Specifications

Variant	☐ standard, ☐ chemically resistant
Fluid Type	clear or translucent liquid
Flow Range	☐ 0.5…20 l/min, ☐ ..... l/min
Pulse Output	☐ TTL (0.1...2 kHz, max. 0.5 mA)
Sensitivity	6000 pulses per liter of water
Control/Alarm Output	☐ PNP (NO), ☐ NPN (NO)
Output Ratings	max. 100 mA, max. 40 V
Display Refresh	1 s
Power Supply	18…30 VDC, max. 2 Vp-p at 50 Hz
Consumption	less than 200 mA
Measurement Error	≤ ± 1% ± 0.01% from span for 1 °C
Reproducibility	≤ ± 0.3%
Medium Viscosity	1…1000 CST
Medium Temperature	max. 90 °C
Medium Pressure	max. 12 bar
Ambient Temperature / Humidity	-10…65 °C / 0…85% RH
Housing Protection Class	IP67
Wetted Parts	PVDF, Viton®, Vectra®, EPDM
Ports and Seals	☐ POM and NBR, ☐ 316SS and PTFE

Warranty and Support

.....
serial number

.....
manufacturing date

QC check mark .....(passed)
(stamp)

88 Slavyanska Str.
P.O.Box 378
Plovdiv 4000, BULGARIA
tel: +359 32 646523, 646524
fax: +359 32 634089, 646517
e-mail: support@comeco.org

QD-8.2.4-WC

Warranty

COMECO warrants this product to be free from defects in materials and workmanship for 1 year. If your unit is found to be defective within that time, we will promptly repair or replace it. This warranty does not cover accidental damage, wear or tear, or consequential or incidental loss. This warranty does not cover any defects caused by wrong transportation, storage, installation, or operating (see '**Specifications**').

Technical support

In the unlikely event that you encounter a problem with your COMECO device, please call your local dealer or contact directly our support team.

v3-03.12

COMECO
CONTROL & MEASUREMENT

COMECO Inc., P.O.Box 378, Plovdiv 4000, BULGARIA, tel: +359 32 646523, 646524, fax: 634089
e-mail: info@comeco.org, WWW.COMECOGROUP.COM

FLOW CONTROLLER

PSF210

OPERATION MANUAL

CE

Please read this Operation Manual before mounting and operating!
Save the Manual for future references!

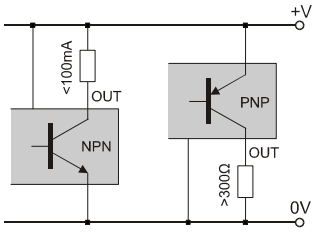
Overview

Safety note:

The appropriate national safety regulations must be observed when installing, putting into operation, and running this instrument.

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 measurement of liquid volume through light-weight rotor, IR sensor and sophisticated electronics for measurement and control. PSF210 can be used as a flow meter, flow transmitter with pulse output, ON/OFF flow controller, or alarm unit suitable for water treatment and other applications.

Mounting and Wiring



Color	Signal
white	TTL pulse output
yellow	alarm output
red	power supply (+V)
black	common (0 V)

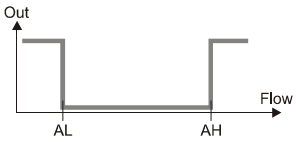
Mounting

- Install PSF210 in the pipe system using flexible hoses with ½" union nuts. Do not over-tighten!
- Make sure the arrow marking matches the flow direction!
- Slowly fill the system to avoid air damaging the PSF210 rotor.
- Avoid uncontrolled air pressure through the unit. This may destroy the rotor!

Wiring

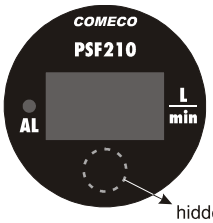
Connect PSF210 via the cable wires as given on the left.

Alarm/Control Function



- PSF210 provides a 'window' type alarm/control output function.
- Both AL and AH limits can be programmed by the user.

Operating



Parameter	Symbol	Value	Description
Input Low	AL o	0.5 ... 20.0	Alarm/control low limit value (output activates below this limit)
Input High	AH,	0.5 ... 20.0	Alarm/control high limit value (output activates above this limit)

Programming

- For programming, use the hidden key below the LED display.
- Press and hold the key until AL o or AH, appears on the display.
- Release the key to setup AL/AH alarm limit.
- Increase the blinking digit value by tapping on the key and hold it to go to the next digit.
- When all digits have been set, press and hold the key to store the value in the device memory and exit programming mode.

Important notes:

- *The fluid to be measured must be compatible with the wetted parts!*
- *Clean the medium-supply lines thoroughly before use.*
- *Use of 20 µm pre-filter is advisable because solid particles or medium contamination may damage the flow sensor and/or influence the measurement results!*
- *Mind that the operating principle is based on volume measurement, i.e. air in water is considered medium.*

Operating

- When in operating mode, PSF210 indicates current flow on the LED display within specified range (see '**Specifications**').
- Alarm output stays off if the measured flow is between AL and AH and goes on outside alarm 'window' (see '**Alarm/Control Function**').
- Alarm LED lamp 'AL' lights when the alarm output is on.

Display Messages

- ⌜ ¯ ⌝ (over range) - display value over 999.
- ⌞ _ ⌟ (under range) - display value below -99.
- oL (over load) - flow rate is over specified range (see '**Specifications**').
- - - - (initial check) - device initialization.
- Sto (store) - settings are stored in memory.