# KAWAKI Product





# **FS SIGHT FLOW INDICATORS**

(Transparent Sight Glass)

Types: FS-I-N: With nozzle FS-II-P: With flap FS-B: With balls

FS-IV: Normal / reverse dual-use

FS-T: With rotor vane FS-W: With wiper Diameter: 3/8B-6B flanged type Rc 3/8-Rc 2 screwed type Withstanding Pressure: 1.0 MPa Temperature: 80°C or less

Construction:

Body: FC250, FCD450, CAC406, SS400, SUS304, SUS316

Main parts: C2801P, SUS304, SUS316

• FS-II type can be provided with a rough flow rate scale.



# **FSJ SIGHT FLOW INDICATORS**

(Compact Type)

Types: FSJ-II: With flap FSJ-B: With balls Diameter: Rc 3/8-Rc 1

Withstanding Pressure: 1.0 MPa

Temperature: 80°C or less

Construction: Body Main parts C2801P For oils: A2017 For water: C3604B C2801P For chemicals: SUS304 SUS304



FSJ-B

# FS-M, FS-O SIGHT FLOW INDICATORS

(Magnet Following Type)

Types: FS-M: Magnet following sight flow

FS-O: Magnet following sight flow for small flow rate

Diameter: FS-M: 3/8B-6B flanged type Rc 3/8-Rc 2 screwed type FS-O: 3/8B-1B flanged type Rc 3/8-Rc 1-1/2 screwed type

Withstanding Pressure: 1.0 MPa

Temperature: 80°C or less

Construction:

Body: FC250, FCD450, CAC406, SS400, SUS304, SUS316

Main parts: C2801P, SUS304, SUS316



FS-M





K A W A K I Product

# **SF FLOW METER & FLOW SWITCH**

Types: SF-M: Instantaneous flow indicator

SF-MA: Instantaneous flow indicator + lower (or upper) microswitch SF-MAA: Instantaneous flow indicator + lower & upper microswitches

Diameter: 3/8B-12B flanged type, Rc 3/8-Rc 1-1/2 screwed type

Withstanding Pressure: Standard: 1.0 MPa Special order: 30 MPa

**Temperature**: Standard: 80°C or less Special order: 300°C or less

Accuracy: SF-M: ±3% of readings SF-MA, SF-MAA: ±5% of readings

### **Contact Capacity:**

Microswitches used for contacts are classified into the following three types according to diameter and flow rate:

• 15A: 125, 250 or 480 VAC

• 5A : 125 or 250 VAC

0.5A: 125 VDC 0.25A: 250 VDC

· 10A: 125 or 250 VAC

#### Characteristics:

- Most suitable for opaque liquids (oils, etc), high-temperature and high-pressure fluids.
  No restrictions on flow direction.
- The contact of the SF-MA•MAA standard flow switch is internally variable, but an external variable type can also be manufactured for frequent variations.
- Complete waterproof type (IEC IP67) is also manufactured for outdoor or severe-atmosphere use.



Body: FC250, CAC406, SS400, SUS304, SUS316, SUS316L

Main parts: C3604B, SUS304, SUS316, SUS316L

#### Note

· For use in high vibration places, use vibration-proof type.



SF-MA

# **SA FLOW METER & FLOW SWITCH**

(Proximity switches are used for small flow rate.)

Types: SA-M: Instantaneous flow indicator

SA-MA: Instantaneous flow indicator + lower (or upper) proximity switch contact SA-MAA: Instantaneous flow indicator + lower & upper proximity switch contacts

Diameter: 3/8B-1B flanged type

Rc 3/8-Rc 1 screwed type

Withstanding Pressure: Standard: 1.0 MPa Temperature: Standard: 80°C or less Special order: 300°C or less

Accuracy: ±3% of readings

Contact Capacity: 50 W: 0.5A, 125 VAC

Self-holding proximity switch

### Characteristics:

- Most suitable for relatively small flow rates (0-15 L/min in water) of opaque liquids (oils, etc.), high-temperature and high-pressure fluids.
- · No restrictions on the flow direction.

### Construction:

Body: FC250, CAC406, SS400, SUS304, SUS316, SUS316L

Main parts: C3604B, SUS304, SUS316, SUS316L

### Note

• For use in high vibration places, use vibration-proof type.





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# **FY FLOW METER & FLOW SWITCH**

(Compact Type)

Types: FY-M: Instantaneous flow indicator

FY-MA: Instantaneous flow indicator + lower (or upper) microswitch

Diameter: 3/8B-5B flanged type,

Rc 3/8-Rc 1-1/2 screwed type Withstanding Pressure: 1.0 MPa Temperature: Standard: 80°C or less Accuracy: FY-M: ±3% of readings

FY-MA: ±5% of readings **Contact Capacity**: 5A; 125, 250 VAC 0.5A; 125 VDC

#### Characteristics:

- Most suitable for opaque liquids (oils, etc), high-temperature and high-pressure fluids.
  No restrictions on flow direction.
- · Available with external contact variable type.

0.25A; 250 VDC

### Construction:

Body: FC250, CAC406, SUS304 Main parts: C3604B, SUS304

#### Note

- · For use in high vibration places, use vibration-proof SF type.
- For 1.0 MPa or higher operating pressure, use the SF type designed for high pressure.
- Complete waterproof type (IEC IP67) is also manufactured for outdoor or severe-atmosphere use.



FY-M

# **KY FLOW METER & FLOW SWITCH**

Types: KY-M: Instantaneous flow indicator

KY-MA: Instantaneous flow indicator + lower (or upper) microswitch

Diameter: 3/8B-5B flanged type

Rc 3/8-Rc 1-1/2 screwed type Withstanding Pressure: 1.0 MPa Temperature: 80°C or less Accuracy: ±5% of reading

Contact Capacity: 15A; 125, 250 or 480 VAC

0.5A; 125 VDC 0.25A; 250 VDC

### Applications:

Most suitable for flow rate indications and alarms for lubricating oil and fluids containing iron powder.

### Characteristics:

- Most suitable for opaque liquids because the indicating section is mechanically sealed from
- · No restrictions on the flow direction.
- The contact position is variable.

## Construction:

Body: FC250, CAC406, SUS304 Main parts: C3604B, SUS304

### Note

- · For use in high vibration places, use vibration-proof SF type.
- For 1.0 MPa or greater operating pressure, use the SF type designed for high pressure.



KY-M



KY-MA





# **FLOW KILLER**

(Thermistor Flow Meter)

Type: FK

This flow meter, using thermistor characteristics, has no movable parts structurally. Fluids to be

measured include water or aqueous solutions.

Diameter: 1B-12B flanged type Operating Pressure: 1.0 MPa Withstanding Pressure: 1.5 MPa Liquid Temperature: 0-80°C

Ambient Temperature: -20°C to +60°C

Accuracy: ±3% FS Indication: LED

Output: 4-20 mA DC, two switching points: S1 and S2 can be set independently.

Power Source: 100, 200 VAC

Characteristics:

- · Little or no trouble and no pressure loss because there are no movable parts.
- · No restrictions on installation of piping, allowing horizontal and vertical piping (in a full condition).
- This flow meter can be used in magnetic fields because of LED indication, and can be used for pure water measurement.
- The waterproof class is IEC IP67 and can be used outdoors.



FΚ

# **RIVER FLOW**

(Gear Type Flow Meter)

### ●RF-I: Field Indication Type (Instantaneous + Integrated Indication)

This compact high-precision flow meter measures not only water and oils, but also chemicals. The rotations of two three-lobe elliptic gears output signals directly proportional to flow rates. Receiving the signals, the indicator provides field indication of instantaneous flow rates or integrated flow rates.

Diameter: Rc 1/8-Rc 3/8 Operating Pressure: 1.0 MPa Withstanding Pressure: 1.5 MPa Liquid Viscosity: 1,000 mm<sup>2</sup>/s or less Ambient Temperature: -5°C to +40°C Liquid Temperature: 0-80°C Operating Humidity: 45-85% RH

Accuracy: ±1%

Indication: Instantaneous flow rate indication: 4 digits Integrated flow rate indication: 8 digits

# ●RF-II: Electronic Transmission Type

Field indication type (integrated type) Remote transmission type (separate type)

(instantaneous + integrated indication + analog output + high/low alarm contact)

Pulse (contact) signals from the transmitter (RF-S) can be output variously by using a converter in accordance with the application. Available with integrated type (RF-II) in which the trasmitter (sensor section), converter and indicating section are integrated, and separate type (RF-II-S).

Power Source: AC 100 V / 200 V ±10% DC 12 V / 24 V (option)

Output Signals: Current Output: 4-20 m ADC

Voltage Output: 0-1 V, 0-5 V, 0-10 V, 1-5 V

Relay Output: Instantaneous high/low alarm contact



RF-I



RF-II