

## Turbine flow meter (Pulse output)

# HF-SCA

- Heat-resistant turbine type.
- Compact size, saving installation space.
- No restriction on installation orientation.
- Usable at low temperatures.



**Caution** To ensure flow accuracy, pipes and fittings you use must be greater than or equal to ID of your instrument

### Model number selection

| Material | Output type | Base model | Shape | Fluid name | Max. flow | Connection size | Option  | Specialized item(s)  |
|----------|-------------|------------|-------|------------|-----------|-----------------|---------|--|
| HF -     | SC          | A          | 0     |            |           |                 |         |  |
|          |             |            |       |            |           |                 | Display | Provide Option symbol of display or converter if necessary * 2 |
|          |             |            |       |            |           |                 | 02      | Rc3/8  |
|          |             |            |       |            |           |                 | 03      | Rc1/2  |
|          |             |            |       |            |           |                 | 04      | Rc3/4  |
|          |             |            |       |            |           |                 | 09      | Specialized size * 1   |
|          |             |            |       |            | Max.      |                 |         | Max. flow rate selected from the available flow range below    |
|          |             |            |       |            | 1         |                 |         | Water  |
|          |             |            |       |            | 9         |                 |         | Specialized fluid * 1  |
|          |             |            |       |            | 0         |                 |         | Standard   |
|          |             | Base model |       |            |           |                 |         | Flow range   |
|          |             |            |       |            |           |                 |         | Connection size (Rc)   |
|          |             | 30         |       |            |           |                 |         | 0.5 - 5 L/min  |
|          |             |            |       |            |           |                 |         | 1 - 10 L/min   |
|          |             |            |       |            |           |                 |         | 2 - 20 L/min   |
|          |             | 40         |       |            |           |                 |         | 3 - 30 L/min   |
|          |             |            |       |            |           |                 |         | 5 - 50 L/min   |
|          |             |            | A     |            |           |                 |         | Pulse output   |
|          | SC          |            |       |            |           |                 |         | SS (Heat resistant type, Max. 140°C of fluid temperature)      |

\* 1: Specify fluid name and connection size at the end of model number selection

\* 2: Display or converter is paired with this product at Factory. Refer to "Digital meter / Converter" page regarding optional symbols.



## Dimensions

| Base model | L  | W  | Rcd |
|------------|----|----|-----|
| 30         | 66 | 34 | 3/8 |
| 40         | 75 | 40 | 1/2 |
|            |    |    | 3/4 |

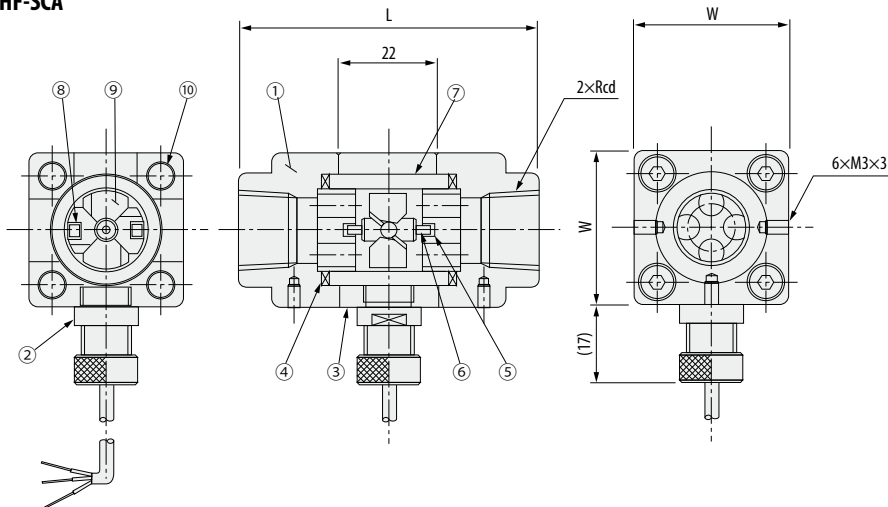
## Specifications

|                         |   |
|-------------------------|---|
| Flow accuracy           | ±3% of F.S.   |
| Pressure limit          | 0.75MPa(G) ※  |
| Fluid temperature limit | 140°C   |
| Operating temperatures  | 0 – 55°C (Non-condensing)                                       |
| Pulse output            | NPN open collector 26.4 VDC<br>Max. 15 mA . 0 – 140Hz (approx.) |
| Power source            | 5 – 24 VDC ±10%, max. 8 mA                                      |
| Cable length            | 2 m   |

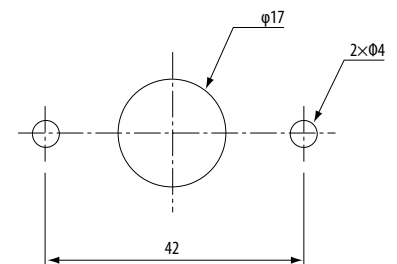
※ In case that fluid temperatures go above 100°C, decrease inlet pressure values down to 0.5MPa(G) or lower.

## Outline drawing

### HF-SCA



### Panel cut-out



Note) φ17 is required, only when Sensor side is installed on panel.

### Flow direction



### Materials

| No. | Part name              | Material  | Remarks              |
|-----|------------------------|-----------|----------------------|
| 1   | Fitting                | SCS14     |                      |
| 2   | Sensor                 | POM, etc. | Sensor cable: AWG 24 |
| 3   | Case                   | PPS       |                      |
| 4   | O-ring                 | FKM       |                      |
| 5   | Bearing                | Alumina   |                      |
| 6   | Shaft                  | Alumina   |                      |
| 7   | Pipe                   | SS304     |                      |
| 8   | Samarium-cobalt magnet |           |                      |
| 9   | Turbine                | PPS-GF30  |                      |
| 10  | Stay bolts             | SS303     |                      |

### Wiring diagram

| Cable colors | Function |
|--------------|----------|
| Orange       | +DC V    |
| Gray         | GND      |
| White        | (Output) |