



# TECHNICAL GUIDANCE

HIGH DURABILITY WITH METAL SUPPORTING BODY CONSTRUCTION  
FLOW INDICATION WITH ALARM CONTACT IN COMPACT AND LIGHT DESIGN

## FA-3000 FLOW MONITOR

### OUTLINE

**FA-3000** is the standard flowmeter with an alarm contact of FLOW MONITOR series which has been welcomed by customers.

**FA-3000** indicates flow rate of liquids and outputs an alarm contact at freely adjustable setting point.

Newly designed metal supported body construction offers best durability against piping stress.

### FEATURES

- ❑ SAVING COST  
One **FA-3000** unit covers flow measurement and alarm contact output.
- ❑ COMPACT AND LIGHT DESIGN  
**FA-3000** is very much suitable for assembling onto equipment and devices due to its compact and light design.
- ❑ DURABLE CONSTRUCTION  
Process connection is done through stainless steel fittings which support **FA-3000** against piping stress.
- ❑ ADJUSTABLE ALARM POINT  
Alarm setting point is freely adjustable even after installation.
- ❑ WATERPROOF CONSTRUCTION  
**FA-3000** can also be used under splashes of water.
- ❑ QUICK DELIVERY AND COMPETITIVE PRICE  
The standardized specification allows reasonable quick delivery time.

### RECOMMENDED APPLICATIONS

- ❑ Cooling water line
- ❑ Monitoring of leakage of sealing liquids
- ❑ Cooling fluids lines in Injection moulding machines
- ❑ Liquid cultivating medium supply
- ❑ Others

### STANDARD SPECIFICATION

Applicable fluid	Water or low viscosity liquids
Available scale range	0.3~3L/min (FA-31 □□-□) 0.5~5L/min (FA-32 □□-□) 1~10L/min (FA-33 □□-□) 2~20L/min (FA-34 □□-□) 3~30L/min (FA-35 □□-□) 5~50L/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 avoid 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
Flow rate indication	By position of float
Alarm setting range	20~90% of full scale
Alarm reset span	Max. 15% of full scale (at 20~70% of full scale)
Alarm contact	SPST Reed switch (Self-holding type)



Contact capacity	AC10VA (Max. Volt. 125V, Max. Curr. 0.5A) DC10W (Max. Volt. 100V, Max. Curr. 0.5A)
Alarm action	High-Close FA-3□□1-□ High-Open FA-3□□2-□ Low-Close FA-3□□3-□ Low-Open FA-3□□4-□
Electric connection	Lead wire connection (Lead wire 30cm provided)
Weight (Approx.)	400g
Material	Refer to DIMENSION AND MATERIAL for details.

### MODEL CODE

FA-3				—		DESCRIPTION
Scale range	1					0.3~3L/min
	2					0.5~5L/min
	3					1~10L/min
	4					2~20L/min
	5					3~30L/min
	6					5~50L/min
	9					Other special scale range
Process connection	1					Rc3/8
	2					Rc1/2
	3					Rc3/4
	4					Rc1
	9					Other special connection
Alarm function	1					High-ON
	2					High-OFF
	3					Low-ON
	4					Low-OFF
	0					No alarm provided
Flow direction	—	1				Bottom to Top
	—	6				Left to Right
	—	7				Right to Left
	—	8				Top to Bottom
	—	9				Others

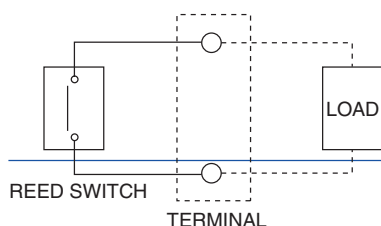
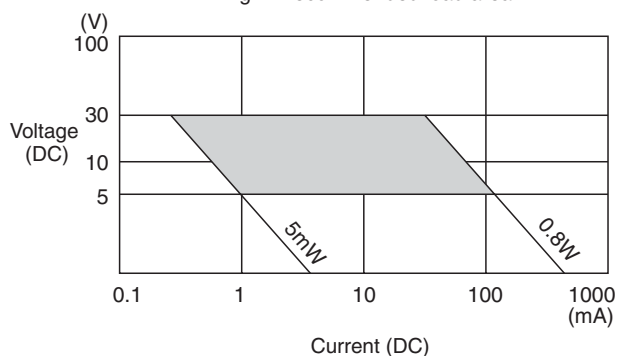


Fig. 1 Recommended load area



## REFERENCE 2.

When used under the condition close to full load or in such inrush load and surge voltage where the load occurs remarkably, 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

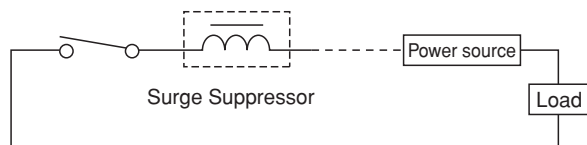
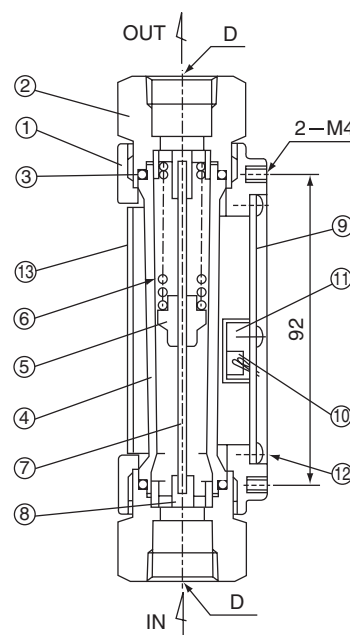
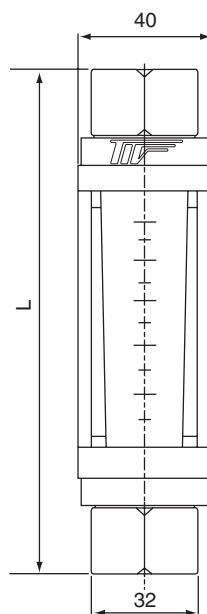
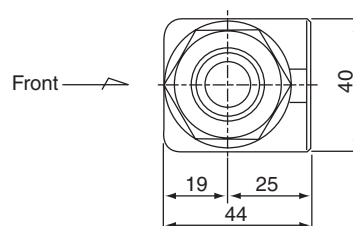


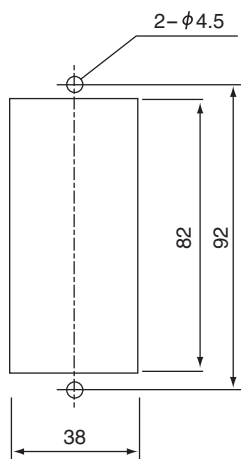
Fig. 2

## DIMENSION AND MATERIAL

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



PANEL CUT



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	Brass (C3604)
13	Scale plate	Transparent resin

\* Specification is subject to change without notice.



**TOKYO KEISO CO., LTD.**

Tel : 03-3431-1625 (KEY) ; Fax : 03-3433-4922

e-mail : [overseas.sales@tokyokeiso.co.jp](mailto:overseas.sales@tokyokeiso.co.jp) ; URL : <http://www.tokyokeiso.co.jp>

