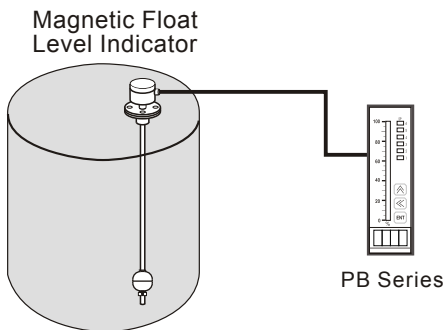


**PRINCIPLE**

The "Magnet Float Level Indicator" is composed of the float and sensing rod (shown as below). As the float raised or lowered by liquid level, the sensing rod will have a resistance output, which is directly proportional to the liquid level. Also, the float level indicator can be equipped with the TAB-2100 (please see page 3) to produce a 0/4~20mA signal. In addition, we can use with PB series bargraphic display scaling panel meter for level control and display. Anyway, "Magnet Float Level Indicator" is a great benefit to all kinds of industries with its easy working principle and reliability.

**FEATURES**

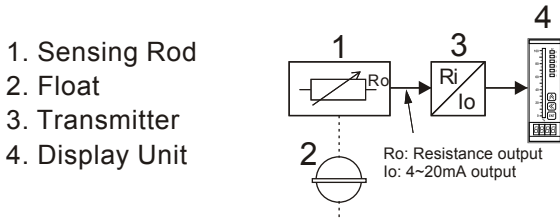
- ✓ Every sensing element is protected by a plastic Package, safety in use and transport. (as fig. 1)
- ✓ High performance and reliability of electric circuit Modular designed (as fig.2).
- ✓ Lower installation costs, less maintenance, reduced personnel training, and decreased plant shock down time.



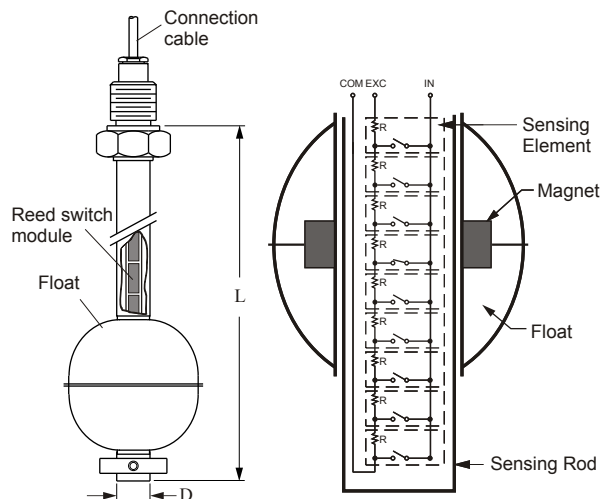
**APPLICATIONS**

Applied for waste water treatment turn-key facility, Electric power plant, shipping vessel, hydraulic facility, chemical industrial equipment, petrochemical industry and hot coal boiler. e.g. diesel engine generator, motor oil meter, oil material storage tank.

**SCHEMATIC DIAGRAM OF THE PRINCIPLES**



**CONSTRUCTION**



Sensing Element Size

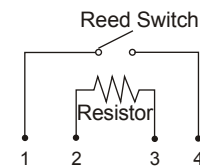
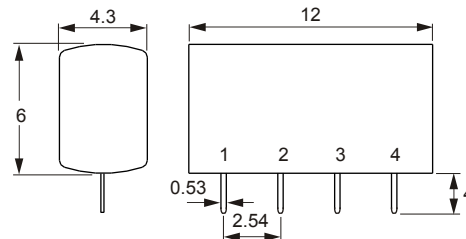


Fig.2

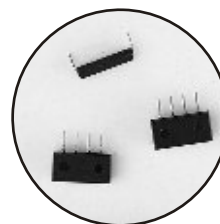


Fig.1 Sensing Element

# HOUSING DIMENSION

**B**  
 Material : Aluminum  
 Enclosure : IP65  
 Max.Temp.: -20°C~200°C

**C**  
 Material : P.P+Fiber  
 Enclosure : IP65  
 Max.Temp.: -20°C~80°C

**D** Explosion-proof

Material : Aluminum  
 Enclosure : NEPSI Ex d IIC T3~T6  
 ATEX II 2G EEx d IIB T3~T6  
 ATEX II 2D IP65 T3~T6  
 Max.Temp.: -20°C~200°C

**G**

Material : PC  
 Enclosure : IP65  
 Max.Temp.: -20°C~100°C

**K** Explosion-proof

Material : Aluminum  
 Enclosure : CESI 03 ATEX 108  
 II 2G EEx d IIC T6  
 Max.Temp.: -20°C~100°C

**N** Explosion-proof

Material : SUS316  
 Enclosure : NEPSI Ex d IIC T3~T6  
 ATEX II 2G EEx d IIB T3~T6  
 ATEX II 2D IP65 T3~T6  
 Max.Temp.: -20°C~200°C

**X**

Material : Aluminum  
 Enclosure : IP65  
 Max.Temp.: -20°C~100°C

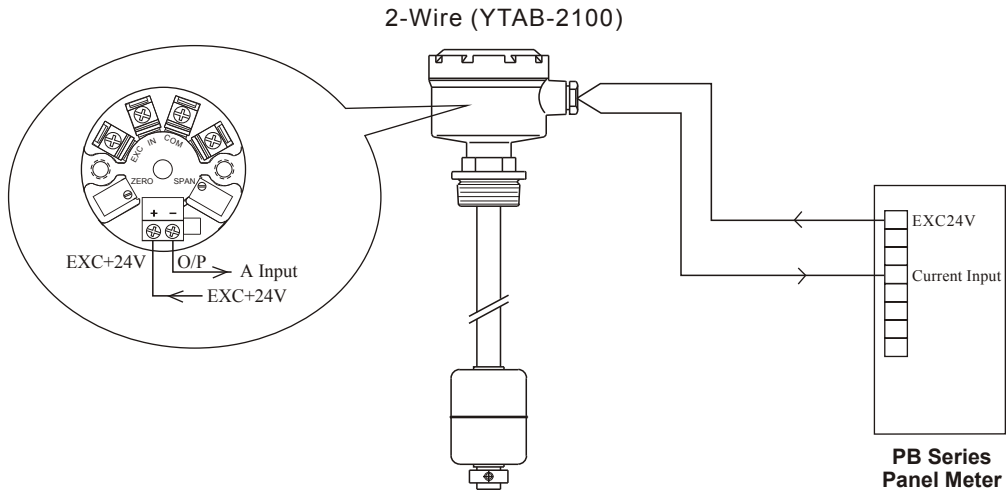
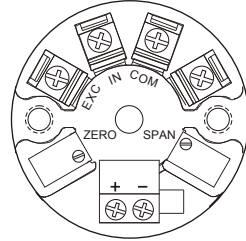
## FLOAT SPECIFICATION

Dimension	Type	AxBxC(mm)	S.G.	Max. Pressure (kg/cm <sup>2</sup> )	Material	Max. Temp. (°C)	Approx. Weight (g)
	S3	45x55x15	0.65	12	SUS 316	200°C	37.6
	S6	75x108x19	0.5	10	SUS 304	200°C	165
	S4	52x52x15	0.55	30	SUS 316	200°C	33.4
	S5	75x73x19	0.65	30	SUS 304	200°C	102.4
	S8	100x100x20	0.5	30	SUS 304	200°C	249.7
	S9	150x150x30	0.45	30	SUS 304	200°C	534
	P3	48x45x18.5	0.6	5	PP	80°C	35.5
	F4	48x60x18	0.75	5	PVDF	120°C	65.3

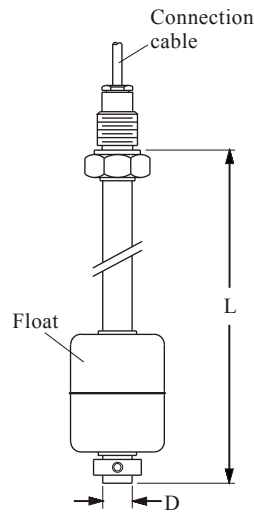
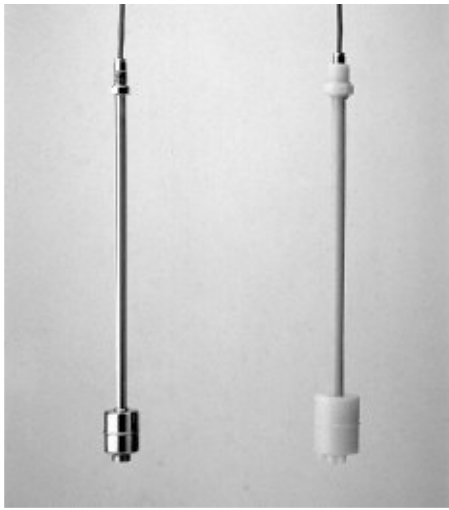
# TRANSDUCER

## MODEL: YTAB-2100 Transducer

Voltage Supply : Loop power 12~32VDC  
 Output Current : 4~20mA  
 Load Resistance :  $RL(\text{Max})=50(\text{Vs}-8)$   
 Operation Temperature: 0°C ~70 °C  
 Ambient Humidity : 0°C ~80 °C RH  
 Accuracy :  $\pm 0.1\%(25^\circ\text{C})$   
 Temperature Effect : 0.5%FS  
 Adjustment Range : Span Ajustment 20% FS  
                               Zero Ajustment 5% FS



# ECONOMICAL



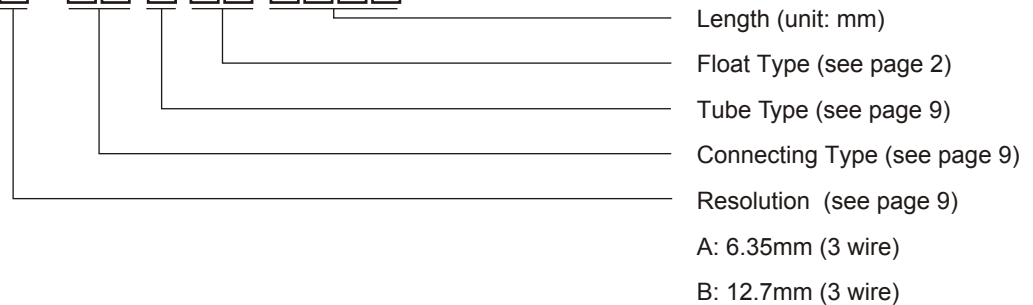
## SPECIFICATION

**Connection Cable:** Silicon cable 3C × 1M  
**Output:** 3-wire resistance output  
**Ambient Temp.:** 60 °C

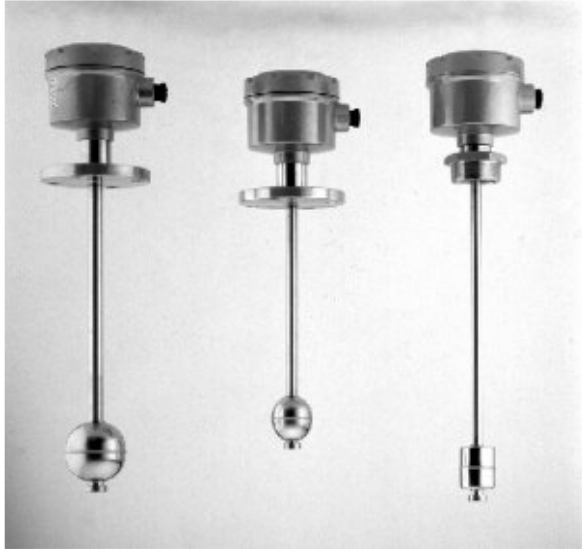
**Operating Temp.:** PP tube -10 °C ~ 80 °C  
 PVDF tube -20 °C ~ 120 °C  
 SUS tube -20 °C ~ 120 °C

Order No.	Connecting	Tube size & Material (D)	Float type & Material	Suitable S.G.	Measuring Range
YFG□-AR4	3/8"PF	φ 14 SUS 304 SUS 316	S3: φ 45x55 SUS 316 S4: φ 52x52 SUS 316	>0.5	FGA...Max.6M FGB...Max.6M
YFG□-AR7	3/8"PF	φ 17.2 SUS 304	S5: φ 75x73 SUS 304 S6: φ 75x108 SUS 304	>0.5	FGA...Max.6M FGB...Max.6M
YFGB-CR5P3	3/4"PF	φ 17.2 PP	P3: φ 48x45 PP	>0.6	FGB...Max.6M
YFGB-CR6F4	3/4"PF	φ 16 PVDF	F4: φ 48x60 PVDF	>0.8	FGB...Max.6M

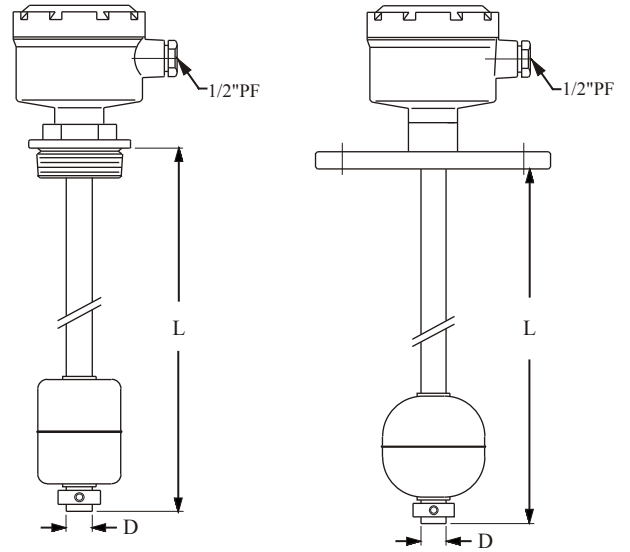
MODEL : YFG□-□□□□□□□□



# STANDARD



★ B type housing, dimension see page 2.



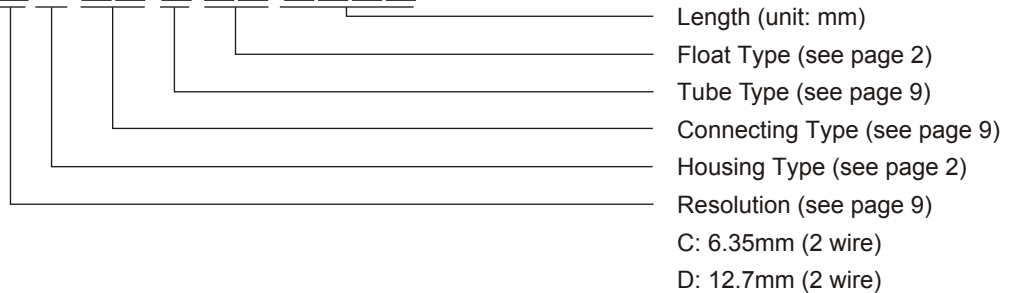
## SPECIFICATION

**Terminal Housing:** Aluminum, IP65  
**Output:** 4~20mA, 2-wire resistance output

**Operating Temp.:** -20 °C ~ 120 °C  
**Ambient Temp.:** 60 °C

Order No.	Connecting	Tube size & Material (D)	Float type & Material	Suitable S.G.	Measuring Range
YFG□BFQ4	2"NPT	φ 14 SUS 316 SUS 304	S3: φ45x55 SUS 316 S4: φ52x52 SUS 316	>0.5	FGC/D...Max.6M
YFG□BGN4	2-1/2"x10kg/cm <sup>2</sup>	φ 14 SUS 316 SUS 304	S3: φ45x55 SUS 316 S4: φ52x52 SUS 316	>0.5	FGC/D...Max.6M
YFGDBHN7	3"x10kg/cm <sup>2</sup>	φ 17.2 SUS 304	S5: φ75x73 SUS 304 S6: φ75x108 SUS 304	>0.45	FGD...Max.6M
YFGDBIQ7	4"NPT	φ17.2 SUS 304	S8: φ100x100 SUS 304	>0.5	FGD...Max.6M
YFGDBKN8 YFGDBKN9	6"x10kg/cm <sup>2</sup>	φ 21.7 SUS 304 φ 27.2	S9: φ150x150 SUS 304	>0.45	FGD...Max.12M

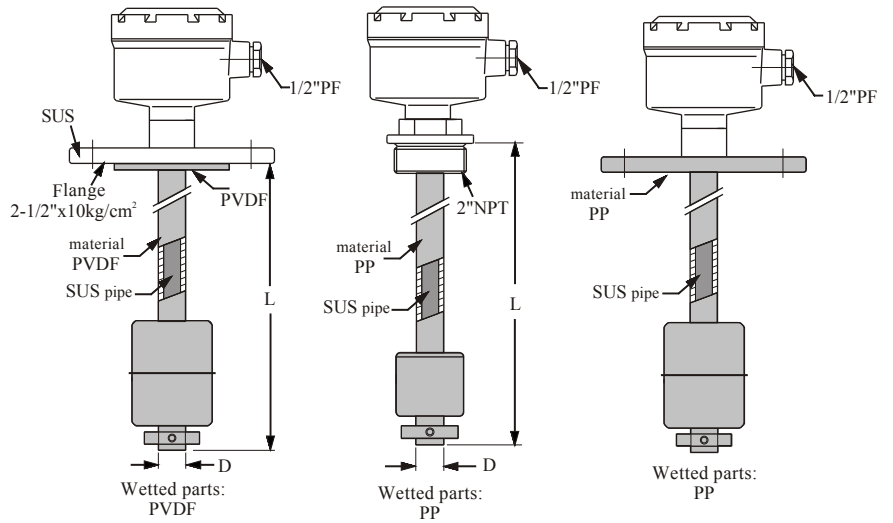
MODEL : YFG□ B □ □ □ □ □ □ □ □



# ANTI-ACID / ALKALINE



★ C type housing, dimension see page 2.



## SPECIFICATION

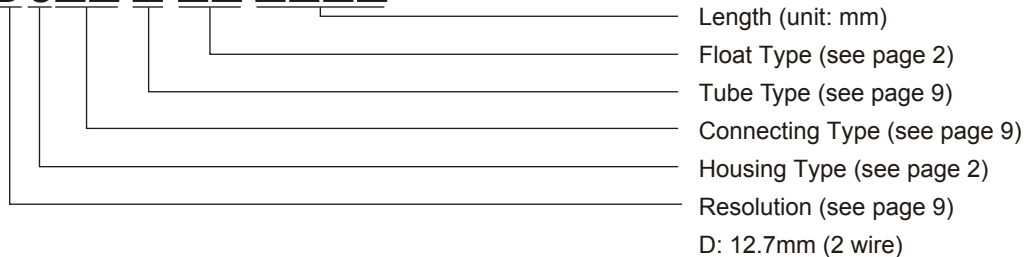
**Terminal Housing:** PP +Fiber, IP65  
**Output:** 4~20mA, 2-wire resistance output  
**Ambient Temp.:** 60

**Operating Temp.:** PP jacket tube -10℃ ~ 80℃  
 PVDF jacket tube -20℃ ~ 120℃

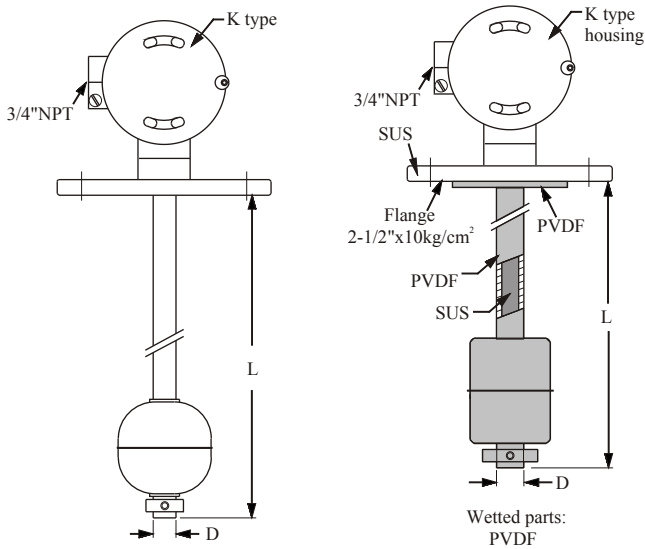
Order No	Connecting	Tube size & Material (D)	Float type & Material	Suitable S.G.	Measuring Range
YFGDCFQ5P3	2"NPT	φ 17.2 PP	P3: φ 48x45 PP	>0.5	FGD...Max.6M
YFGDCFQ6F4	2"NPT	φ 16 PVDF	F4: φ 48x60 PVDF	>0.8	FGD...Max.6M
YFGDCGN5P3	2-1/2"x10kg/cm²	φ 17.2 PP	P3: φ 48x45 PP	>0.6	FGD...Max.6M
YFGDCGN6F4	2-1/2"x10kg/cm²	φ 16 PVDF	F4: φ 48x60 PVDF	>0.8	FGD...Max.6M

Every unit is protected by PP or PVDF jacket to prevent the sensing rod from chemical corrosion.

MODEL : YFG D C □ □ □ □ □ □ □ □



★ K type ATEX Explosion proof Enclosure can be selected, dimension see page 2.



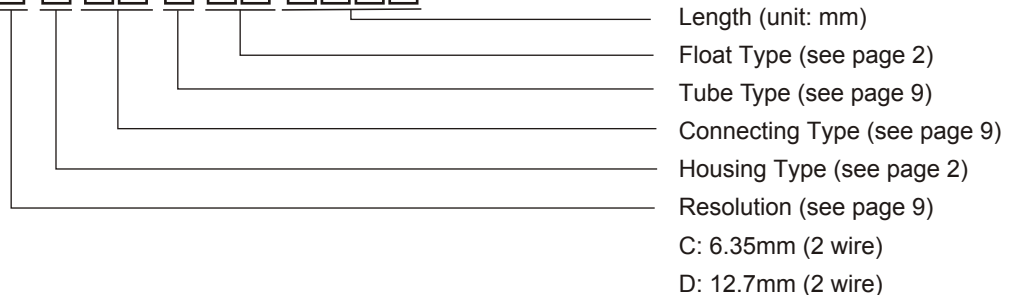
### SPECIFICATION

**Terminal Housing:** K type --- Aluminum, ATEX EEx d IIC T6     **Operating Temp.:** PP tube -10°C ~ 80°C  
**Output:** 4~20mA, 2-wire resistance output     PVDF tube -20°C ~ 120°C  
**Ambient Temp.:** 60°C     SUS tube -20°C ~ 120°C

°C

Order No	Connecting	Tube size & Material (D)	Float type & Material	Suitable S.G.	Measuring Range
YFG□KFQ4	2"NPT	φ 14    SUS 304	S4: φ52x52    SUS 316	>0.5	FGA/B...Max.6M FGC/D...Max.6M
YFG□KGN4	2-1/2"x10kg/cm <sup>2</sup>	φ 14    SUS 304	S4: φ52x52    SUS 316	>0.5	FGA/B...Max.6M FGC/D...Max.6M
YFGDKHN7	3"x10kg/cm <sup>2</sup>	φ 17.2    SUS 304	S6: φ75x108    SUS 304	>0.45	FGD...Max.6M
YFGDKIQ4	4"NPT	φ 17.2    SUS 304	S8: φ100x100    SUS 304	>0.5	FGD...Max.6M
YFGDKFQ5P3	2"NPT	φ 17.2    PP	P3: φ48x45    PP	>0.6	FGD...Max.6M
YFGDKFQ6F4	2"NPT	φ 16    PVDF	F4: φ48x60    PVDF	>0.8	FGD...Max.6M
YFGDKGN5P3	2-1/2"x10kg/cm <sup>2</sup>	φ 17.2    PP	P3: φ48x45    PP	>0.6	FGD...Max.6M
YFGDKGN6F4	2-1/2"x10kg/cm <sup>2</sup>	φ 16    PVDF	F4: φ48x60    PVDF	>0.8	FGD...Max.6M

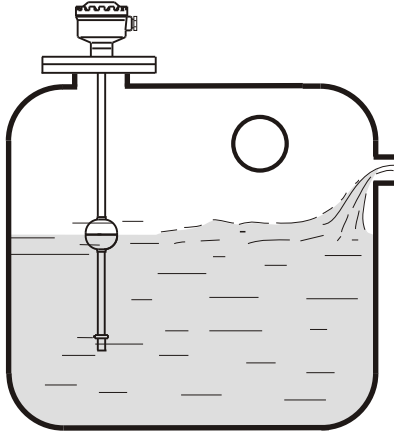
MODEL : YFG □ □ □ □ □ □ □ □



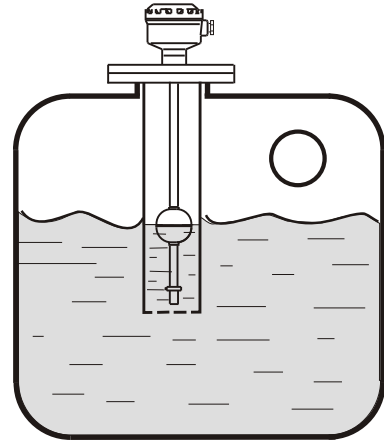
# INSTALLATION

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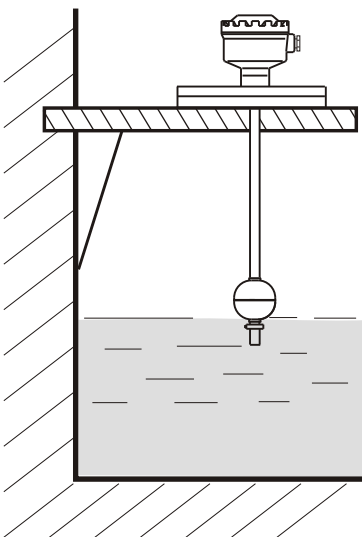
- ▶ The float level indicator should be mounted far away from liquid inlet, any strong liquid Fluctuation will produce error output signals.



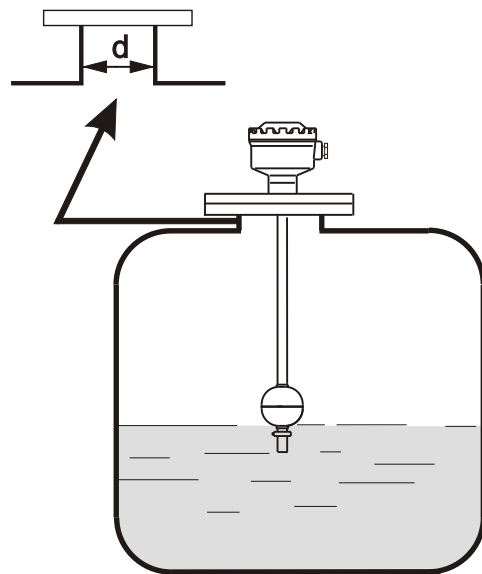
- ▶ It is requested a pipe shield or equivalent Device to normalize the indicator actuation if the indicator is used with any agitator Application.



- ▶ It had better require an L type supporter, when the level indicator is mounted in concrete wall tank as figure below.



- ▶ It is recommended to select the standpipe with diameter(d) larger than the float ball for Installation process.





# ORDER INFORMATION

**YFG [D] [C] [FQ] [6] [F1] [1500] (P)**

### RESOLUTION

- A: 6.35mm (3-wire)
- B: 12.7mm (3-wire)
- C: 6.35mm (2-wire)
- D: 12.7mm (2-wire)

### TERMINAL HOUSING (see page 2)

- B: Aluminum (IP65)                      - : None
- C: P.P (IP65)                                  S : Others
- D: Aluminum (Ex d IIB T3~T6)
- E: AL. (Small space) IP65
- G: PC (IP65)
- K: Aluminum (Ex d IIB T3~T6)
- N: SUS (Ex d IIB T3~T6)

### CONNECTING TYPE

- |                 |                           |             |
|-----------------|---------------------------|-------------|
| A: 3/8" (10A)   | I : 4" (100A)             | P : 300 Lbs |
| B: 1/2" (15A)   | J : 5" (125A)             | Q: PT       |
| C: 3/4" (20A)   | K : 6" (150A)             | R: PF(G)    |
| D: 1" (25A)     | 4 : 7" (175A)             | T : BSP     |
| E: 1 1/2" (40A) | 5 : 8" (200A)             | U: NPT      |
| F: 2" (50A)     | M: 5 Kg/cm <sup>2</sup>   | V: GAS      |
| G: 2 1/2" (65A) | N : 10 Kg/cm <sup>2</sup> | S : Others  |
| H: 3" (80A)     | O : 150 Lbs               |             |

※ Tri-Clamp 1-1/2"=ES; 2"=FS

### TUBE TYPE & MATERIAL

- |  |  |
|--|--|
| 0: φ12.7 (SUS304)<br>Only available for resolution 12.7mm. | C: φ12.7 (SUS316)<br>Only available for resolution 12.7mm. |
| 4: φ14 (SUS304)  | B: φ14 (SUS316)  |
| 5: φ17.2 (P.P.)  | D: φ17.2 (SUS316)  |
| 6: φ16 (PVDF)  | E: φ21.7 (SUS316)  |
| 7: φ17.2 (SUS304)  | F: φ27.2 (SUS316)  |
| 8: φ21.7 (SUS304)  |  |
| 9: φ27.2 (SUS304)  |  |

### FLOAT TYPE (see page 2)

Material	Type					
	Plastic	P3	F4			
SUS	S3	S4	S5	S6	S8	S9

### LENGTH (UNIT : mm)

- 0500:** 50cm (01~50)            ※ 50cm per Unit
- 1000:** 100cm (51~100)
- 1500:** 150cm (101~150)

### PIPE SHIELD

- ★ Tolerance of the total product length is ±5mm.
- ★ Characteristics, specifications and dimensions are subject to change without notice.
- ★ Please contact us for further informations.

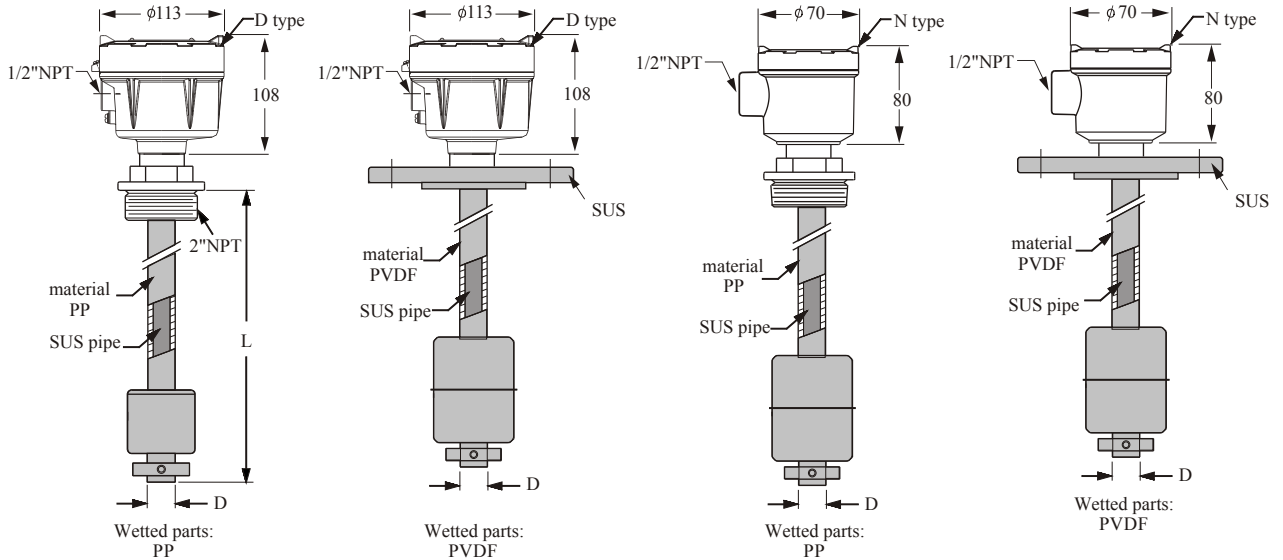
# ENCLOSURE EXPLOSION PROOF (PLASTIC JACKET)

★ D or N type housing can be selected, dimension see page 2.

NEPSI PROOF No. GYJ06231 Ex d IIC T3~T6

PTB PROOF No. 05 ATEX 1028 Ex II 2G Ex d IIB T3~T6

Ex II 2D IP65 T3~T6



## SPECIFICATION

**Terminal Housing:** D type --- Aluminum, Ex d IIB T3~T6  
N type --- SUS, Ex d IIC T3~T6

**Operating Temp.:** PP tube -10°C ~ 80°C

PVDF tube -20°C ~ 120°C

SUS tube -20°C ~ 120°C

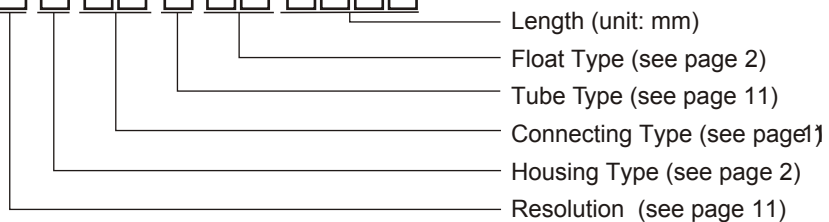
**Output:** 4~20mA, 2-wire resistance output

**Ambient Temp.:** 60°C

ORDER NO. FG7 MODEL NO. RL7	Connecting	Tube size & Material (D)	Float type & Material	Suitable S.G.	Measuring Range
YRL7□DFQ4	2"NPT	φ 14 SUS 316	S3: φ 45x55 SUS 316	>0.5	RL7...Max.3M
YRL7□DGN4	2-1/2"x10kg/cm <sup>2</sup>	φ 14 SUS 316	S3: φ 45x55 SUS 316	>0.5	RL7...Max.3M
YRL7DDHN7	3"x10kg/cm <sup>2</sup>	φ 17.2 SUS 304	S5: φ 75x73 SUS 304	>0.45	RL7...Max.6M
YRL7DDIQ4	4"NPT	φ 17.2 SUS 304	S8: φ 100x100 SUS 304	>0.5	RL7...Max.6M
YRL7DDKN8 YRL7DDKN9 YRL7DDKN8 YRL7DDKN9	6"x10kg/cm <sup>2</sup>	φ 21.7 φ 27.2 SUS 304	S9: φ 150x150 SUS 304	>0.45	RL7...Max.6M
YRL7DDFQ5P3	2"NPT	φ 17.2 PP	P3: φ 48x45 PP	>0.6	RL7...Max.6M
YRL7DDFQ6F4	2"NPT	φ 16 PVDF	F4: φ 48x60 PVDF	>0.8	RL7...Max.6M
YRL7DDGN5P3	2-1/2"x10kg/cm <sup>2</sup>	φ 17.2 PP	P3: φ 48x45 PP	>0.6	RL7...Max.6M
YRL7DDGN6F4	2-1/2"x10kg/cm <sup>2</sup>	φ 16 PVDF	F4: φ 48x60 PVDF	>0.8	RL7...Max.6M

ORDER NO.: YFG7 □ □ □ □ □ □ □ □ □ □

MODEL NO.: YRL7 □ □ □ □ □ □ □ □ □ □



C: 6.35mm (2 wire)

D: 12.7mm (2 wire)

# CODE NAME INFORMATION

**Order No. YFG7** D D FQ 6 F1 1 5 0 0 (L)  
**Model No. YRL7** D D FQ 6 F1 1 5 0 0 (L)

**RESOLUTION** \_\_\_\_\_

- A: 6.35mm (3-wire)
- B: 12.7mm (3-wire)
- C: 6.35mm (2-wire)
- D: 12.7mm (2-wire)

**TERMINAL HOUSING (see page 2)** \_\_\_\_\_

- D: AL (EEx d IIB T3~T6)
- N: SUS (EEx d IIB T3~T6)

**CONNECTING TYPE** \_\_\_\_\_

- |                |                          |             |
|----------------|--------------------------|-------------|
| A: 3/8" (10A)  | I : 4" (100A)            | P : 300 Lbs |
| B: 1/2" (15A)  | J : 5" (125A)            | Q: PT       |
| C: 3/4" (20A)  | K : 6" (150A)            | R: PF(G)    |
| D: 1" (25A)    | 4 : 7" (175A)            | T : BSP     |
| E: 1 1/2"(40A) | 5 : 8" (200A)            | U: NPT      |
| F: 2" (50A)    | M: 5 Kg/cm <sup>2</sup>  | V: GAS      |
| G: 2 1/2"(65A) | N: 10 Kg/cm <sup>2</sup> | S : Others  |
| H: 3" (80A)    | O: 150 Lbs               |             |

**TUBE TYPE & MATERIAL** \_\_\_\_\_

- 0: φ 12.7 (SUS) Only available for resolution 12.7mm.
- 4: φ 14 (SUS)            7: φ 17.2 (SUS)
- 5: φ 17.2 (P.P.)        8: φ 21.7 (SUS)
- 6: φ 16 (PVDF)        9: φ 27.2 (SUS)

**FLOAT TYPE (see page 2)** \_\_\_\_\_

Material	Type					
Plastic	P3	F4				
SUS	S3	S4	S5	S6	S8	S9

**LENGTH (UNIT : mm)** \_\_\_\_\_

- 0500:** 50cm (01~50)    ※ 50cm per Unit
- 1000:** 100cm (51~100)
- 1500:** 150cm (101~150)

**TAG** \_\_\_\_\_

- ★ Tolerance of the total product length is ± 5mm.
- ★ Characteristics, specifications and dimensions are subject to change without notice.
- ★ Please contact us for further informations.