

EARL Type 41vS (2021)

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EARL Flow switch for low gas- or liquid flows type 41vS



Application

The unit has been developed for long-term operational use and controls liquid flows from 0.1 l/h or gas flows from 20 l/h referred to air with standard conditions. The unit is suitable for horizontal pipes with threaded process $G \frac{1}{4}$. The set point is factory set.

Operation

The flow directed upwards lifts a float. When decreasing the set point a permanent magnet contained in the float operates a reed contact. With normal flow the float is situated at the stop. The pressure loss is kept down by means of overflow tubing.

Advantages

- Control of small flow quantities.
- Suitable for pulsing flow from piston or diaphragm pumps.
- Differing material combinations for aggressive media.

Suitability

- Control of gas odorization.
- Control of extraction.
- Leakage control.
- Overflow control.





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Technical data (standard model)

Installation position Horizontal

Wetted parts Housing PVDF, float Corrosion and acid resistant

stainless steel, material no. 1.4571 (similar to AISI 316Ti)

Switch contact Plastics encapsulated reed contact,

closing with falling flow

Switching capacity: max. 300V/50 Hz, max. 0.5 A, max. 10W

Resistance 0.2 $\boldsymbol{\Omega}$

Set points Liquids: from 0.1 l/h

Air with standard conditions: from 20 l/h;

Cable 5 m two- core litz, 22 AWG (0.324 mm²) PVC isolated and

covered with PVC, with litz ends

Admissible deviation of actual set point +/- 5 % of required set point

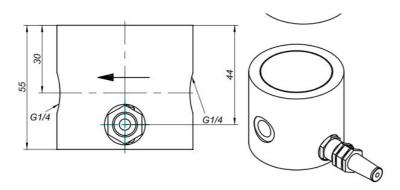
Repeatability of adjusted set point +/- 2 % of adjusted set point

Hysteresis Between on and off switching 20 % of required set point

Operating pressure Max. 16 bar

Operating temperature Max. 105 °C

Ambient air temperature -25 to +70 °C



Note

There is no maintenance required if the unit is used with clean liquids and gases. For slightly contaminated media a suitable filter has to be incorporated.

03-2021 Subject to technical changes