



TECHNICAL GUIDANCE

Highly durable construction made of compact and light metal
Flow indicator with alarm contact

FA-3000 Series FLOW MONITOR

OUTLINE

FA-3000, flow indicator with alarm contact is the standard model among a series of FLOW MONITORS which have been widely appreciated by customers.

In addition to the indicator, **FA-3000** outputs an alarm contact signal at preset value. The body constructed of metal frame offers high durability against the stress caused from the mounted piping.

FEATURES

- ❑ COMPACT AND LIGHTWEIGHT
FA-3000 is suitable for assembling onto the packaged equipment and devices thanks to its compact and lightweight design.
- ❑ DURABLE CONSTRUCTION
Rugged and armored construction endures stress from the piping.
- ❑ WATERPROOF CONSTRUCTION
FA-3000 can also be used under splashes of water.
- ❑ QUICK DELIVERY AND COMPETITIVE PRICE

RECOMMENDED APPLICATIONS

- ❑ Monitoring of sealing liquid supply and its stoppage
- ❑ Monitoring of cooling water supply and its stoppage
- ❑ Liquid cultivating medium supply

STANDARD SPECIFICATION

Applicable fluid	Water or liquids equivalent to water
Available scale range	0.3 to 3L/min (FA-31 □□-□) 0.5 to 5L/min (FA-32 □□-□) 1 to 10L/min (FA-33 □□-□) 2 to 20L/min (FA-34 □□-□) 3 to 30L/min (FA-35 □□-□) 5 to 50L/min (FA-36 □□-□)
Process connection	Rc3/8, Rc1/2, Rc3/4, Rc1* *Installation length for Rc1 is 160mm. Select Rc1/2 or more for 20 and 30L/min, Rc3/4 or more for 50L/min version to reduce pressure loss.
Flow direction	Left to Right, Right to Left, Bottom to Top, Top to Bottom
Max. OP. Temp.	60°C
Max. OP. Press.	0.8MPa
Indication accuracy	±5% of full scale
Alarm setting accuracy	±5% of full scale
Alarm setting range	20~90% of full scale (adjustable on site)
Alarm reset span	Max. 15% of full scale (at 20~70% of full scale)
Alarm contact	SPST Reed switch
Contact capacity	AC10VA (Max. Volt. 125V, Max. Curr. 0.5A) DC10W (Max. Volt. 100V, Max. Curr. 0.5A)
Alarm action	Closed at or higher than set point FA-3□□1-□ Opened at or higher than set point FA-3□□2-□ Closed at or lower than set point FA-3□□3-□ Opened at or lower than set point FA-3□□4-□



Electric connection

Lead wire connection
(Lead wire 30cm provided)

Mass (Approx.)

400g

Material

Refer to DIMENSION AND MATERIAL
for details.

MODEL CODE

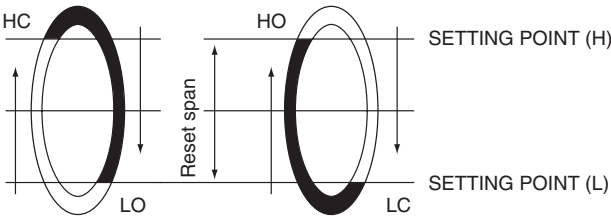
Model code	Detail Model Code	Description
FA - 3 □ □ □ - □	- □ □ □ □ - □	
Scale range	1	0.3 to 3L/min
	2	0.5 to 5L/min
	3	1 to 10L/min
	4	2 to 20L/min
	5	3 to 30L/min
	6	5 to 50L/min
Process connection	1	Rc3/8
	2	Rc1/2
	3	Rc3/4
	4	Rc1
Alarms	1	Closed at or higher than set point
	2	Opened at or higher than set point
	3	Closed at or lower than set point
	4	Opened at or lower than set point
	0	No alarm
Flow direction	- 1	Bottom to top
	- 6	Left to right
	- 7	Right to left
	- 8	Top to bottom
Wetted part materials	- 4	SUS304 (Standard)
	- 6	SUS316
Gasket materials	0	NBR (Standard)
	1	Fluorocarbon rubber
	2	EPDM
	3	CR
Reed switch	0	Standard
	1	Complying with CE or UL*
Alarm set point	- 0	Not specified *
	- Numerals	set at designated scale

* If alarm set point is not designated, set points will be set as 20% of full scale for low alarm and 80% of full scale for high alarm.

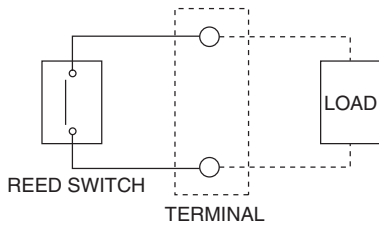
ALARM ACTION

FA-3□□1-□ FA-3□□2-□
 FA-3□□4-□ FA-3□□3-□

■ : CLOSE
 □ : OPEN

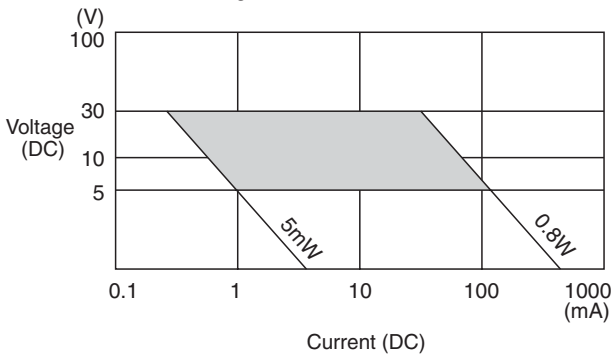


WIRING



REFERENCE 1.

Fig. 1 Recommended load area



Recommended load area is shown by gray area in Fig. 1. When used within this area, the life of reed switch will become longest.

REFERENCE 2.

When used under the condition close to full load or in such inrush load and surge voltage where the load occurs frequently, the protective circuit shall be prepared for the contact protection.

REFERENCE 3.

In case the working voltage is higher than shown in Fig. 1 and the cable length between contact and load is more than 10m, the inrush current flows by the capacity between lines and the contact may weld. Prepare a surge suppressor in series near to the contact as shown in Fig. 2

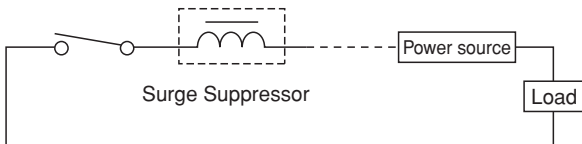
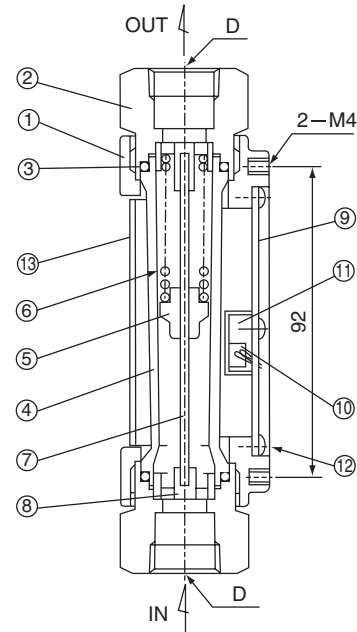
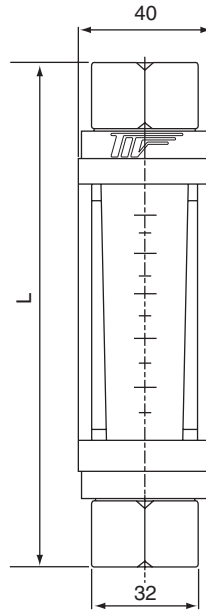
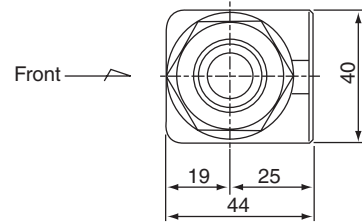


Fig. 2

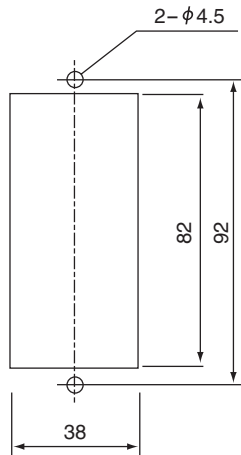
DIMENSION AND MATERIAL

Connection	L (mm)
Rc3/8	150
Rc1/2	150
Rc3/4	150
Rc1	160



PANEL CUT

Following panel cut shows the case of flowmeter with alarm contact.



No.	PARTS NAME	MATERIAL
1	Body	Aluminium Die-casting
2	Fittings	SUS304
3	O ring	NBR
4	Tapered tube	Acryl
5	Float	PPS resin
6	Spring	SUS316
7	Float rod	SUS316
8	Float stopper	POM
9	Rear cover	ABS(White)
10	Reed switch	-
11	Switch holder	POM
12	Screw	SUS304
13	Scale plate	Transparent resin

Note : Flowmeter without alarm contact needs only 2-4.5φ holes in above drawing.

* Specification is subject to change without notice.

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