LEVEL SENSORS

VERTICAL FLOAT TYPE LEVEL INDICATOR

KF-100

Reliable Liquid Level Indicator in Versatile Applications.

CAT. No. FM-074-1008E

KANSAI Automation Co.,Ltd.

KF-100

VERTICAL FLOAT TYPE LEVEL INDICATOR

Float Type Level Meter whose function is not affected by Environmental Conditions including but not limited to Material Changes and Gas.

Features

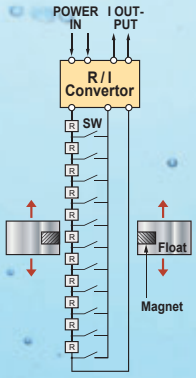
Confidence — The level indicator consisting of reed switches with no moving parts mounted except a float, it is not at all affected by environmental conditions such as material changes, vapor, gas and so on, and it is also easy to be serviced.

Corrosion Resistance — Available are a number of models with wetted parts made of SS or various corrosive resistant resin, and they can be workable in a broad range of chemical solution.

Principale of Operation

The model KF-100 is a float type level indicator.
A float with a built-in magnet, which is put on a stem, floats on the surface and goes up and down as level varies.
Reed Switches(SW) and Resistor(R) being built in the stem as described on the right figure, it can detect the resistance changes in the varying liquid level.
These can be transmitted through the R/I Converter in the form of 4 – 20mA DC current signals.

Inside Circuit

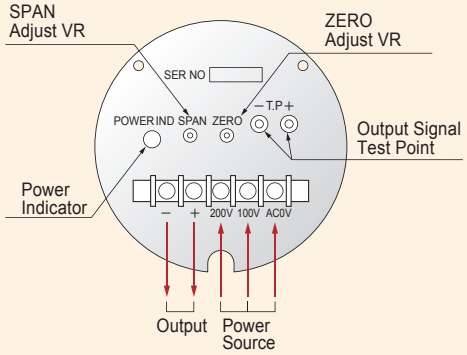


Explosion-proof Specification

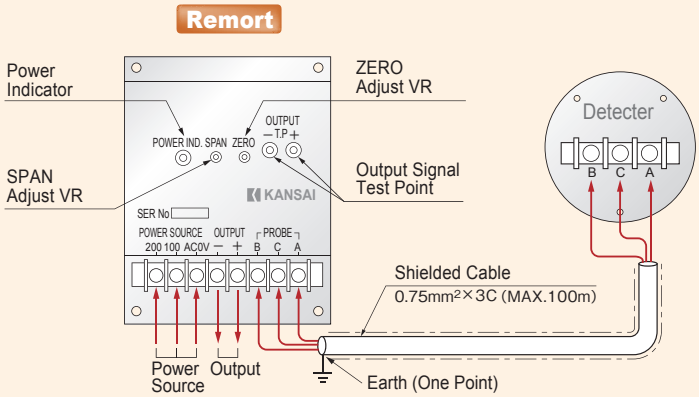
If you want an Explosion-proof type of Vertical Float Level Indicator, please consult with our Sales staff because other models are available.

Connection Drawings

Built-in

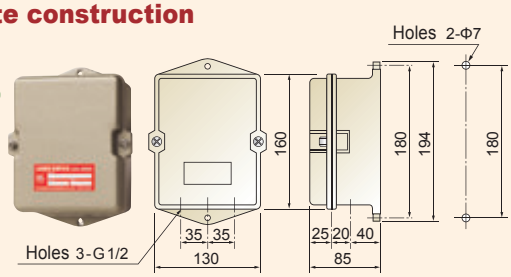


Remort

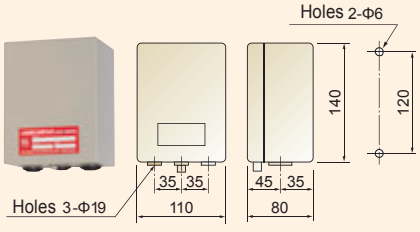


Remote construction

Indoor



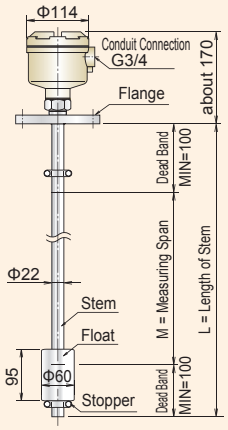
Outdoor



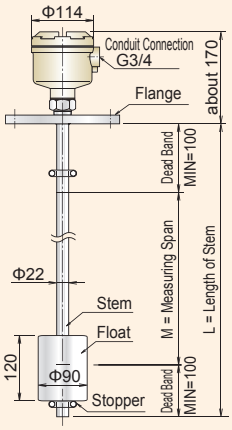
Standard Specifications & General Drawings

SS Type

KF-10□

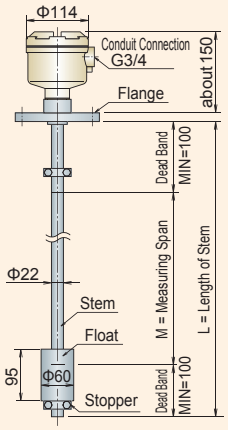


KF-11□
KF-12□ (With Rib)
KF-1a□ (High-Visoosity)

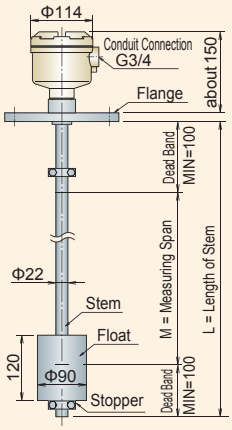


PVC Type

KF-13□



KF-14□
KF-18□ (With Rib)
KF-1b□ (High-Visoosity)

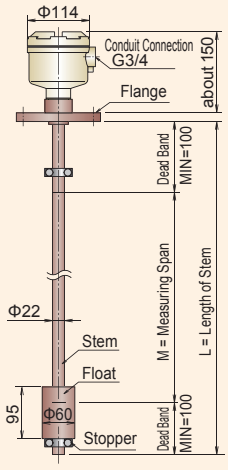


Spec \ Model	KF-10□	KF-11□/-12□/-1a□	KF-13□	KF-14□/-18□/-1b□
Application	Water, oil, General Liquid	High-viscosity or Low Spec.Gravity Liquid	Anti-corrosive,Water, oil,Genaral Liquid	High-viscosity or Low Spec.Gravity Liquid
Pressure	490kPa	490kPa	196kPa	196kPa
Temperature	100°C	100°C	50°C	50°C
Process Connection	over JIS5K65A	over JIS5K100A	Equivalent to JIS5K65A or over	over JIS5K100A
Specific Gravity of Liquid	over 0.90	over 0.61	over 0.66	over 0.50
Float dimension	Φ60×95L	Φ90×120L	Φ60×95L	Φ90×120L
Float Material	304SS or 316SS	304SS or 316SS	PVC	PVC
Stem Material	304SS or 316SS	304SS or 316SS	PVC (Reinforced with Brass Pipe)	PVC (Reinforced with Brass Pipe)
Flange Material	304SS or 316SS, SS400	304SS or 316SS, SS400	PVC	PVC
Housing Material	ADC	ADC	ADC	ADC
Conduit Connection	G 3/4	G 3/4	G 3/4	G 3/4

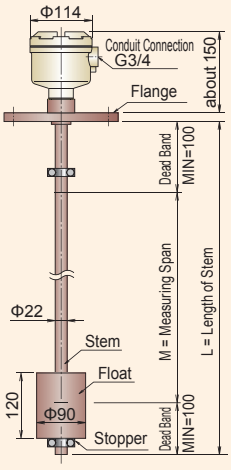
Standard Specifications & General Drawings

HT.PVC Type (Heat-resistant Type)

KF-16□

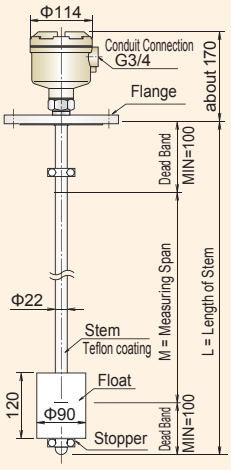


KF-17□



TEFLON Type

KF-19□



Spec \ Model	KF-16□	KF-17□	KF-19□
Application	Anti-corrosive,Water, oil,Genaral Liquid	Anti-corrosive, Low Spec.Gravity Liquid	Anti-corrosive, Genaral Liquid
Pressure	196kPa	196kPa	ATM
Temperature	80°C	80°C	100°C
Process Connection	over JIS5K65A	over JIS5K100A	over JIS5K100A
Specific Gravity of Liquid	over 0.76	over 0.50	over 1.00
Float dimension	Φ60×95L	Φ90×120L	Φ90×120L
Float Material	HT.PVC	HT.PVC	Teflon
Stem Material	HT.PVC (Reinforced with Brass Pipe)	HT.PVC (Reinforced with Brass Pipe)	304SS, Teflon coating
Flange Material	HT.PVC	HT.PVC	304SS, Teflon coating
Housing Material	ADC	ADC	ADC
Conduit Connection	G 3/4	G 3/4	G 3/4

Amplifier Common Specifications

Power Source :
100V/200VAC±10%
50/60Hz

Power Consumption :
4VA

Allowable Temperature :
0°C to +55°C

Output Voltage :
2V DC

Input Signal :
Resistance (3 wire type)

Input Impedance :
Max.100KΩ
(Detection impedance :1 – 3KΩ)

Output Signal :
4 – 20mA DC

Resistance Load :
MAX.500Ω

Linearity :
FS 1 % (Electronics)

Type Designation

KF-1□□

Note: Float-code a and b having larger clearance dimensions between float and stem are effective to prevent the float from being stuck in the high viscosity liquid as well as liquids containing slurry and solid particles.

Instrument Construction

0 : Built-in construction
1 : Remote construction (Amplifier for indoor use)
2 : Remote construction (Amplifier for outdoor use)

Float, Stem

	Float Dim	Float Material	Stem Dim	Stem Material	Acceptable Liquit Specific Gravity	Min.Size
0	Φ60× 95×23	304SS	Φ22	304SS	0.90	65A
1	Φ90×120×23	304SS	Φ22	304SS	0.61	100A
2	Φ90×120×30	304SS (With Rib)	Φ22	304SS	0.77	100A
3	Φ60× 95×25	PVC	Φ22	PVC	0.66	65A
4	Φ90×120×25	PVC	Φ22	PVC	0.50	100A
5	Not In Use					
6	Φ60× 95×25	HTPVC	Φ22	HTPVC	0.67	65A
7	Φ90×120×25	HTPVC	Φ22	HTPVC	0.50	100A
8	Φ90×120×30	PVC (With Rib)	Φ22	PVC	0.55	100A
9	Φ90×120×25	Teflon	Φ22	304SS, Teflon coating	1.00	100A
a	Φ90×120×30	304SS (High-Visoosity)	Φ22	304SS	0.76	100A
b	Φ90×120×30	PVC (High-Visoosity)	Φ22	PVC	0.55	100A

Vertical Float Type Level Indicator

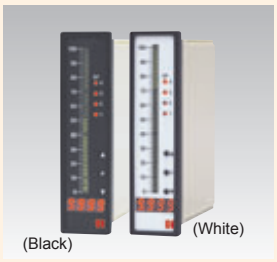
Generic Designation of Float Gages

Option Products

Digital Meter Relay **MR-B51D5**

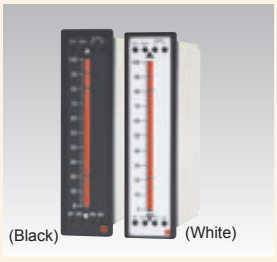
Size : 1/8DIN W48 × H96mm
Supply Voltage : 85−265VAC / 95−370VDC (Shared power for AC/DC within any voltage as above)
Consumption : 5W
Display : Digital (5 digit, LED) Bargraph (51 segment, LED)
Input : 4−20mA DC
Output Contact : 2SPST (A contact)
Features : Scaling function

Bargraph Meter Relay **MR-B101D4**



Size : 9/64DIN W36 × H144mm
Supply Voltage : 85−265VAC / 95−370VDC (Shared power for AC/DC within any voltage as above)
Consumption : 5W
Display : Digital (4 digit, LED) Bargraph (101 segment, LED)
Input : 4−20mA DC
Output Contact : 2SPST (A contact)
Features : Scaling function

Bargraph Meter **M-B101**



Size : 9/64DIN W36 × H144mm
Supply Voltage : 85−265VAC / 95−370VDC (Shared power for AC/DC within any voltage as above)
Consumption : 5W
Display : Bargraph (101 segment, LED)
Input : 4-20mA DC
Output Contact : nil

Digital Meter **MR-40**

Size : 1/8DIN W96 × H48mm
Supply Voltage : 85−265VAC / 95−370VDC (Shared power for AC/DC within any voltage as above)
Consumption : 5W
Display : Digital (4 digit, LED)
Analogue Input : 4−20mA DC
Output Contact : 2SPST (A contact)
Features : Scaling function

Line of business

- Rotary Paddle Type Level Switch
- Vibration Type Level Switch
- Swing Type Level Switch
- Acoustic Level Switch
- Capacitance Type Level Switch
- Capacitive Proximity Sensor
- Capacitance Type Level Indicator
- Diaphragm Type Level Switch
- Tilt Switch
- Leak Type Level Switch
- Microwave Type Switch
- Sounding Bob Type Level Indicator
- Flow Switch
- Conductance Type Level Switch
- Float Switch
- Float Type Level Indicator
- Ultrasonic Type Level Indicator
- Equipments For Conveyor Lines
- Dust Monitor System
- Zirconia Oxygen Analyzer
- Laser Type Level Indicator
- RADAR Type Level Indicator
- On-line Sensors for Accurate Liquid Analysis
- Ultrasonic Flow meter

*Please be sure to read USER'S GUIDE, Installation & Operation Instructions before using the instrument.
*The specifications herein may be subject to change without advance notice.

Nuclear Power Generation to Rice Milling
All-round Manufacturer of Level Controllers for Powder, Granules and Liquid

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