

All Metal Flow Switches

for Liquids



measuring

monitoring

analysing

Low switchpoint at high flow



- Max. flow range:

 1-100 L/min
 Switch point at approximately 1 L/min water falling flow rate
- pmax 350 bar tmax 100°C
- Connection: G1 female
- Material: Brass or stainless steel





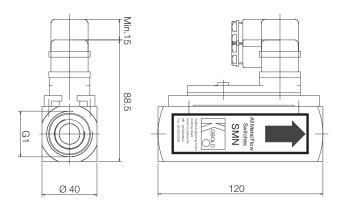
Description

The KOBOLD model SMN flow switch is used when extremely low flow switch points are required together with minimum pressure loss at high flow rates.

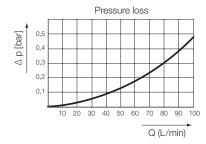
The flow switch operates on the well-known float principle. An orifice float with its integral circular magnet moves within a cylindrical flow tube in the direction of flow and against a spring.

The magnetic field of the float activates a reed contact which is mounted on the outside of the instrument in a sliding protective casing. The special construction of the float and flow tube means that only a low flow is required to raise the float and hence activate the reed contact. If the flow rate increases further and the float reaches the top of its travel an additional flow path opens allowing high flow rates without a significant increase in the pressure loss.

Dimensions (Model SMN with N/O contact)



Pressure loss



Technical Details

Housing: SMN-11..: Brass, Ms 58

SMN-12..: Stainless steel, 1.4301

Float: SMN-11..: Brass, Ms 58

SMN-12..: Stainless steel, 1.4301

Pin: SMN-11..: Brass, Ms 58

SMN-12..: Stainless steel, 1.4301

Spring: Stainless steel

Magnets: Ceramic

Max. temperature: 100 °C

Max. pressure: SMN-11..: 250 bar

SMN-12..: 350 bar

Installation position: horizontal or

vertical (upward direction) flow in direction of the arrow

Contact components: 1 bistable reed contact

N/O contact, Changeover contact

Electrical connection: Connector DIN 43 650 Electr. switching values: N/O contact (CSA)

max. 240 V_{AC} / 100 VA / 1.5 A Changeover contact (CSA) max. 240 V_{AC} / 60 VA / 1 A

N/O contact (UL)

max. 250 V_{AC} - 0.4 A /

200 V_{DC} - 0.25 A

max. 50 V_{DC} - 1 A

Changeover contact (UL) max. 250 V_{DC} - 0.136 A /

 $30 V_{DC} - 1 A$

Ex range: ATEX-Zone 1 as "simple operator"

Accuracy: $\pm 5\%$ f. s. Protection: IP 65

Applications

Water cycles

Cooling circuits

High pressure purifiers

Prevention of low water

Sanitary technology

levels

• Samilary technion

Confining fluid control

Pumps

Heating installations

Order Details (Example: SMN-1150 R R25)

Function	Brass version	St. steel version	Type of contact	Connection
Max. Flow: 100 L/min Fix Switch point at approx. 1 L/min with falling flow rate	SMN-1150H	SMN-1250H	R0 = 1 N/O contactU0 = 1 Changeover contactC0 = 1 N/O contact (UL)D0 = 1 Changeover c. (UL)	R25 = G 1 female N25 = 1 NPT female