

## ***VARIABLE AREA TYPE FLOW METER (ROTAMETER)***

## P-TYPE

## Applications

### A. Measuring the flow rate for

- Chemical process system
- Water treatment system
- Industrial flow system

### B. Service Condition

- Viscosity  $\leq 3$  cP
- Max. working temperature: Metal: 100°C;  
Plastic: 60°C
- Max. working pressure:
  - (1) Body material: PS, PI: 15 kg/cm<sup>2</sup>,  
Plastic: 6 kg/cm<sup>2</sup>,
  - (2) Glass tube: Borosilicate glass  
6 kg/cm<sup>2</sup>,
  - (3) P.C tube: 10 kg/cm<sup>2</sup>,  
Instant pressure: 15 kg/cm<sup>2</sup>

**C. Alarm switch available (N.O)**

- **Switch rating:** AC 125V 0.5A / DC 100V 10W / Max. DC 250V < 40mA

**D. Accuracy:  $\pm 2.5\% \text{F.S}$**

### Operation Principle

The variable area Flow meter contains a float & taper tube. The fluid flows through the taper tube and forces up to the float . The flow rate is measured as a function of the area of the opening. The flow rate increases as the float becomes free to move to produce the varying area.

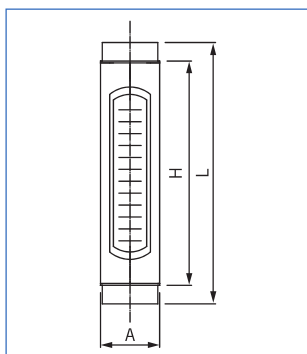


### Plastic



## Metal

## Dimensions



| Range<br>Size | H <sub>2</sub> O (MAX)<br>L/min | AIR (MAX)<br>NL/min | DIMENSION |     |   |        |
|---------------|---------------------------------|---------------------|-----------|-----|---|--------|
|               |                                 |                     | L         | H   | A | PT/NPT |
| 6A            | 0.03 – 0.3                      | 0.5 – 5.0           | 200       | 165 | — | 1/4"   |
| 10A           | 0.1 – 1.0                       | 2 – 20              | 200       | 165 | — | 3/8"   |
| 15A           | 1 – 10                          | 20 – 200            | 240       | 200 | — | 1/2"   |
| 20A           | 2 – 20                          | 30 – 300            | 280       | 240 | — | 3/4"   |
| 25A           | 5 – 50                          | 100 – 1000          | 280       | 240 | — | 1"     |
| 32A           | 10 – 100                        | 200 – 2000          | 280       | 240 | — | 1 1/4" |
| 40A           | 20 – 200                        | 300 – 3000          | 305       | 240 | — | 1 1/2" |
| 50A           | 40 – 400                        | 500 – 5000          | 315       | 240 | — | 2"     |

### Ordering Information

| P-TYPE | Code | Model                                                   | Code | Seal material                                    |
|--------|------|---------------------------------------------------------|------|--------------------------------------------------|
|        | PS   | stainless steel wetted parts                            |      | (1) NBR (2) Viton                                |
|        | PI   | steel wetted parts                                      |      | <b>Code</b> <b>Protection Supporter material</b> |
|        | PV   | plastic wetted parts                                    |      | (1) SS304                                        |
|        |      | <b>Code</b> <b>Size</b>                                 |      | (2) SS316                                        |
|        |      | (1) 6A (2) 10A (3) 15A (4) 20A                          |      | (3) Acrylic plastic                              |
|        |      | (5) 25A (6) 32A (7) 40A (8) 50A                         |      | <b>Code</b> <b>Flow range</b>                    |
|        |      | <b>Code</b> <b>Connection thread (M—Male, F—Female)</b> |      | L 0.03 ~ 400 L/min for liquid                    |
|        |      | (1) PTM (2) PTF (3) NPTM (4) NPTF                       |      | G 0.5 ~ 5000 NL/min for gas                      |
|        |      | <b>Code</b> <b>Body (wetted parts) material</b>         |      | <b>Code</b> <b>Alarm Switch</b>                  |
|        |      | (1) CS (2) SS304 (3) SS316                              |      | 1R One setting point                             |
|        |      | (4) SS316L (5) P.V.C. (6) P.P.                          |      | 2R Two setting points                            |
|        |      | (7) PVDF (8) Teflon                                     |      | 0 Without alarm                                  |
|        |      | <b>Code</b> <b>Indicating Tube material</b>             |      |                                                  |
|        |      | (1) Borosilicate glass                                  |      |                                                  |
|        |      | (2) PC (plastic)                                        |      |                                                  |
|        |      | <b>Code</b> <b>Float material</b>                       |      |                                                  |
|        |      | (1) SS304                                               |      |                                                  |
|        |      | (2) SS316                                               |      |                                                  |
|        |      | (3) P.V.C                                               |      |                                                  |
|        |      | (4) P.P.                                                |      |                                                  |
|        |      | (5) Nylon                                               |      |                                                  |
|        |      | (6) PVDF                                                |      |                                                  |
|        |      | (7) Teflon                                              |      |                                                  |
| P-TYPE |      |                                                         | +    |                                                  |

### NOTE

Special requests on materials are available.