TECHNICAL Guidance

COMPACT AND LIGHT DESIGH, FLOW INDICATION WITH ALARM CONTACT

FA-1000 FLOW MONITOR

GENERAL

FA-1000 FLOW MONITOR is a flow indicator with alarm contact for liquid application.



FEATURES

- SAVING COST
 One FLOW MONITOR unit covers flow measurement and alarm contact output.
- COMPACT AND LIGHT DESIGN
 FLOW MONITOR is very much suitable for assembling onto equipments and devices due to its compact and light design.
- ADJUSTABLE ALARM POINT
 Alarm setting point is freely adjustable even after installation.
- WATER PROOF CONSTRUCTION FLOW MONITOR can also be used under splashes of water.

ANY FLOW DIRECTION

Thanks to uniquely designed "Universal Graduation", FLOW MONI-TOR can be installed for any flow directions.

QUICK DELIVERY

The standardized specification allows reasonably quick delivery time.



FA-1000

RECOMMENDED APPLICATION

- Cooling water lines
- Monitoring of leakage of sealing liquids
- Lubrication oil lines
- Cooling fluids lines in Injection Moulding machines
- Liquid cultivating medium supply lines

STANDARD SPECIFICATION

| | | FA-1000 | | |
|-----------------|------------------|--|--|--|
| Applicable flui | d | Water or low viscosity liquids *1 | | |
| Available scale | e range | Min. 0.1~1ℓ/min. | | |
| | | Max. 10~100l/min. | | |
| Max. OP. Temp |) | 100°C | | |
| Max. OP. Pres | S. | 10kg/cm ² G (0.98MPa) | | |
| Flow direction | | Bottom→Top, Left→Right, | | |
| | | Right→Left, Top→Bottom | | |
| Process conne | ection | Rc ¹ /4, ³ /8, ¹ /2, ³ /4, 1, 1 ¹ /4, 1 ¹ /2 | | |
| | | 10A~40AJIS 10KFFflange | | |
| Indication accu | uracy | ±5%F.S. | | |
| Alarm setting a | accuracy | ±2%F.S. | | |
| Flow rate indic | ation | By magnet coupled pointer ring | | |
| | Type of switch | SPST Reed switch (Self holding type) | | |
| Alarm | Contact capacity | AC10VA (Max. V125V, Max. i0.5A) | | |
| contact | | DC10W (Max. V100V, Max. i0.5A) | | |
| Comaci | Setting of alarm | By rotating setting screw | | |
| | Alarm reset span | Max. 10%F.S. | | |
| Electric conne | ction | M3.5 screw terminal | | |
| Cable entry | | Water tight gland *2 | | |
| Enclosure | | Water tight | | |
| Installation | | Piping support or panel mount | | |

*1 : Special calibration for liquids for medium viscosity is available as option. Consult factory for details. *2 : Separate Terminal box with G1/2 thread cable entry available on request.

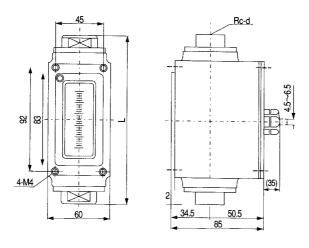
MODEL CODE

□ FA-1000

| FA-1000 MOD | EL C | COD | E | | | | | Deadriatian | | | |
|--------------------|-------------|-----|----|--------------------------|------------------------|--|----------------|---------------------------|--|--|--|
| FA-1 | | | | | | | | Desdription | L dimension (L) | | |
| | 1 | | | | | | | 0.1~1 ℓ /min. | | | |
| | 2 | | | | | | | 0.2~2 ℓ /min. | | | |
| | 3 | | | | | | | 0.5~5ℓ/min. | | | |
| | 4 | | | | | | | 1~10 ℓ /min. | 150mm | | |
| | 5 | | | | | | 1.5~15 l /min. | (250mm for flange | | | |
| | 6 | | | | | | 2~20 ℓ /min. | connection versions) | | | |
| Scale range | 7 | | | | | | | 3~30 l /min. | | | |
| | 8 9 | | | | | | | 5~50ℓ/min. | | | |
| | | | | | | | | 6~60 l /min. | | | |
| | Α | | | | | | | 7~70ℓ/min. | | | |
| | В | | | | | | | 8~80 l /min. | 180mm | | |
| | С | | | | | | | 9~90ℓ/min. | (250mm for flange | | |
| | D | | | | | | | 10~100 l /min. | connection versions) | | |
| | Ζ | | | | | | | Other special scale range | | | |
| | | 1 | | | | | | Rc 1/4 | | | |
| | | 2 | | | | | | Rc 3/8 | 150mm or 100mm | | |
| | 3 4 A | | | | | | | Rc 1/2 | 150mm or 180mm (Refer to Scale Range) | | |
| | | | | | | | | Rc 3/4 | | | |
| | | | | | | | | Rc 1 | | | |
| | | В | | | | | | Rc 1 1/4 | 100mm | | |
| | | С | | | | | | Rc 1 1/2 | 190mm | | |
| Process | | D | | | | | | Other threads | | | |
| Conncetion | | 5 | | | | | | 10AJIS 10KFF | | | |
| | | 6 | | | | | | 15AJIS 10KFF | 050 | | |
| | | 7 | | | | | | 20AJIS 10KFF | | | |
| | | 8 | | | | | | 25AJIS 10KFF | 250mm | | |
| | | 9 | | | | | | 32AJIS 10KFF | | | |
| | | E | | | | | | 40AJIS 10KFF | | | |
| | | Ζ | | | | | | Other flanges | | | |
| | | | 1 | | | | | Bottom→Top | | | |
| Flow Direction | | | 6 | | | | | Left→Right | | | |
| Flow Direction | | | 7 | | | | | Right→Left | | | |
| | | | 8 | | | | | Top→Bottom | | | |
| Alarm Function – H | | 0 | | | No alarm contact | | | | | | |
| | | | | High alarm contact | | | | | | | |
| — L | | | | | Low alarm contact | | | | | | |
| Material | | | 1 | | Material class 1 | | | | | | |
| | | | 2 | | Meterial class 2 | | | | | | |
| | | | 3 | | Material class 3 | | | | | | |
| | | | Ζ | | Other special material | | | | | | |
| Special Features | | | | | Standard | | | | | | |
| | | | /Z | Special feature involved | | | | | | | |

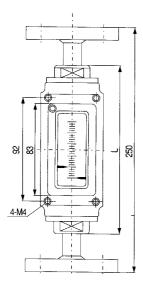
DIMENSIONS AND MATERIAL

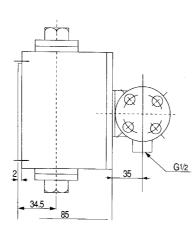
G FA-1000



Screw connection

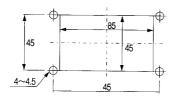
| | Derthlerer | Material | | | | | | |
|-----|--------------------|------------------------------|------------------|------------------|--|--|--|--|
| No. | Part Name | Material class 1 | Material class 2 | Material class 3 | | | | |
| 1 | Tapered tube | C3602 (Brass) | 304SS | 316SS | | | | |
| 2 | Float | PPS resin | | | | | | |
| 3 | Oring | NBR | VITON | VITON | | | | |
| 4 | Connection fitting | C3602 (Brass) | 304SS | 316SS | | | | |
| 5 | Housing | ADC12 (Aluminum die-casting) | | | | | | |
| 6) | Flange | SS41 | 304SS | 316SS | | | | |
| 0 | | (Carbon steel) | 30455 | | | | | |





Flange connection

In case Terminal box with G1/2 cable entry is provided.

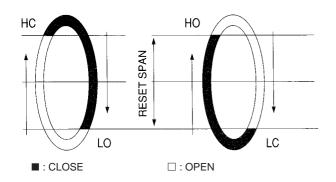


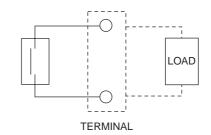
Panel cut (For horizontal flow direction)

WIRING AND SWITCH ACTION

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FA-1 🗆 🗆 -L 🗆





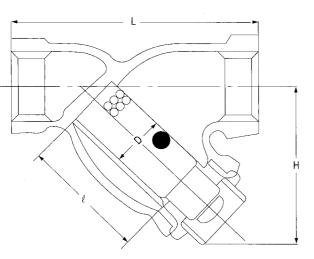
OPTIONAL UNITS

Magnet Straightener

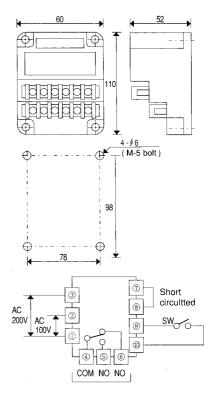
A magnet is moulded in the float and in case ferrous powders are involded in the fluid, smooth movement of float will not be obtained. It is recommended to install a Magnet Straightener in upstream of the line to eliminate the ferrous contents.

· Relay driver

The contact output of FLOW MONITOR is reed switch contact. In case the contact capacity is not sufficient for the operation, use RD-1000 type RELAY DRIVER for capacity increment. (Separate TECH-NICAL GUIDANCE for RD-1000 RELAY DRIVER is available on request.)



| Size | mm | 8 | 10 | 15 | 20 | 25 | 32 | 40 |
|------|------|-----|-----|-----|-----|-----|-------|-------|
| | inch | 1/4 | 3/8 | 1/2 | 3/4 | 1 | 1 1/4 | 1 1/2 |
| L | | 65 | 70 | 85 | 100 | 115 | 135 | 150 |
| Н | | 50 | 50 | 60 | 65 | 77 | 90 | 100 |



* Specification subject to change without notice



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