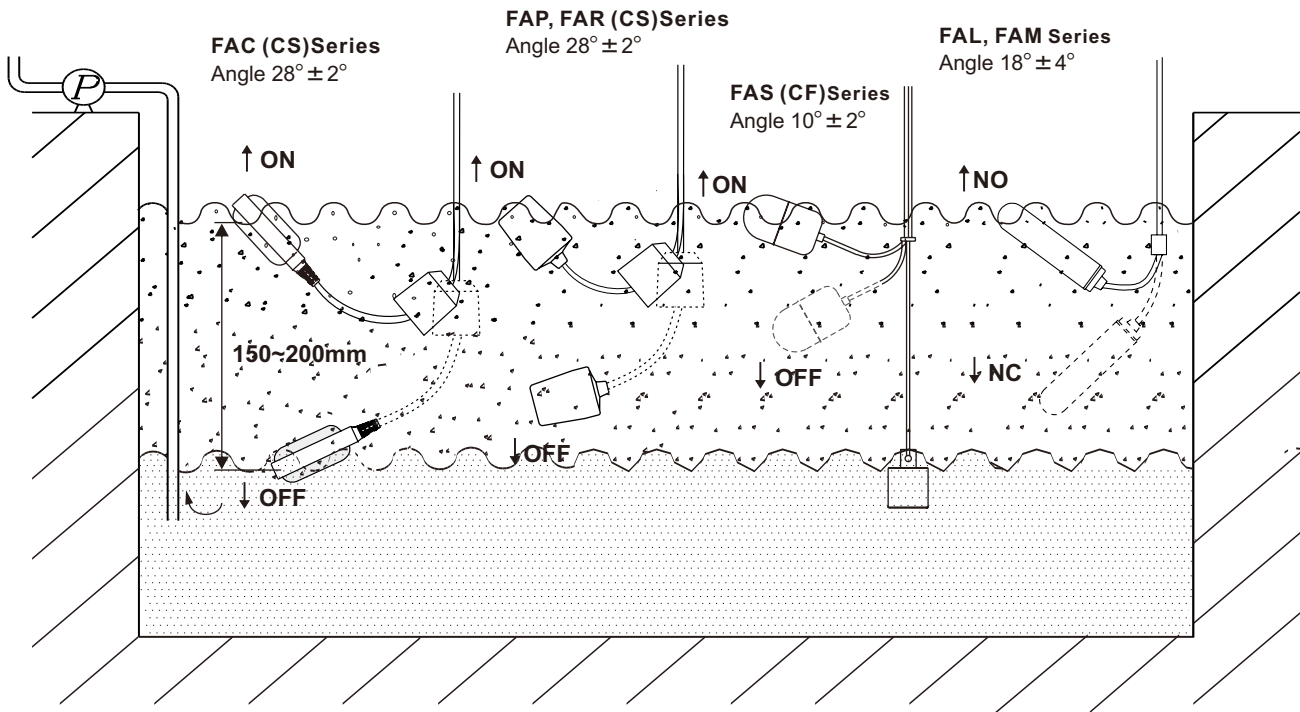
The Float Level Switch is made from chemical resistant polypropylene. It is durable, low-cost, and specially designed to assist with long range and multiple point level detection in liquids. It is also suitable for tanks containing pumps and granular solutions.

APPLICATION

FAC: Suitable for pump controlled systems
FAR/ P / D/ E: Suitable for pump controlled waste water with a low Specific Gravity (SG level).
FAS: High temperature solutions
FAL/ J: Cleaner water, and installation with smaller process connections.
It is suggested to apply Reed Switch contact models in PLC or DCS control.

WORKING PRINCIPLE

The Cable Float Level Switch is structured by using either micro switches proximity switches or reed switches to control the contact. It's user-friendly design is ideal for level measurement. The switches will transmit an ON or OFF contact signal output when the float rises and turns upwards. The switch contains a metal ball that can slide as the float position changes. For different water or solution temperatures, different float materials are available for selection. Plastic and stainless steel switches are the most common. The cable float level switch can not only be used in clear liquids but also can be used in granular liquids. Long distance detection points and multi-point contacts are also available. Cable float level switches can be applied in all water management, petrochemical, chemical industries. Other uses include: air-conditioner systems, drainage systems, most tanks or containers with level switch requirements.

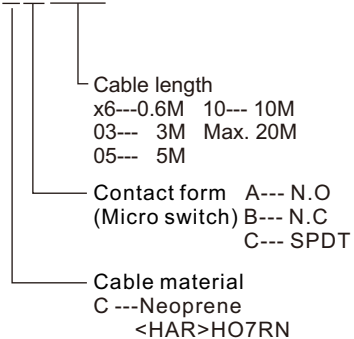


SPECIFICATIONS

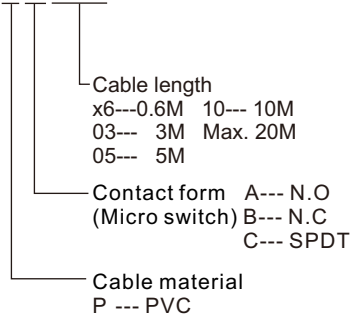
| | | | |
|-----------------------------|--|--|--|
| Dimensions (Unit:mm) | | | |
| | | | |
| Model | FAC A/B/C Round type | FAP A/B/C Cup type | FAR A/B/C Cup type |
| Switch | Micro switch | Micro switch | Micro switch |
| Float material | P.P. | | |
| Cable spec | Neoprene Cable 1mm ² x3C or 2C | PVC Cable 1.25mm ² x3C or 2C | Neoprene Cable 1mm ² x3C or 2C |
| Contact rating | 10A/ 250Vac (std.) or 15A/ 250Vac | | |
| Contact form | N.O or N.C or SPDT | | |
| Operating temp. | -10°C~80°C | 0°C~60°C | -10°C~80°C |
| Specific gravity | 0.6 | 0.6 | 0.6 |
| Weight approx. | 770g/5M | 290g/1M | 290g/1M |
| Pressure | 2 kg/cm ² | 2 kg/cm ² | 2 kg/cm ² |
| Wire voltage | 600 Vac | 600 Vac | 600 Vac |
| Isolation resistance | Min 100 MΩ | Min 100 MΩ | Min 100 MΩ |
| Contact resistance | Max. 100mΩ | Max. 100mΩ | Max. 100mΩ |
| Actuation angle | 28° ± 2° | 28° ± 2° | 28° ± 2° |
| Protection | IP68 | IP68 | IP68 |

Float Type Code

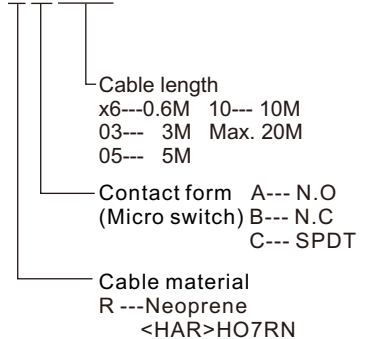
FACA□□...PP Float



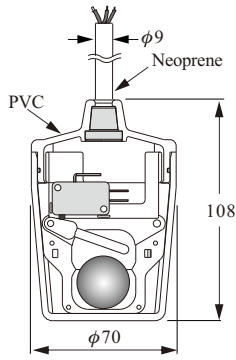
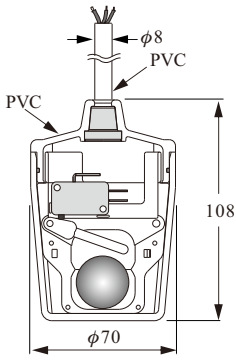
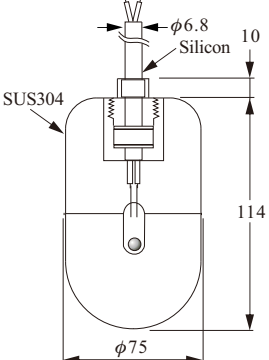
FAPA□□...PP Float



FARA□□...PP Float

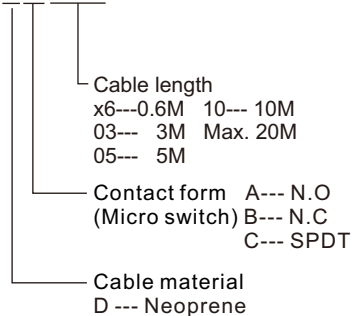


SPECIFICATIONS

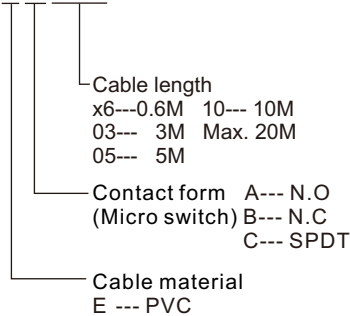
| | | | |
|-----------------------------|---|--|---|
| Dimensions (Unit:mm) |  |  |  |
| | FAD A/B/C Round type | FAE A/B/C Cup type | FAS A/B/C Cup type |
| Switch | Micro switch | Micro switch | Mercury switch |
| Float material | PVC | | SUS304 |
| Cable spec | Neoprene Cable 1mm ² x3C or 2C | PVC Cable 1.25mm ² x3C or 2C | Silicon Cable 0.75mm ² x3C or 2C |
| Contact rating | 10A/ 250Vac (std.) or 15A/ 250Vac | | 1A/ 230Vac |
| Contact form | N.O or N.C or SPDT | | N.O or N.C or SPDT |
| Operating temp. | 0°C~60°C | 0°C~60°C | 0°C~170°C |
| Specific gravity | 0.6 | 0.6 | 0.5 |
| Weight approx. | 290g/1M | 290g/1M | 480g/5M |
| Pressure | 2 kg/cm ² | 2 kg/cm ² | 2 kg/cm ² |
| Wire voltage | 600 Vac | 600 Vac | 300 Vac |
| Isolation resistance | Min 100 MΩ | Min 100 MΩ | — |
| Contact resistance | Max. 100mΩ | Max. 100mΩ | Max. 1Ω |
| Actuation angle | 28° ± 2° | 28° ± 2° | 10° ± 2° |
| Protection | IP68 | IP68 | IP68 |

Float Type Code

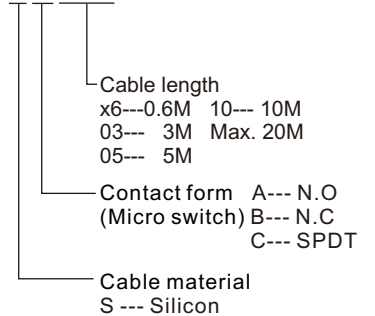
FADA□□...PVC Float



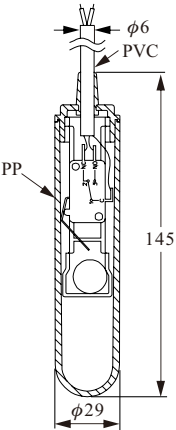
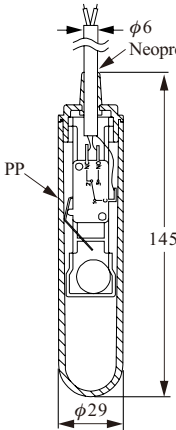
FAEA□□...PVC Float



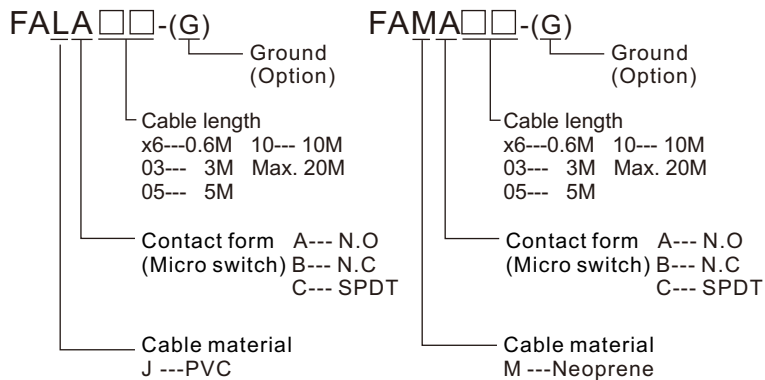
FASA□□...SUS Float



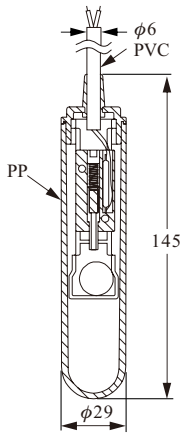
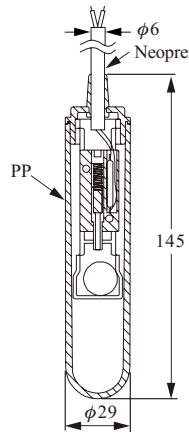
SPECIFICATIONS

| | | |
|-----------------------------|---|--|
| Dimensions (Unit:mm) |  |  |
| | Model | FAL A/B/C Bar type |
| Switch | Micro switch | |
| Float material | P.P. | |
| Cable spec | PVC Cable 0.75mm ² x3C | Neoprene Cable 0.75mm ² x3C |
| Contact rating | 3A/ 125/250Vac | |
| Contact mode | N.O or N.C or SPDT | |
| Operating temp. | -0°C~60°C | -10°C~80°C |
| Specific gravity | 0.8 | |
| Weight approx. | 113 ± 2g/1M Cable | |
| Pressure | 4.5 kg/cm ² | |
| Wire voltage | 600 Vac | |
| Isolation resistance | Min 100 MΩ | |
| Contact resistance | Max. 100mΩ | |
| Actuation angle | Up 18° ± 4° / Down 3° ± 3° | |
| Protection | IP68 | |

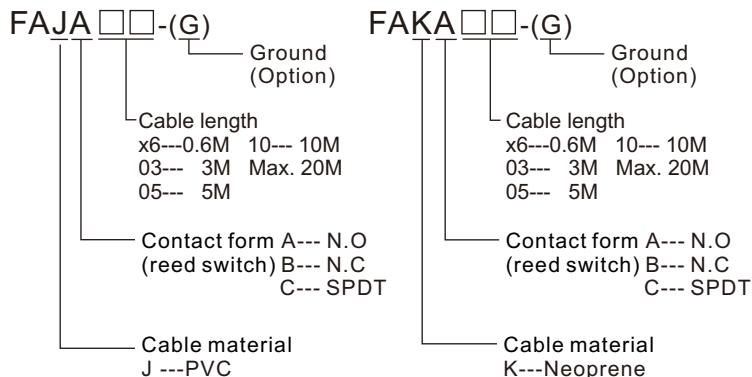
Float Type Code



SPECIFICATIONS

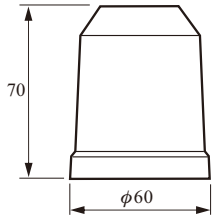
| | | |
|-----------------------------|---|--|
| Dimensions (Unit:mm) |  |  |
| | Model | FAJ A/B/C Bar type |
| Switch | Reed Switch | |
| Float material | P.P. | |
| Cable spec | PVC Cable 0.75mm ² x3C | Neoprene Cable 0.75mm ² x3C |
| Contact rating | AC70 VA / DC50 W(N.O), 20W(N.C, SPDT) | |
| Contact mode | N.O or N.C or SPDT | |
| Operating temp. | -0°C~60°C | -10°C~80°C |
| Specific gravity | 0.8 | |
| Weight approx. | 115 ± 2g/1M Cable | |
| Pressure | 4.5 kg/cm ² | |
| Wire voltage | 300 Vac/ 350Vdc(N.O), 150 Vac/ 200Vdc(N.C, SPDT) | |
| Isolation resistance | Min 100 MΩ | |
| Contact resistance | Max. 100mΩ(N.O), Max. 150mΩ(N.C, SPDT) | |
| Actuation angle | Up 18° ± 4° / Down 3° ± 3° | |
| Protection | IP68 | |

Float Type Code

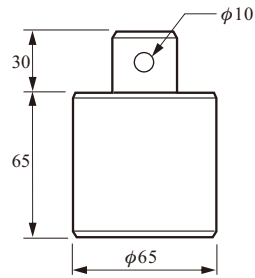


WEIGHTS DIMENSIONS

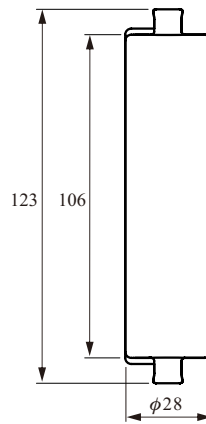
**FAPW-03
FAPW-05**



FASW



FAB-0010

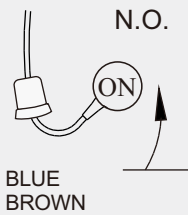


| Model | Material | Weight |
|----------------------------|----------|----------------|
| FAPW-03 FAPW-05 | PP | 0.3kg 0.5kg |
| FASW | SUS304 | 1.8kg |
| FAB-0010 | PP | 0.15kg |

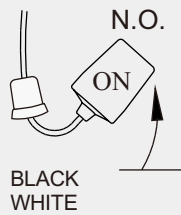
CONTACT MODE

1. SPDT (N.O)

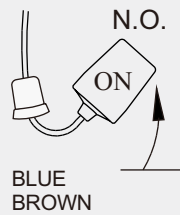
FACA



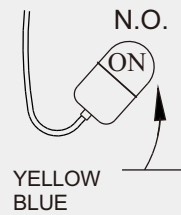
FAPA/FAEA



FARA/FADA

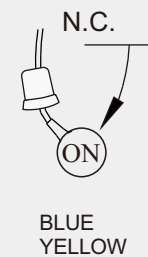


FASA

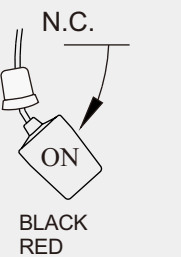


2. SPDT (N.C)

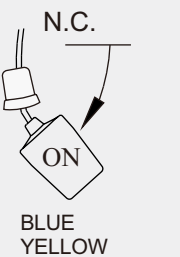
FACB



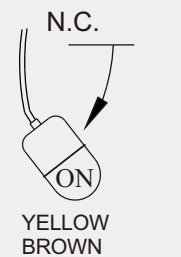
FAPB/FAEB



FARB/FADB

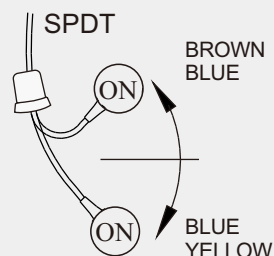


FASB

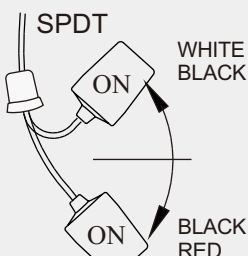


3. SPDT (1C)

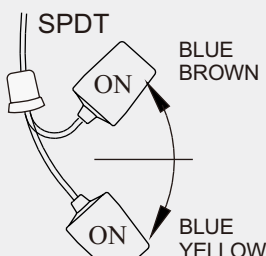
FACC



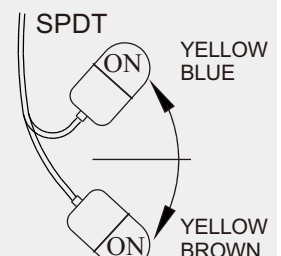
FAPC/FAEC



FARC/FADC



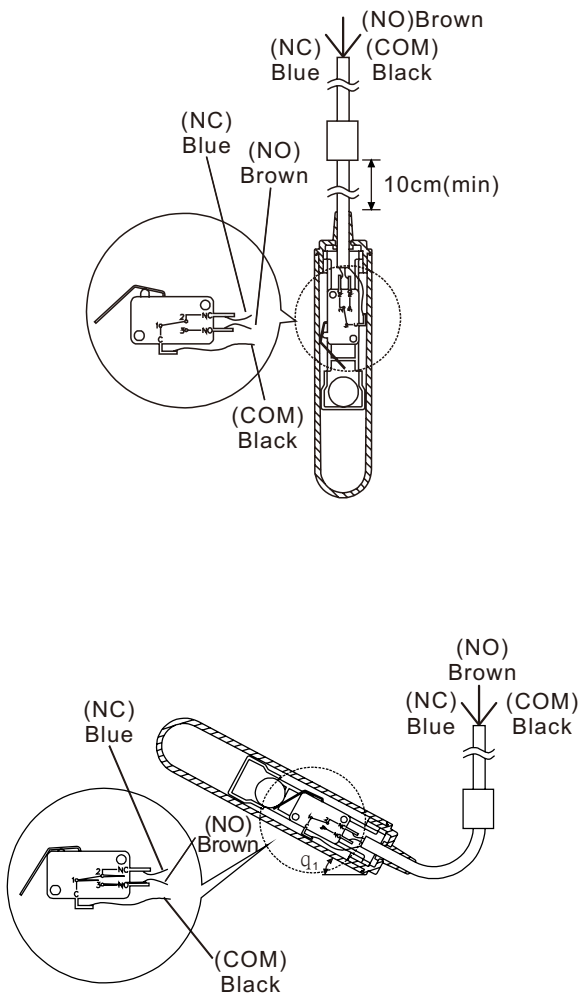
FASC



WIRING

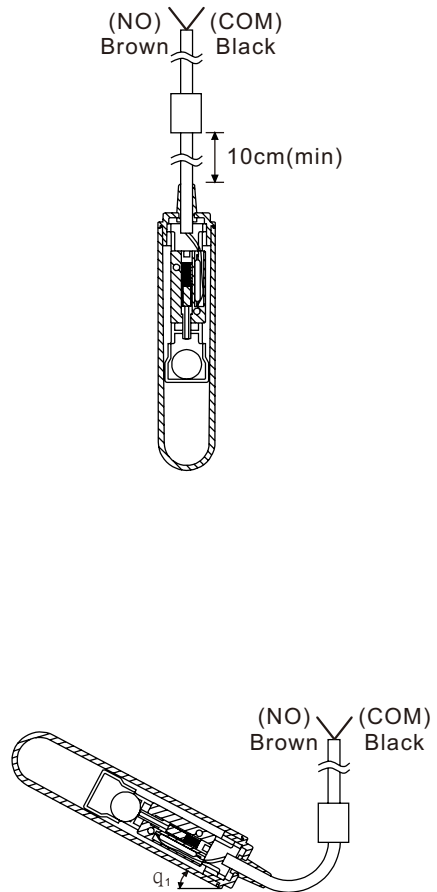
Micro Switch

When the float hasn't contacted the liquid, the blue and black wires are in an open state and the contact mode will be NC. When the liquid level rises and lifts the float until it reaches the actuation angle, the brown and black wires will be in an open state and the contact mode will be NO.



Reed Switch

When the liquid level is low, the metal ball remains away from the sensing range and the brown and black wires are in an open state (NC mode). When the liquid level rises and lifts the float until it reaches the actuation angle, the brown and black wires will be in an open state (NO mode).

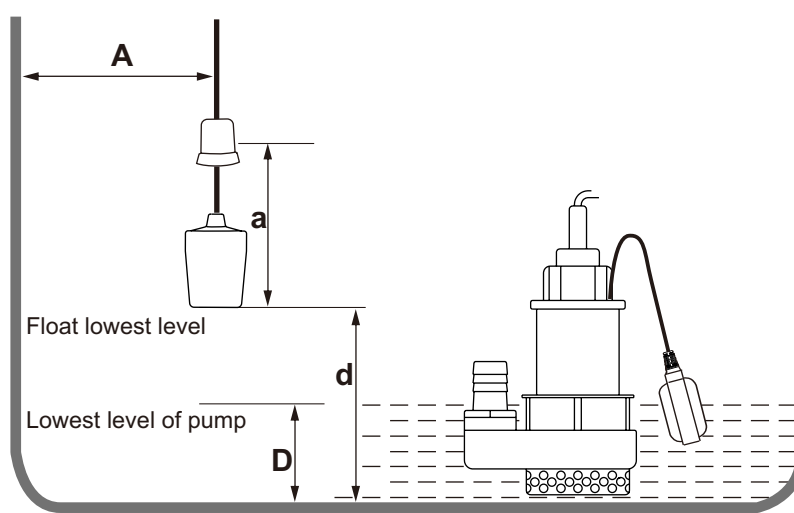


Installation guide

DIMENSIONS

The float's action length (a) must be shorter than the distance between the wall and the cable (A) ; if not, it will not function accurately.

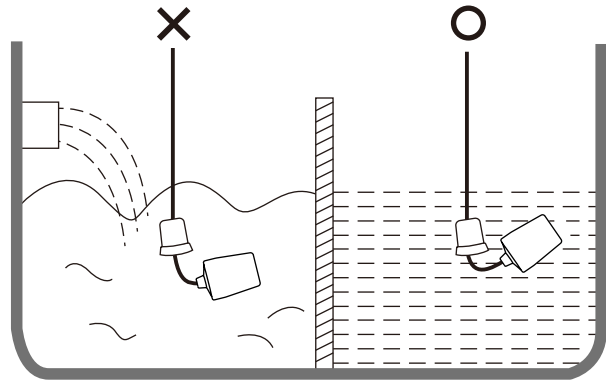
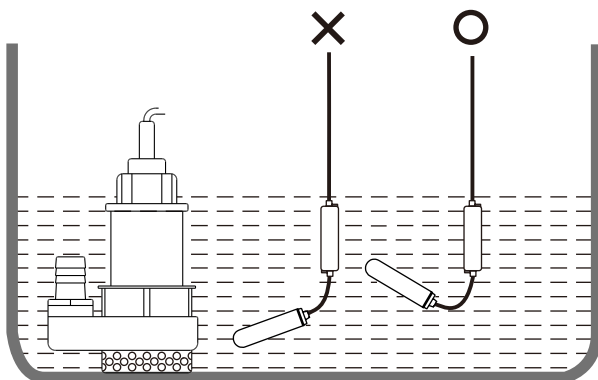
The lowest float level (d) must be higher than the lowest water level of the pump (D).



PRECAUTIONS

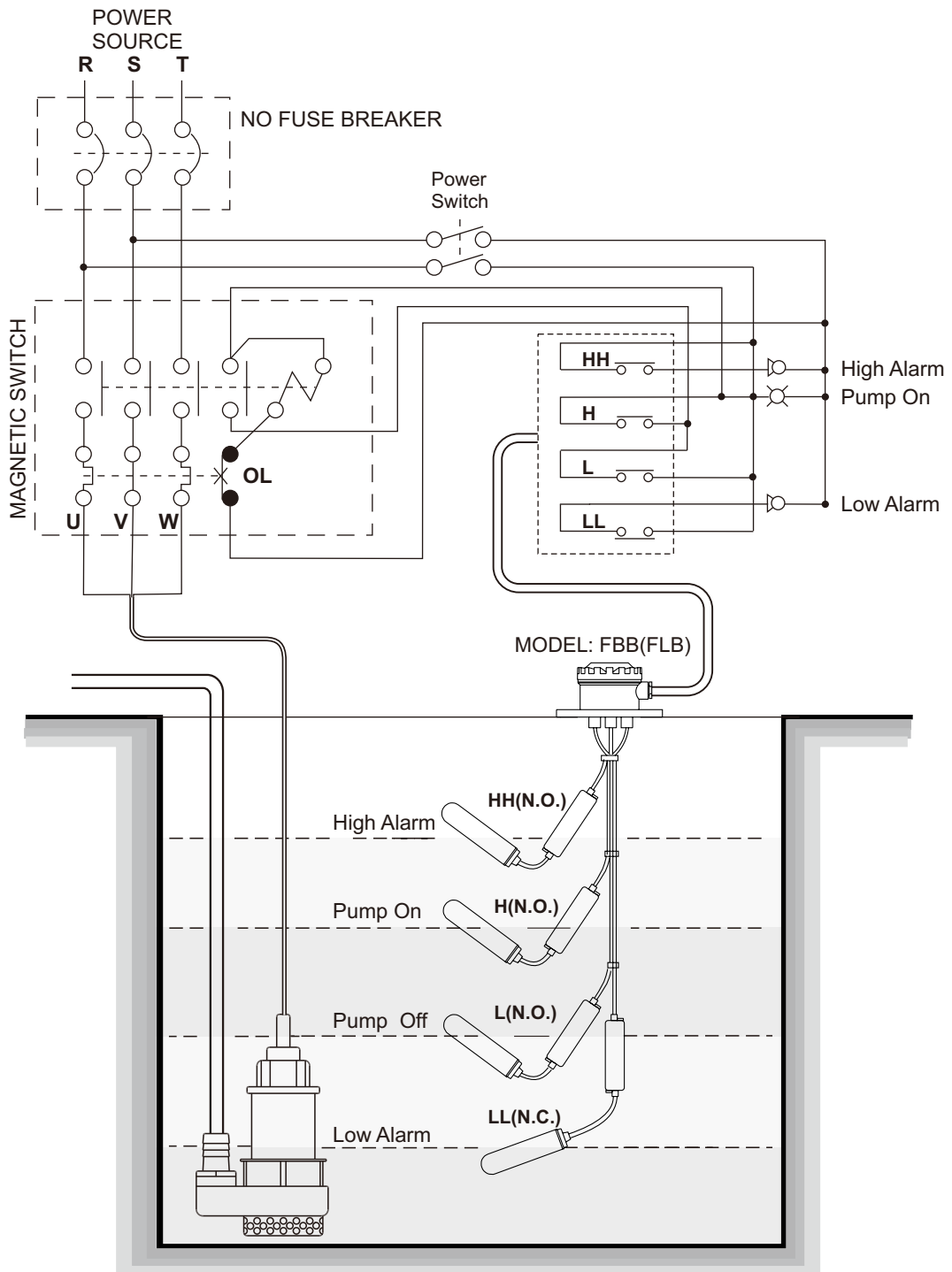
Keep a proper distance between the installation position and the water pump inlet to prevent the float switch from being sucked in towards the pump.

There should be a proper distance between the installation position and water inlet to prevent any direct water impact. If it can't be avoided, please install a pipe-shield or plate that lowers the turbulence.



APPLICATION

The FBB type is suitable for installation from the tank's roof/top for level control and monitoring.



HOW TO ORDER CABLE FLOATS (FB TYPE)

Various types of multi-point products can be selected to meet the user's needs.

For example:
 FB-B type is suitable for corrosive solutions.
 FB-A type is suitable for high-temperature waste water

DISTANCE OF CONTROL POINTS

| | | | |
|----------------|--------------------------|--------------------------|--------------------------|
| | | NO | NC |
| ℓ 1 : _____ mm | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| ℓ 2 : _____ mm | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| ℓ 3 : _____ mm | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| ℓ 4 : _____ mm | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| L : _____ mm | | | |

FB ()

Cable Fixed Wire Length (unit: mm)
 0500: 500mm up
 1000: 501~1000mm
 1500: 1001~1500mm
 ※ 500mm per Unit
 ※ Use English letter as first code for probe length over 10m.
 A150 represents 15m, A200 represents 20m

Cable Fixed Wire Material
 S: Stainless N: Nylon

Weight Quantity
 1~4

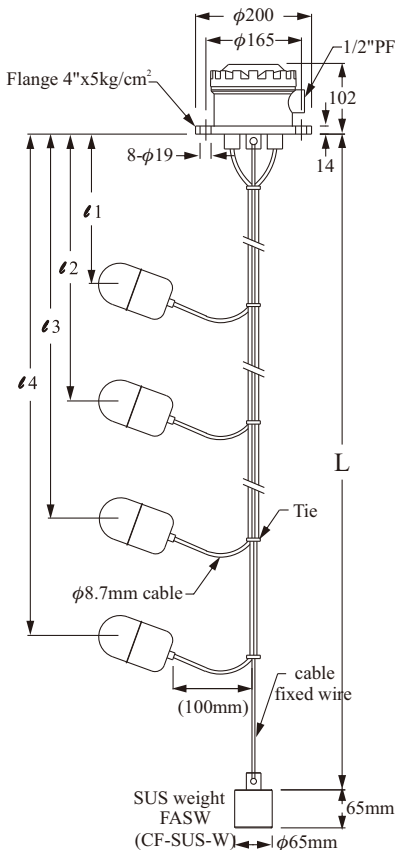
Weight Material
 C: P.P. P: PPφ28x106
 S: SUS304

Float Quantity
 1~4

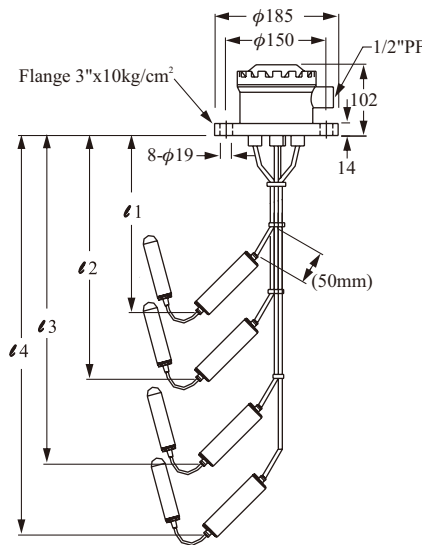
Float material
 C: P.P. (φ90x110 Neoprene cable) L: P.P. (φ29x145 PVC cable)
 P: P.P. (φ70x108 PVC cable) M: P.P. (φ29x145 Neoprene cable)
 R: P.P. (φ70x108 Neoprene cable) G: P.P. (φ29x145 PVC cable)
 S: SUS(φ75x114 Silicon cable) H: P.P. (φ29x145 Neoprene cable)
 D: PVC(φ70x108 Neoprene cable) J: P.P. (φ29x145 PVC cable)
 E: PVC(φ70x108 PVCcable) K: P.P. (φ29x145 Neoprene cable)

Housing
 A: Aluminum B: Plastic S: SUS304

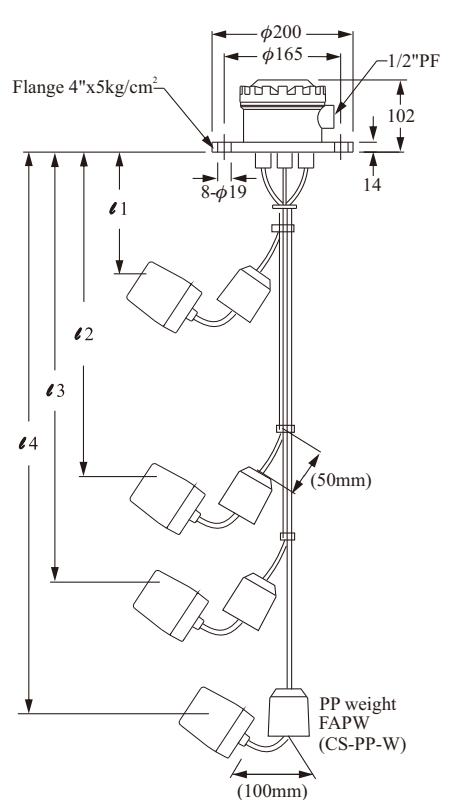
MODEL: FBA (FLA)



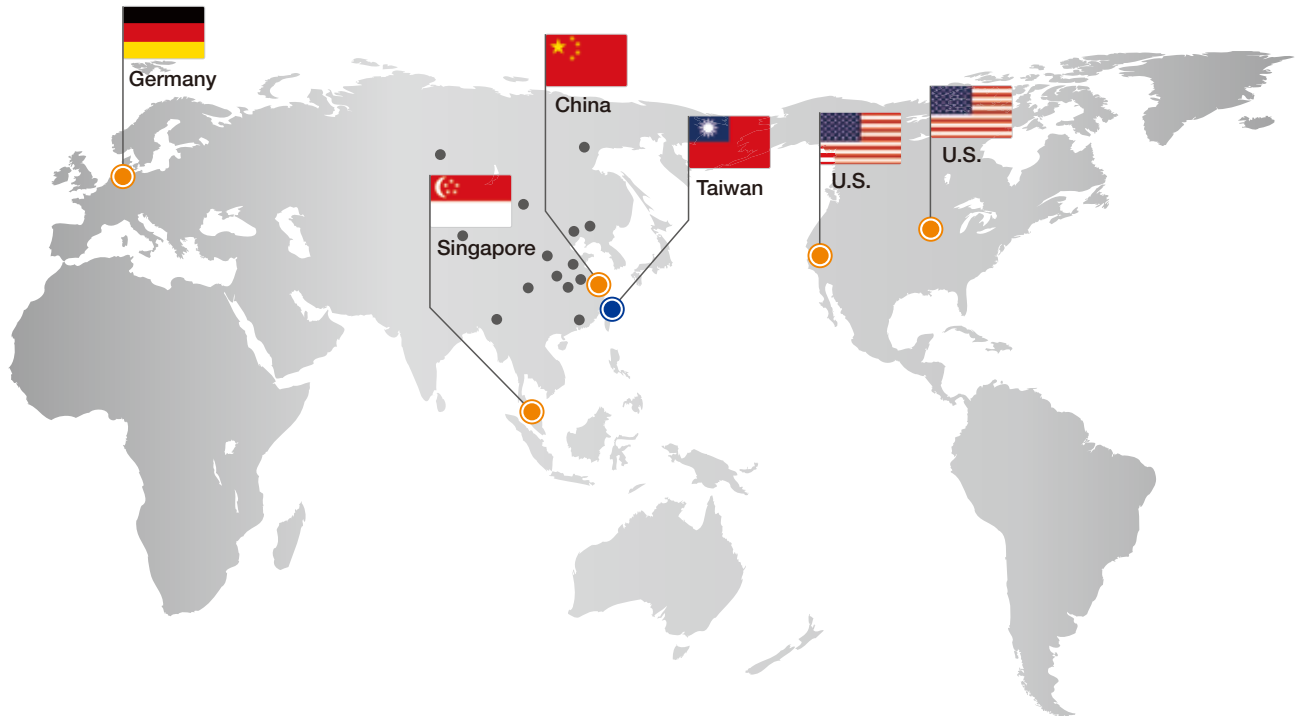
MODEL: FBB (FLB)



MODEL: FBS (FLB)



Global Network



■ Asia

● Taiwan

FINETEK CO., LTD. - Taipei Head Quarter
No.16, Tzuchiang St., Tucheng Industrial Park
New Taipei City 236, Taiwan
TEL: 886-2-2269-6789
FAX: 886-2-2268-6682
EMAIL: info@fine-tek.com

FINETEK CO., LTD. - I-Lan Factory
TEL: 886-3-990-9669
FAX: 886-3-9909659

FINETEK CO., LTD. - Taichung Brance
TEL: 886-4-2337-0825
FAX: 886-4-2337-0836

FINETEK CO., LTD. - Kaohsiung Branch
TEL: 886-7-333-6968
FAX: 886-7-536-8758

● China

FINE AUTOMATION CO., LTD. - Shanghai Factory
No.451 DuHui Rd, MinHang District, Shanghai,
China 201109
TEL: 86-21-6490-7260
FAX: 86-21-6490-7276
EMAIL: info.sh@fine-tek.com

● Singapore

FINETEK PTE LTD. - Singapore Office
No. 60 Kaki Bukit Place, #07-06 Eunos
Techpark 2 Lobby B, Singapore 415979
TEL: 65-6452-6340
FAX: 65-6734-1878
EMAIL: info.sg@fine-tek.com

■ North America

● California, U.S.

APLUS FINETEK SENSOR INC. - US Office
355 S. Lemon Ave, Suite D, Walnut,
CA 91789
TEL: 1 909 598 2488
FAX: 1 909 598 3188
EMAIL: info@aplusfine.com

● Illinois, U.S.

APLUS FINETEK SENSOR INC.
TEL: 1 815 632-3132
FAX: 1 815 716 8464
EMAIL: info@aplusfine.com

■ Europe

● Germany

FineTeK GmbH - Germany Office
Frankfurter Str. 62, OG D-65428
Ruesselsheim, Germany
TEL: +49-(0)6142-17608-0
FAX: +49-(0)6142-17608-20
EMAIL: info@fine-tek.de



Distributor: