## Flow Switch
### Series Variations

<table>
<thead>
<tr>
<th>Model</th>
<th>Fluid</th>
<th>Calibration method</th>
<th>Rated flow range</th>
<th>Power supply voltage</th>
<th>Temperature characteristics (based on 25°C)</th>
<th>Repeatability</th>
<th>Hysteresis</th>
<th>Output</th>
<th>Display</th>
<th>Enclosure</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>PF2M7(-L)</td>
<td>Dry air, N2, Ar, CO2</td>
<td></td>
<td>0.01 to 1 L/min</td>
<td>12 to 24 VDC</td>
<td>±3% F.S. (15 to 35°C)</td>
<td>±1% F.S.</td>
<td>Hysteresis mode: Variable Window comparator mode: Fixed (3 digits*)</td>
<td>NPN/PNP open collector</td>
<td>2-color LCD display</td>
<td>IP40</td>
<td>Analog free span function, Reversible display mode, Delay time setting, Flow adjustment valve integrable, Panel mounting possible, DIN rail mountable, Selectable flow rate display unit, Secret code setting function, Display OFF mode, Accumulated value hold function</td>
</tr>
<tr>
<td>PF2M7-L</td>
<td>Dry air, N2</td>
<td></td>
<td>0.02 to 2 L/min</td>
<td>12 to 30 VDC</td>
<td>±5% F.S. (0 to 50°C)</td>
<td>±1% F.S.</td>
<td>Hysteresis mode: Variable Window comparator mode: Variable</td>
<td>NPN/PNP open collector</td>
<td>2-color display</td>
<td>IP65</td>
<td></td>
</tr>
<tr>
<td>PFM7</td>
<td>Air, N2</td>
<td></td>
<td>0.2 to 10 L/min</td>
<td>24 VDC ±10%</td>
<td>±2% F.S. (15 to 35°C)</td>
<td>±1% F.S.</td>
<td>Hysteresis mode: Variable Window comparator mode: Variable</td>
<td>NPN/PNP open collector</td>
<td>1-color display</td>
<td>IP65</td>
<td></td>
</tr>
<tr>
<td>PF3A7□□H</td>
<td>Air, N2</td>
<td></td>
<td>1 to 10 L/min</td>
<td>24 VDC ±10%</td>
<td>±5% F.S. (0 to 50°C)</td>
<td>±1% F.S.</td>
<td>Hysteresis mode: Variable Window comparator mode: Variable</td>
<td>NPN/PNP open collector</td>
<td>3-color LCD display</td>
<td>IP65</td>
<td></td>
</tr>
<tr>
<td>PFMB7</td>
<td>Dry air, N2</td>
<td></td>
<td>0.5 to 25 L/min</td>
<td>12 to 24 VDC</td>
<td>±2% F.S. (15 to 35°C)</td>
<td>±1% F.S.</td>
<td>Hysteresis mode: Variable Window comparator mode: Variable</td>
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<td>2-color LED display</td>
<td>IP40</td>
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</tbody>
</table>

### Model Selection Table
#### Self-contained Type

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<thead>
<tr>
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<th>Power supply voltage</th>
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</tr>
<tr>
<td>Air, N2</td>
<td></td>
<td>0.2 to 10 L/min</td>
<td>24 VDC ±10%</td>
<td>±2% F.S. (15 to 35°C)</td>
<td>±1% F.S.</td>
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<td>IP65</td>
<td></td>
</tr>
<tr>
<td>Air, N2</td>
<td></td>
<td>1 to 10 L/min</td>
<td>24 VDC ±10%</td>
<td>±5% F.S. (0 to 50°C)</td>
<td>±1% F.S.</td>
<td>Hysteresis mode: Variable Window comparator mode: Variable</td>
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<td></td>
</tr>
<tr>
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<td>12 to 24 VDC</td>
<td>±2% F.S. (15 to 35°C)</td>
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<td>NPN/PNP open collector</td>
<td>2-color LED display</td>
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</tr>
</tbody>
</table>

* PF2A7□□ has a selectable flow rate display unit and an analog output of ±3% F.S. (Fluid: Dry air) with a 12 to 24 VDC power supply voltage.

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1. When used as an IO-Link device
2. ±1% F.S.
3. ±1 Digit is min. calibration unit.
# Series Variations

## Flow Switch

### PFMC7
- Dry air, N₂
- 5 to 500 L/min
- 0.5 to 4 L/min
- 12 to 24 VDC ±10%
- ±2% F.S. (15 to 35°C)
- ±5% F.S. (0 to 50°C)
- Hysteresis mode: Variable
- Window comparator mode: Variable
- NPN/PNP open collector
- Analog voltage output
- Analog current output
- 3-color LCD display
- IP65
- Flow adjustment valve integrable
- Responses time setting function
- Secret code setting function
- Power saving mode
- Accumulated flow display function

### PF3W-Z
- Water, ethylene glycol aqueous solution
- 10 to 1000 L/min
- 2 to 16 L/min
- 18 to 30 VDC ±10%*
- ±5% F.S. (0 to 50°C)
- Hysteresis mode: Variable
- Window comparator mode: Variable
- NPN/PNP open collector
- Analog voltage output
- Analog current output
- 3-color LCD display
- IP65
- Flow adjustment valve integrable
- Responses time setting function
- Secret code setting function
- Power saving mode
- Accumulated flow display function

### PF3W-L
- Water, deionized water, chemicals
- 10 to 1000 L/min
- 5 to 40 L/min
- 12 to 24 VDC ±10%
- ±5% F.S. (0 to 50°C)
- Hysteresis mode: Variable
- Window comparator mode: Variable
- NPN/PNP open collector
- Analog voltage output
- Analog current output
- 3-color LCD display
- IP65
- Flow adjustment valve integrable
- Responses time setting function
- Secret code setting function
- Power saving mode
- Accumulated flow display function

### PF3W7
- Water, water-soluble coolant
- 0.5 to 40 L/min
- 10 to 100 L/min
- 50 to 250 L/min
- 24 VDC ±10%
- ±5% F.S.
- Hysteresis mode: Variable
- Window comparator mode: Variable
- NPN/PNP open collector
- Analog voltage output
- Analog current output
- 3-color LCD display
- IP65
- Flow adjustment valve integrable
- Responses time setting function
- Secret code setting function
- Power saving mode
- Accumulated flow display function

### LFE□
- PVC piping type
- 0.5 to 20 L/min
- 2.5 to 100 L/min
- 5 to 200 L/min
- 24 VDC ±10%
- ±2% F.S. (Displayed values)
- Analog output: ±1.5% F.S.
- Hysteresis mode: Variable
- Window comparator mode: Variable
- NPN/PNP open collector
- Analog voltage output
- Analog current output
- 3-color LCD display
- IP65
- Flow adjustment valve integrable
- Responses time setting function
- Secret code setting function
- Power saving mode
- Accumulated flow display function

### PF2D

- Selection of display on sub screen
- Switching of flow direction
- Responses time setting function
- Secret code setting function
- Power saving mode
- Accumulated flow display function

### IF

- Selection of display on sub screen
- Switching of flow direction
- Responses time setting function
- Secret code setting function
- Power saving mode
- Accumulated flow display function

---

*Displayed values*
## Flow Switch

### Series Variations

#### Model Selection Table

<table>
<thead>
<tr>
<th>Model</th>
<th>Sensor unit</th>
<th>Monitor unit</th>
<th>Sensor unit</th>
<th>Monitor unit</th>
<th>Sensor unit</th>
<th>Monitor unit</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PFM5</td>
<td>PFM3</td>
<td>PFMV5</td>
<td>PFMV3</td>
<td>PF2A5</td>
<td>PF2A3</td>
</tr>
<tr>
<td><strong>Fluid</strong></td>
<td>Dry air, N₂, Ar, CO₂</td>
<td>Dry air, N₂</td>
<td>Air, N₂</td>
<td>1 input</td>
<td>1 input</td>
<td>1 input</td>
</tr>
<tr>
<td><strong>Sensor input amount</strong></td>
<td>Push-button calibration</td>
<td>Push-button calibration</td>
<td>Push-button calibration</td>
<td>Push-button calibration</td>
<td>Push-button calibration</td>
<td>Push-button calibration</td>
</tr>
<tr>
<td><strong>Calibration method</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Rated flow range</strong></td>
<td>0.2 to 10 L/min</td>
<td>0.2 to 4 L/min</td>
<td>0.5 to 25 L/min</td>
<td>0.5 to 1 L/min</td>
<td>1 to 50 L/min</td>
<td>1 to 2 L/min</td>
</tr>
<tr>
<td><strong>Power supply voltage</strong></td>
<td>24 VDC ±10%</td>
<td>24 VDC ±10%</td>
<td>12 to 24 VDC ±10%</td>
<td>12 to 24 VDC ±10%</td>
<td>12 to 24 VDC ±10%</td>
<td>12 to 24 VDC ±10%</td>
</tr>
<tr>
<td><strong>Temperature characteristics (25°C reference)</strong></td>
<td>±2% F.S. (15 to 35°C)</td>
<td>±1% F.S. (Fluid: Dry air)</td>
<td>±2% F.S. (15 to 35°C)</td>
<td>±2% F.S. (15 to 35°C)</td>
<td>±1% F.S. (Connected with PF2A2)</td>
<td>±1% F.S. (Connected with PF2A2)</td>
</tr>
<tr>
<td><strong>Repeatability</strong></td>
<td>±1% F.S. (Fluid: Dry air) Ananlog output: ±5% F.S.</td>
<td>±0.1% F.S. (Fluid: Dry air) Analog output: ±0.5% F.S.</td>
<td>±2% F.S. (Fluid: Dry air) Analog output: ±5% F.S.</td>
<td>±2% F.S. (Fluid: Dry air) Analog output: ±5% F.S.</td>
<td>±1% F.S. (Connected with PF2A2)</td>
<td>±2% F.S. (Connected with PF2A2)</td>
</tr>
<tr>
<td><strong>Output</strong></td>
<td>Analog voltage output: Ananlog current output</td>
<td>Analog voltage output: Analog current output</td>
<td>Analog voltage output: Analog current output</td>
<td>Analog voltage output: Analog current output</td>
<td>Analog voltage output: Analog current output</td>
<td>Analog voltage output: Analog current output</td>
</tr>
<tr>
<td><strong>Display</strong></td>
<td>2-color display</td>
<td>2-color display</td>
<td>2-color display</td>
<td>2-color display</td>
<td>1-color display</td>
<td>1-color display</td>
</tr>
<tr>
<td><strong>Enclosure</strong></td>
<td>IP40</td>
<td>IP40</td>
<td>IP65</td>
<td>IP40</td>
<td>Front only: IP65 The rest: IP40</td>
<td></td>
</tr>
<tr>
<td><strong>Manifold mountable</strong></td>
<td>Manifold mountable</td>
<td>Manifold mountable</td>
<td>Manifold mountable</td>
<td>Manifold mountable</td>
<td>Manifold mountable</td>
<td>Manifold mountable</td>
</tr>
<tr>
<td><strong>Flow adjustment valve integrable</strong></td>
<td>Panel mounting possible</td>
<td>Panel mounting possible</td>
<td>Panel mounting possible</td>
<td>Panel mounting possible</td>
<td>Panel mounting possible</td>
<td>Panel mounting possible</td>
</tr>
<tr>
<td><strong>Panell mounting possible</strong></td>
<td>Security code setting function</td>
<td>Security code setting function</td>
<td>Security code setting function</td>
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<td>Security code setting function</td>
</tr>
<tr>
<td><strong>Accumulated flow display function</strong></td>
<td>Power saving mode Auto shift function</td>
<td>Power saving mode Auto shift function</td>
<td>Power saving mode Auto shift function</td>
<td>Power saving mode Auto shift function</td>
<td>Power saving mode Auto shift function</td>
<td>Power saving mode Auto shift function</td>
</tr>
<tr>
<td><strong>Remote Type</strong></td>
<td>Connectable with 4 ch monitor (Analog voltage output only)</td>
<td>Connectable with 4 ch monitor (Analog voltage output only)</td>
<td>Connectable with 4 ch monitor (Analog voltage output only)</td>
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<td>Connectable with 4 ch monitor (Analog voltage output only)</td>
</tr>
<tr>
<td><strong>Page</strong></td>
<td>P.207</td>
<td>P.287</td>
<td>P.305</td>
<td>P.207</td>
<td>P.287</td>
<td>P.305</td>
</tr>
</tbody>
</table>

*1 Digit is min. calibration unit.*
<table>
<thead>
<tr>
<th>Sensor unit</th>
<th>Monitor unit</th>
<th>Sensor unit</th>
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<th>Sensor unit</th>
<th>Monitor unit</th>
<th>PFG300</th>
</tr>
</thead>
<tbody>
<tr>
<td>PF3W5-Z</td>
<td>PF3W4</td>
<td>PF3W5</td>
<td>LFE</td>
<td>PF2D5</td>
<td>PF2D3</td>
<td>PF2D2</td>
</tr>
<tr>
<td>PF3W5</td>
<td>PF3W3</td>
<td>PF3W5</td>
<td>LFE0</td>
<td>PF2D5</td>
<td>PF2D3</td>
<td>PFG300</td>
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<td>PF2D5</td>
<td>PF2D3</td>
<td>PFG300</td>
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</tbody>
</table>

- **Flow Switch**
- **Enclosure**: IP40, IP40, IP65, IP40 (Front only: IP65)
- **2-color display**
- **Analog voltage output**
- **Hysteresis**: (25°C reference)
- **Rated flow amount**
- **Sensor input**

### Fluids
- Water, ethylene glycol aqueous solution
- Water, deionized water
- Water, water-soluble coolant
- Deionized water, fluids that do not corrode or corroce Super PFA
- Water, ethylene glycol
- Deionized water, fluids that do not corrode or corroce Super PFA
- Water, ethylene glycol
- Deionized water, fluids that do not corrode or corroce Super PFA

### Fluids (respective models)
- Water, ethylene glycol aqueous solution
- Water, deionized water
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