

## Flow Controller PSF210

- ◆ Excellent price-to-performance ratio
- ◆ Unique ultra-light-rotor technology
- ◆ Exceptional accuracy and reliability
- ◆ Operates with liquids with viscosity from 1 to 1000 CST
- ◆ Alarm/Control output with 2 programmable limits
- ◆ Local programmable LED display
- ◆ Maintenance-free

PSF210 is a programmable flow controller designed for use with low-viscose clear or translucent liquids, transmitting IR light. The operating principle is based on the liquid volume measurement through light-weight rotor, IR sensor, and sophisticated electronics for measurement and control. The material types used (PVDF, Vectra®, Viton®, EPDM, stainless steel) have an exceptional chemical and thermal (up to 90 °C) resistance. Other ranges except the standard 0.5...20 l/min are available on request. PSF210 is equipped with a local 3-digit LED display and a key for easy programming and flow monitoring as well as with a PNP or NPN alarm output that activates when either of the programmable alarm limits is reached. PSF210 can be used as a flow meter, ON/OFF flow controller, or alarm unit suitable for water treatment and other applications.

### Technical specifications

#### Input

|   |  |
|---|--|
| <b>Liquid type</b>                            | clear or translucent liquid transmitting IR light <sup>(1)</sup> |
| <b>Liquid viscosity</b>                       | 1...1000 CST   |
| <b>Flow range</b>                             | 0.5...20 l/min <sup>(2)</sup>                                    |
| <b>Measurement accuracy</b>                   |  |
| <b>Accuracy</b>                               | ± 1.00%  |
| <b>Interchangeability</b>                     | 1.00%  |
| <b>Reproducibility</b>                        | max. ± 0.30%   |
| <b>Alarm/Control output</b> (user selectable) |  |
| <b>Alarm type</b>                             | "window"   |
| <b>Alarm/control limits</b>                   | programmable   |
| <b>Output type</b>                            | PNP or NPN   |
| <b>Output ratings</b>                         | max. 100 mA, max. 40 V   |
| <b>Output function</b>                        | ON/OFF, NO or NC (programmable)                                  |
| <b>Power supply</b>                           |  |
| <b>Supply voltage</b>                         | 18...30 VDC  |
| <b>Admissible variations</b>                  | 2 Vp-p at 50 Hz  |
| <b>Consumption</b>                            | max. 200 mA  |

<sup>(1)</sup> Liquid medium must be compatible with wetted parts!

<sup>(2)</sup> Other ranges are available on request.

### Ordering code PSF210 - G5.G8

| Code | Feature or option         | Code values   |
|------|---------------------------|---|
| G5   | Relay output              | E - NPN, F - PNP  |
| G8   | Cable length [m] and type | 1PV...10PV - PVC, 1SL...10SL - silicone, 1TF...10TF - Teflon® |



#### Local indicator

|                                   |  |
|-----------------------------------|--|
| <b>Digital display</b>            | 3 LED indicators, 10 mm                      |
| <b>Display resolution</b>         | 0.1 l/min                                    |
| <b>Display refresh</b>            | 1 s  |
| <b>Temperature drift</b>          | 0.01% from span for 1 °C                     |
| <b>LED indicator</b>              | for alarm event                              |
| <b>Keyboard</b>                   | 1 membrane key                               |
| <b>Operating conditions</b>       |  |
| <b>Process temperature</b>        | -20...90 °C                                  |
| <b>Ambient temperature</b>        | -10...65 °C                                  |
| <b>Process pressure</b>           | max. 16 bar                                  |
| <b>Design and materials</b>       |  |
| <b>Wetted parts</b>               | PVDF, Viton®, Vectra®, EPDM, stainless steel |
| <b>Case material</b>              | stainless steel                              |
| <b>Mounting</b>                   | free   |
| <b>Process connection</b>         | 2 x G1/2" male nipples                       |
| <b>Wiring</b>                     | 3-wire cable                                 |
| <b>Dimensions</b>                 | 100x60x45 mm                                 |
| <b>Weight</b>                     | max. 200 g                                   |
| <b>Protection class (housing)</b> | IP67   |