



## All Metal Flow Switches for Liquids



measuring  
•  
monitoring  
•  
analysing

Low  
switchpoint  
at high flow



- Max. flow: 100 L/min  
switch point at  
approximately 1 L/min  
water falling flow rate
- $p_{max}$  350 bar  
 $t_{max}$  100°C
- Connection:  
G 1 female, 1 NPT female
- Material:  
brass or stainless steel



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**Model:**  
SMN



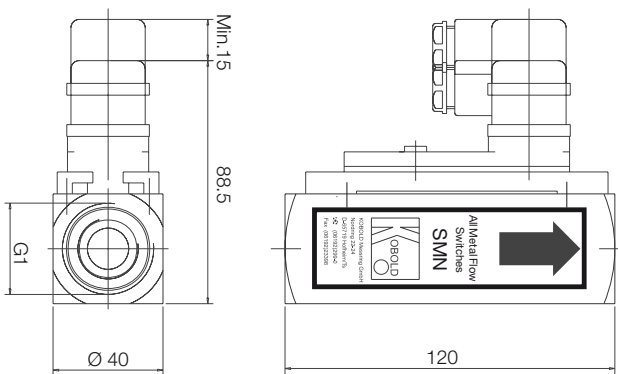
**Description**

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.

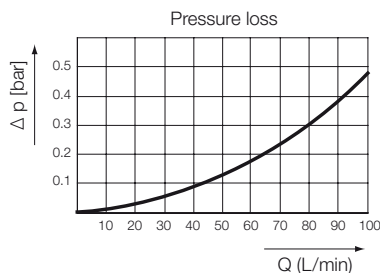
The flow switch operates on the well-known float principle. An orifice float with its integral circular magnet moves within a cylindrical flow tube in the direction of flow and against a spring.

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<sub>AC</sub> / 100 VA / 1.5 A  
changeover contact (CSA)  
max. 240 V<sub>AC</sub> / 60 VA / 1 A  
N/O contact (UL)  
max. 250 V<sub>AC</sub> - 0.4 A /  
200 V<sub>DC</sub> - 0.25 A  
max. 50 V<sub>DC</sub> - 1 A  
changeover contact (UL)  
max. 250 V<sub>DC</sub> - 0.136 A /  
30 V<sub>DC</sub> - 1 A
- Ex range: ATEX-Zone 1 as "simple operator"
- Accuracy: ±5% f. s.
- Protection: IP 65

**Applications**

- Water cycles
- Heating installations
- High pressure purifiers
- Cooling circuits
- Sanitary technology
- Prevention of low water levels
- Pumps
- Confining fluid control

**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 contact ..U0.. = 1 changeover contact ..C0.. = 1 N/O contact (UL) ..D0.. = 1 changeover c. (UL)	...R25 = G 1 female ...N25 = 1 NPT female