DS52

Low Cost Miniature Variable Area Flow Switch

- for low viscosity liquids
- complete stainless steel design
- small switch hysteresis
- high switching accuracy
- universal mounting position
- small mounting dimensions
- measuring ranges: 5...60 ml/min up to 8...30 l/min
- max. pressure: 350 bar
  max. temperature: 100 °C

Description:
The flow switch model DS52 works according to a modified variable area principle. The float is guided in a cylindrical measuring tube by means of a spring. The flowing medium moves the float in the flow direction. A Reed contact is mounted outside the meter in a sealed housing. When the float reaches the position of the Reed contact the switch will close. With higher flows the float moves further upward until it reaches a built-in float stop, still keeping the switch closed. This ensures a bistable switch function at any time. The Reed contact is adjustable over the full switching range of the meter.

Applications:
The variable area flow switch model DS52 is used for monitoring the flow of low viscosity liquids, e.g. in cooling circuits and laser systems, for pump monitoring, compressors and many other applications.
Dimensions:

Electrical Reed Contact:

DS52.1 (G 1/4 connection)
Function N/O: 200 V / 1 A / 20 VA

DS52.2 (G 1/2 connection)
Function N/O: 230 V / 3 A / 60 VA
Function SPDT: 250 V / 1.5 A / 50 VA

Connection:
1 = G 1/4 female
2 = G 1/2 female

Measuring range:
DS52.1 only (G 1/4 connection N/O contact only):
W101 = 5...60 ml/min
W102A = 40...130 ml/min
W106 = 0,1...0,6 l/min
W11 = 0,2...1,2 l/min
W12 = 0,4...2 l/min
W13 = 0,5...3 l/min
W15 = 1...5 l/min

DS52.2 only (G 1/2 connection):
W202 = 0,02...0,2 l/min
W206 = 0,2...0,6 l/min
W21 = 0,4...1,8 l/min
W23 = 0,8...3,2 l/min
W27 = 2...7 l/min
W213 = 3...13 l/min
W220 = 4...20 l/min
W230 = 8...30 l/min

Contact:
1 = function N/O
2 = function SPDT (only with G 1/2)

Technical Data:

Max. pressure: 350 bar

Pressure drop:
DS52.1: 0,02...0,6 bar
DS52.2: 0,02...0,3 bar

Max. Temperature: 100 °C

Materials:
stainless steel 1.4571,
magnet: Ferrite

Electr. Connection: plug acc. to DIN EN 175301-803

Accuracy: ± 10 % FS