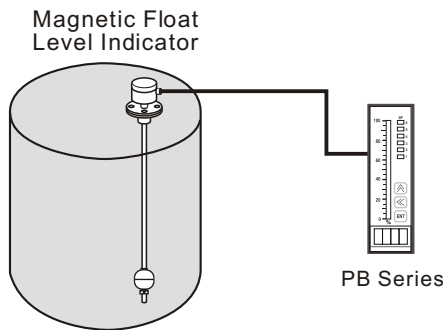


PRINCIPLE

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-1531 (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

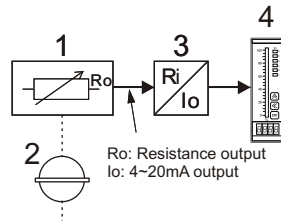
- Every sensing element is protected by a plastic package, safety in use and transport. (as fig. 1)
- High performance and reliability of electric circuit modular designed (as fig.2).
- Lower installation costs, less maintenance, reduced personnel training, and decreased plant shock down time.

APPLICATIONS

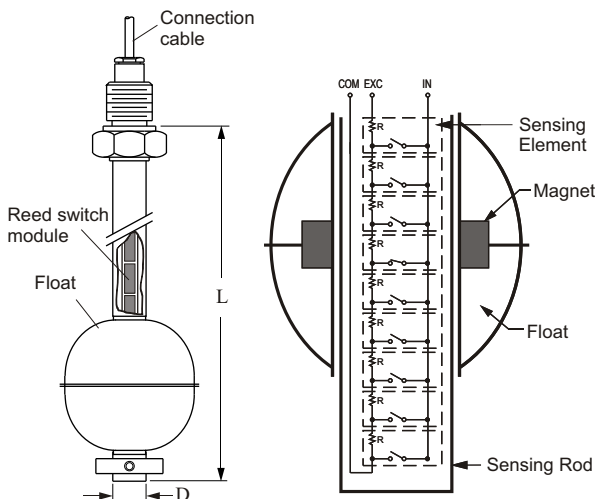
Applied for waste water treatment turn-key facility, electric power plant, shipping vessel, hydraulic facility, chemical industrial equipment, petrochemical industry and hot coal boiler. e.g. diesel engine generator, motor oil meter, oil material storage tank.

SCHEMATIC DIAGRAM OF THE PRINCIPLES

1. Sensing Rod
2. Float
3. Transmitter
4. Display Unit



CONSTRUCTION



Sensing Element Size

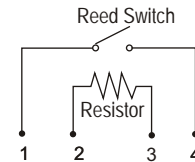
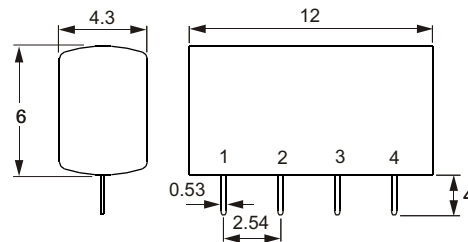


Fig.2

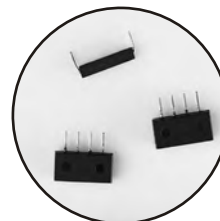
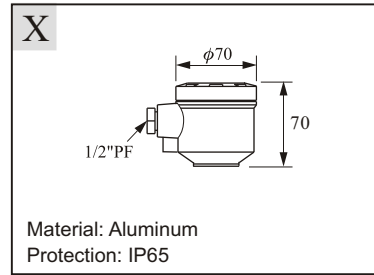
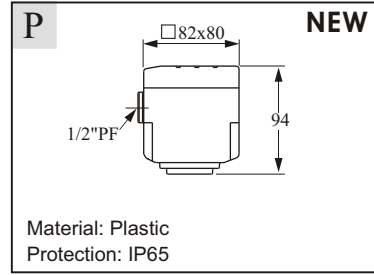
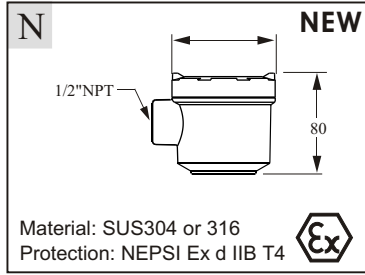
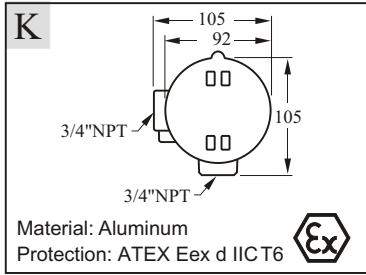
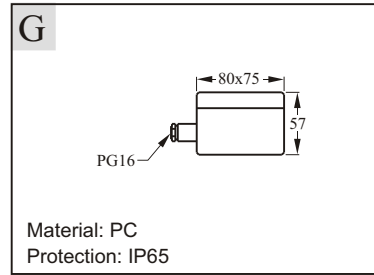
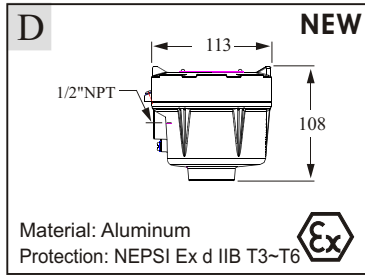
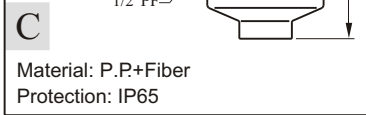
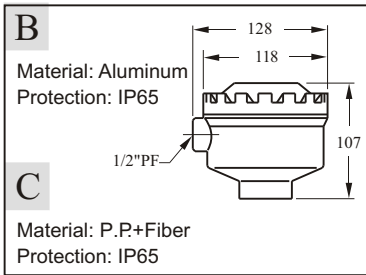


Fig.1
Sensing Element

HOUSING DIMENSION



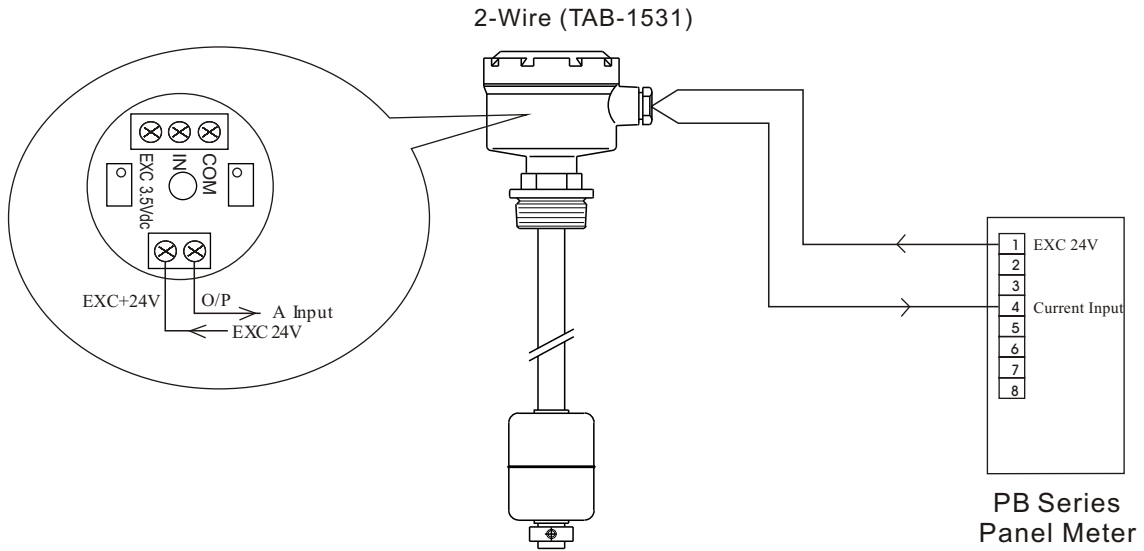
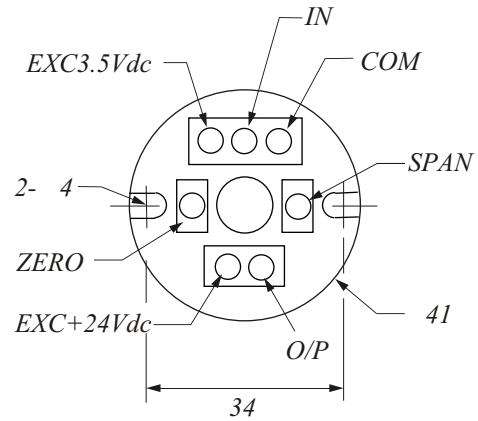
FLOAT SPECIFICATION

| Dimension | Type | AxBxC(mm) | S.G. | Max. Pressure (kg/cm ²) | Material | Max. Temp. (C) | Approx. Weight (g) |
|-----------|------|------------|------|-------------------------------------|----------|------------------|--------------------|
| | S3 | 45x55x15 | 0.5 | 12 | SUS316 | 200°C | 30 |
| | S6 | 75x108x19 | 0.45 | 10 | SUS304 | 200°C | 135 |
| | S4 | 52x52x15 | 0.5 | 30 | SUS316 | 200°C | 36 |
| | S5 | 75x73x19 | 0.5 | 30 | SUS304 | 200°C | 100 |
| | S8 | 100x100x20 | 0.5 | 30 | SUS304 | 200°C | 250 |
| | S9 | 150x150x30 | 0.45 | 30 | SUS304 | 200°C | 700 |
| | P3 | 48x45x18.5 | 0.6 | 5 | PP | 80°C | 33 |
| | F4 | 48x70x22 | 0.8 | 5 | PVDF | 120°C | 100 |

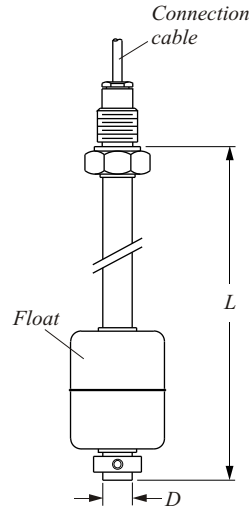
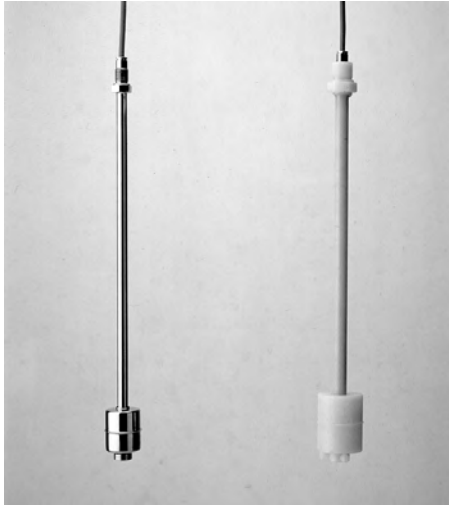
TRANSDUCER

MODEL: TAB-1531 Transducer

Supply Voltage : 12~36Vdc
 Input : 2M
 Output : 4~20mA, loop power, 2 wire
 Adjustable Range : 30%
 Operation Temp. : -20 C~80 C
 Load loopResistance : less than 500
 Accuracy : 0.1%



ECONOMICAL



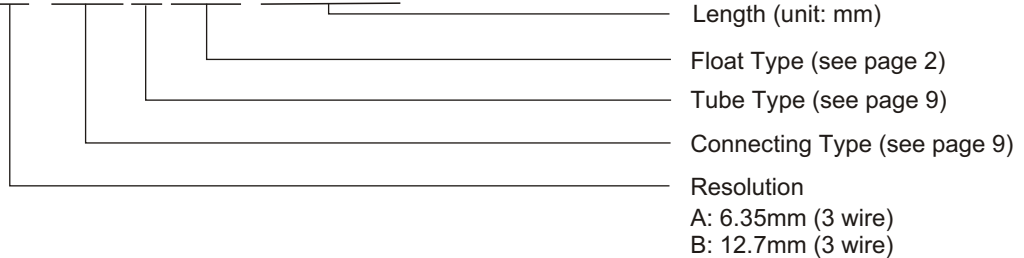
SPECIFICATION

Connection Cable: Silicon cable 3C 1M
Output: 3-wire Resistance
Maximum Resistance: 1M
Ambient Temp.: 60 C

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

| STANDARD ORDER NO. | Connecting | Tube size & Material (D) | Float type & Material | Suitable S.G. | Measuring Range |
|--------------------|------------|--------------------------|---|---------------|------------------------------|
| FG□-AR4 | 3/8"PF | 14 SUS 304 SUS 316 | S3: 45x55 SUS 316 S4: 52x52 SUS 316 | >0.5 | FGA...Max.6M FGB...Max.6M |
| FG□-AR7 | 3/8"PF | 17.2 SUS 304 | S5: 75x73 SUS 304 S6: 75x108 SUS 304 | >0.5 | FGA...Max.6M FGB...Max.6M |
| FGB-CR5P3 | 3/4"PF | 17.2 PP | P3: 48x45 PP | >0.6 | FGB...Max.6M |
| FGB-CR6F4 | 3/4"PF | 16 PVDF | F4: 48x70 PVDF | >0.8 | FGB...Max.6M |

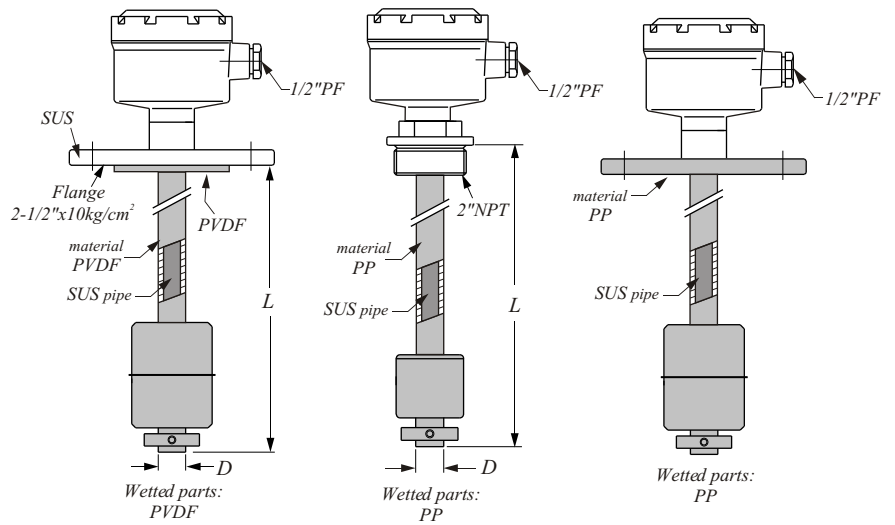
MODEL : FG □ - □ □ □ □ □ □ □ □



ANTI-ACID / ALKALINE



C type housing, dimension see page 2.



SPECIFICATION

Terminal Housing: PP +Fiber, IP65

Operating Temp.: PP jacket tube -10 C ~ 80 C

Output: 4~20mA, 2-wire or 3 wire resistance output

PVDF jacket tube -20 C ~ 120 C

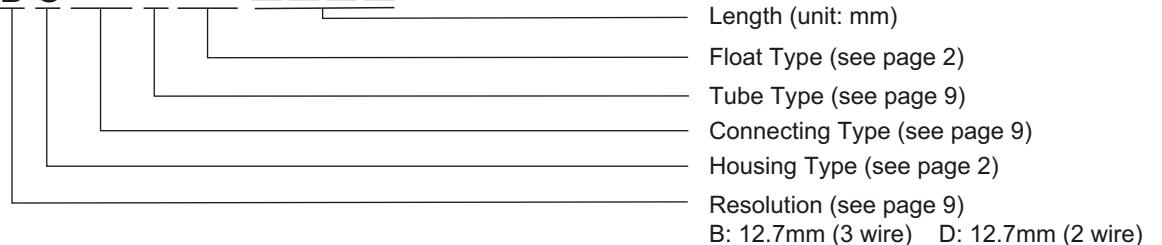
Maximum Resistance: 1M

Ambient Temp.: 60 C

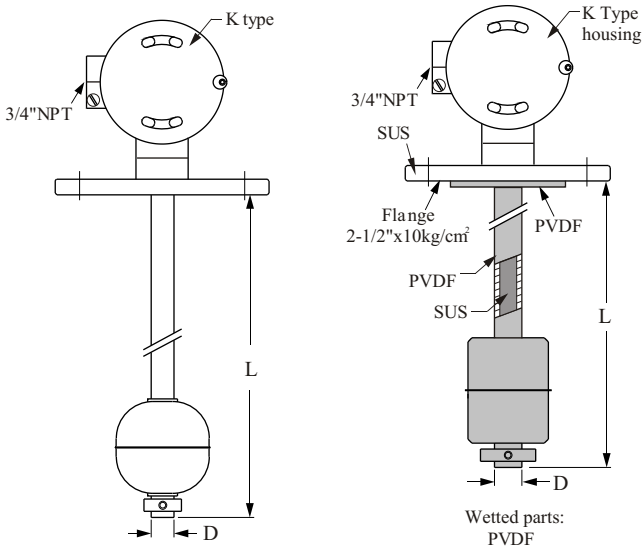
| STANDARD ORDER NO. | Connecting | Tube size & Material (D) | Float type & Material | Suitable S.G | Measuring Range |
|--------------------|-----------------------------|--------------------------|-----------------------|--------------|-----------------|
| FGDCFQ5P3 | 2"NPT | 17.2 PP | P3: 48X45 PP | >0.5 | FGD...Max.6M |
| FGDCFQ6F4 | 2"NPT | 16 PVDF | F4: X70 PVDF | >0.8 | FGD...Max.6M |
| FGDCGN5P3 | 2-1/2"x10kg/cm ² | 17.2 PP | P3: 48X45 PP | >0.6 | FGD...Max.6M |
| FGDCGN6F4 | 2-1/2"x10kg/cm ² | 16 PVDF | F4: 48x70 PVDF | >0.8 | FGD...Max.6M |

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

MODEL : FGB C



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

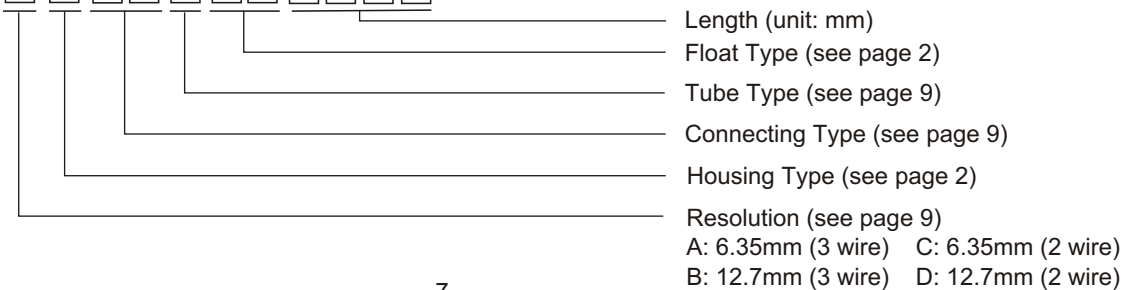


SPECIFICATION

Terminal Housing: K type --- Aluminum, ATEX EEx d IIC T6 **Operating Temp.:** PP tube -10 C ~ 80 C
Output: 4~20mA, 2-wire or 3 wire resistance output PVDF tube -20 C ~ 120 C
Maximum Resistance: 1M SUS tube -20 C ~ 120 C
Ambient Temp.: 60 C

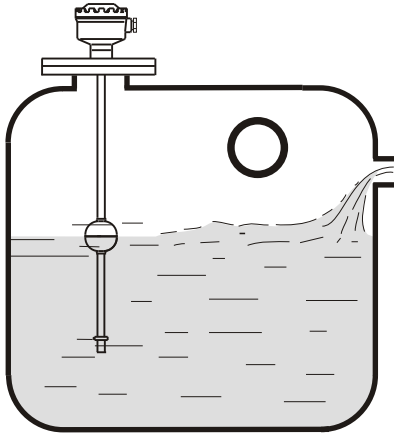
| STANDARD ORDER NO. | Connecting | Tube size & Material (D) | Float type & Material | Suitable S.G. | Measuring Range |
|--------------------|-----------------------------|--------------------------|-----------------------|---------------|----------------------------------|
| FG□KFQ4 | 2"NPT | φ 14 SUS 304 | S4: φ52X52 SUS 316 | >0.5 | FGA/B...Max.6M FGC/D...Max.6M |
| FG□KGN4 | 2-1/2"x10kg/cm | φ 14 SUS 304 | S4: φ52X52 SUS 316 | >0.5 | FGA/B...Max.6M FGC/D...Max.6M |
| FGDKHN7 | 3"x10kg/cm | φ 17.2 SUS 304 | S6: φ75X108 SUS 304 | >0.45 | FGD...Max.6M |
| FGDKIQ4 | 4"NPT | φ 17.2 SUS 304 | S8: φ100x100 SUS 304 | >0.5 | FGD...Max.6M |
| FGDKFQ5P3 | 2"NPT | φ 17.2 PP | P3: φ48X45 PP | >0.6 | FGD...Max.6M |
| FGDKFQ6F4 | 2"NPT | φ 16 PVDF | F4: 48X70 PVDF | >0.8 | FGD...Max.6M |
| FGDKGN5P3 | 2-1/2"x10kg/cm ² | φ 17.2 PP | P3: φ48X45 PP | >0.6 | FGD...Max.6M |
| FGDKGN6F4 | 2-1/2"x10kg/cm ² | φ 16 PVDF | F4: 48X70 PVDF | >0.8 | FGD...Max.6M |

MODEL : FG □ □ □ □ □ □ □ □ □ □

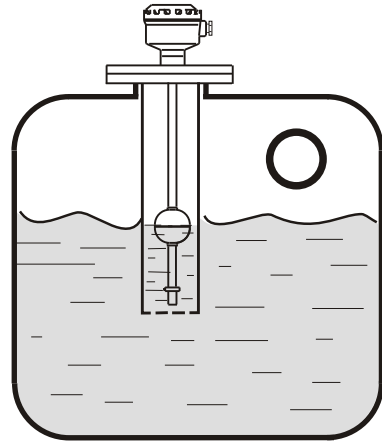


INSTALLATION

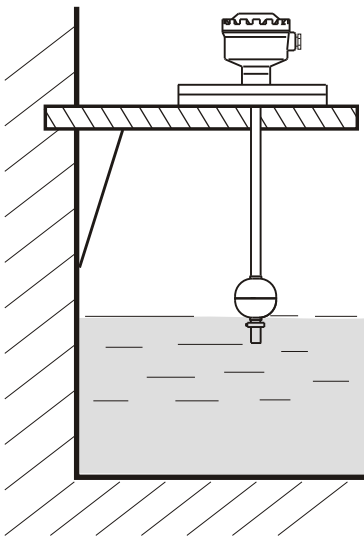
- ▶ The float level indicator should be mounted far away from liquid inlet, any strong liquid fluctuation will produce error output signals.



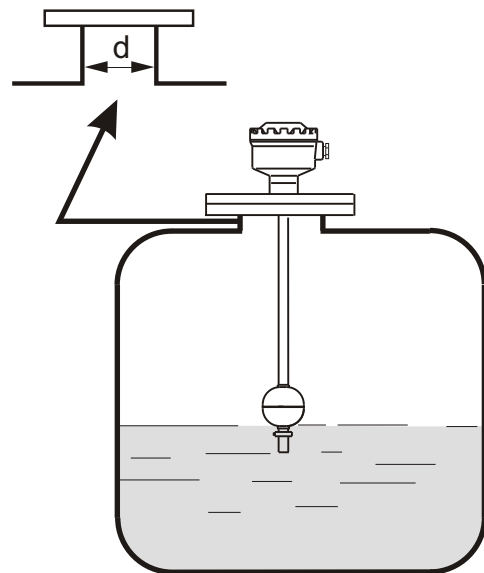
- ▶ It is requested a pipe shield or equivalent device to normalize the indicator actuation if the indicator is used with any agitator application.



- ▶ 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

FG **D** **C** **FQ** **6** **F1** **1** **5** **0** **0**

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)
- C: P.P (IP65)
- D: AL (Ex d IIB T4)
- G: PC (IP65)
- K: Aluminum (EEx d IIC T6)
- : None
- N: SUS (Ex d IIB T4)

CONNECTING TYPE

- A : 3/8" (10A) M : 5 kg/cm²
- B : 1/2" (15A) N : 10 kg/cm²
- C : 3/4" (20A) O : 150 Lbs
- D : 1" (25A) P : 300 Lbs
- E : 1-1/2" (40A) Q : PT
- F : 2" (50A) R : PF
- G : 2-1/2" (65A) T : BSP
- H : 3" (80A) U : NPT
- I : 4" (100A) V : G
- J : 5" (125A) S : Other
- K : 6" (150A)
- 4 : 7" (175A)
- 5 : 8" (200A)

TUBE TYPE & MATERIAL

- 4: 14 (SUS) 7: 17.2 (SUS)
- 5: 17.2 (P.P.) 8: 21.7 (SUS)
- 6: 16 (PVDF) 9: 27.2 (SUS)

FLOAT TYPE (see page 2)


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

LENGTH (UNIT : mm)

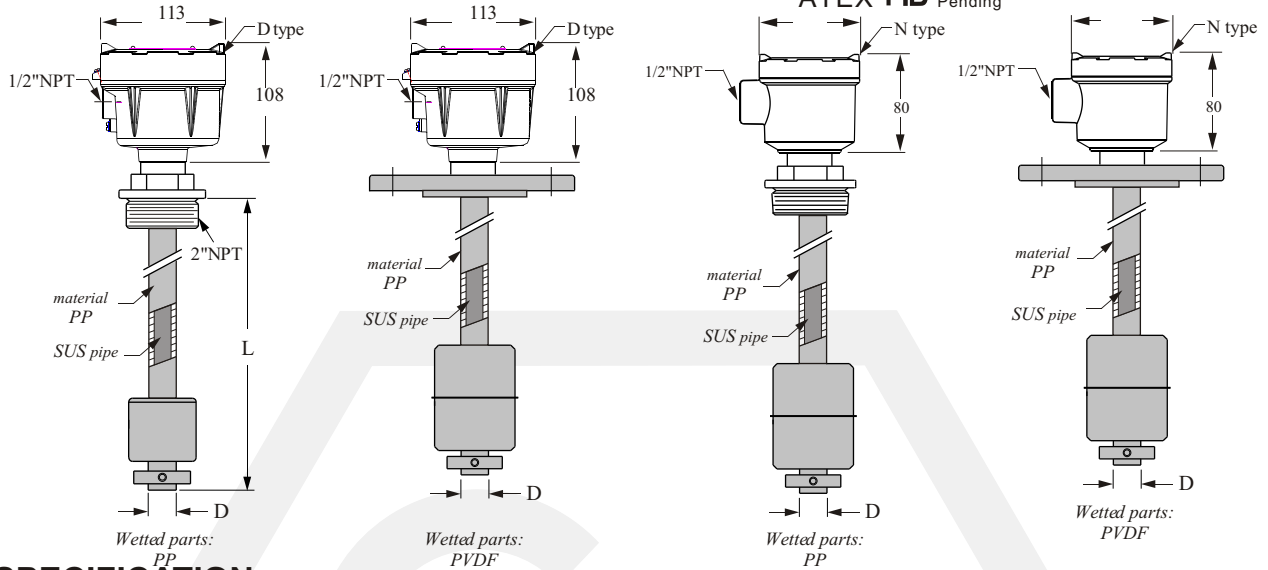
Tolerance of the total product length is 5mm.
 Characteristics, specifications and dimensions are subject to change without notice.
 Please contact us for further informations.

ENCLOSURE EXPLOSION PROOF (PLASTIC JACKET)

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

NEPSI  GYJ03351 EX d IIB T3~T6

ATEX  Pending



SPECIFICATION

Terminal Housing: D type --- Aluminum, NEPSI Ex d IIB T3~T6 Ambient Temp.: 60 C
 N type --- SUS, EEx d IIC T6
Output: 4~20mA, 2-wire or 3 wire resistance output
Maximum Resistance: 1M
Operating Temp.: PP tube -10 C ~ 80 C
 PVDF tube -20 C ~ 120 C
 SUS tube -20 C ~ 120 C

| ORDER NO. FG7 MODEL NO. RL7 | Connecting | Tube size & Material (D) | Float type & Material | Suitable S.G. | Measuring Range |
|--|-----------------------------|--------------------------|-----------------------|---------------|-----------------|
| RL7□DFQ4 | 2"NPT | φ 14 SUS316 | S3: φ 45X55 SUS 316 | >0.5 | RL7...Max.3M |
| RL7□DGN4 | 2-1/2"x10kg/cm ² | φ 14 SUS316 | S3: φ 45X55 SUS 316 | >0.5 | RL7...Max.3M |
| RL7DDHN7 | 3"x10kg/cm ² | φ 17.2 SUS304 | S5: φ 75X73 SUS 304 | >0.45 | RL7...Max.6M |
| RL7DDIQ4 | 4"NPT | φ 17.2 SUS304 | S8: φ 100x100 SUS 304 | >0.5 | RL7...Max.6M |
| RL7DDKN8 RL7DDKN9 RL7DDKN8 RL7DDKN9 | 6"x10kg/cm ² | φ 21.7 φ 27.2 SUS304 | S9: φ 150x150 SUS 304 | >0.45 | RL7...Max.6M |
| RL7DDFQ5P3 | 2"NPT | φ 17.2 PP | P3: φ 48X45 PP | >0.6 | RL7...Max.6M |
| RL7DDFQ6F4 | 2"NPT | φ 16 PVDF | F4: 48X70 PVDF | >0.8 | RL7...Max.6M |
| RL7DDGN5P3 | 2-1/2"x10kg/cm ² | φ 17.2 PP | P3: φ 48X45 PP | >0.6 | RL7...Max.6M |
| RL7DDGN6F4 | 2-1/2"x10kg/cm ² | φ 16 PVDF | F4: 48X70 PVDF | >0.8 | RL7...Max.6M |

ORDER NO. FG7
 MODEL NO. RL7

- Length (unit: mm)
- Float Type (see page 2)
- Tube Type (see page 11)
- Connecting Type (see page 11)
- Housing Type (see page 2)
- Resolution (see page 11)
- A: 6.35mm (3 wire) C: 6.35mm (2 wire)
- B: 12.7mm (3 wire) D: 12.7mm (2 wire)

CODE NAME INFORMATION

Order No. FG7 **D** **D** **FQ** **6** **F1** **1500**
 Model No. RL7 **D** **D** **FQ** **6** **F1** **1500**

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 (Ex d IIB T3~T6)
- N: SUS (Ex d IIB T3~T6)

CONNECTING TYPE _____

- A: 3/8" (10A) M: 5 kg/cm²
- B: 1/2" (15A) N: 10 kg/cm²
- C: 3/4" (20A) O: 150 Lbs
- D: 1" (25A) P: 300 Lbs
- E: 1^{1/2}" (40A) Q: PT
- F: 2" (50A) R: PF
- G: 2^{1/2}" (65A) T: BSP
- H: 3" (80A) U: NPT
- I: 4" (100A) V: G
- J: 5" (125A) S: Other
- K: 6" (150A)
- 4: 7" (175A)
- 5: 8" (200A)

TUBE TYPE & MATERIAL _____

- 4: 14 (SUS) 7: 17.2 (SUS)
- 5: 17.2 (P.P.) 8: 21.7 (SUS)
- 6: 16 (PVDF) 9: 27.2 (SUS)

FLOAT TYPE (see page 2) _____

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

LENGTH (UNIT : mm) _____

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