

# Flow switch for liquid media



## flow-captor 412x.8xM

The flow-captor 412x.8xM is ideally suited for use in automation processes or other industrial applications where liquid media must be controlled. The sensor operates according to the calorimetric measuring principle, fully electronic and without any mechanically moving parts. The flow-captor detects the flow velocity of the medium and converts it into an electrical signal.

- precise switching flow monitor with **relay output**
- operating voltage **90 - 250 VAC/DC**
- high switching accuracy even with slower flows
- separate adjustment of set-point and range
- display of flow and the adjusted switching point via LED chain
- LED for output status
- robust stainless steel design (special potting)
- **ISO 9001:2015**



Technical data		
Type	<b>4120.8xM</b>	<b>4121.8xM</b>
Medium	water-based	oil-based
Sensor data *1 *2		
Measuring range	0 - 20 cm/s to 0 - 300 cm/s, continuously adjustable	0 - 30 cm/s to 0 - 300 cm/s, continuously adjustable
Set-point range	approx. 15 % - 90 % of measuring range setting	
Medium temperature	- 20 °C to + 80 °C	
Ambient temperature	- 20 °C to + 70 °C	
Pressure	max. 100 bar (1000 Kpa)	
Response time	2 sec. - 10 sec., according to range setting	2 sec. - 15 sec., according to range setting
Linearity deviation	< 5 % <sup>1) 2)</sup> most favourable straight line related to the final value	
Repeatability	< 2 %	
Hysteresis	approx. 10 %	
Temperature drift	< 3 % per kelvin	
Mechanical data		
Protection class	IP67	
Material housing	stainless steel AISI 303	
Material of sensor probe	stainless steel AISI 303 (other material on request)	
Thread	G ½" BSP alt. ½" 14 - NPT	
Housing dimensions	see drawing next page	
Electrical connection	2 m oilflex cable 6 x 0.5 mm <sup>2</sup>	
Electrical data		
Operating voltage	90 – 250 VAC/DC	
Switching current	≤ 5 A, 120 VAC/ ≤ 3 A, 250 VAC/ ≤ 5 A, 150 W with VDC	
Initial operation	approx. 10 sec. after connection of power	
Electrical output	relay with potential free contact	
Flow < set-point	.80	.81
- LED, green	off	off
- Output relay	activated	not activated

<sup>1)</sup> data relate to water <sup>2)</sup> calibrated with insulation oil type "Shell Diala S4 ZX-I"

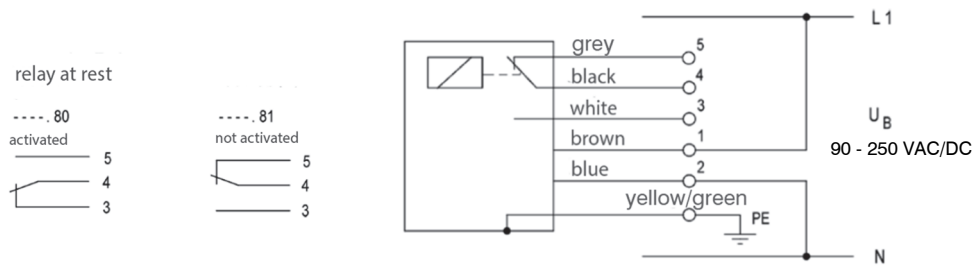


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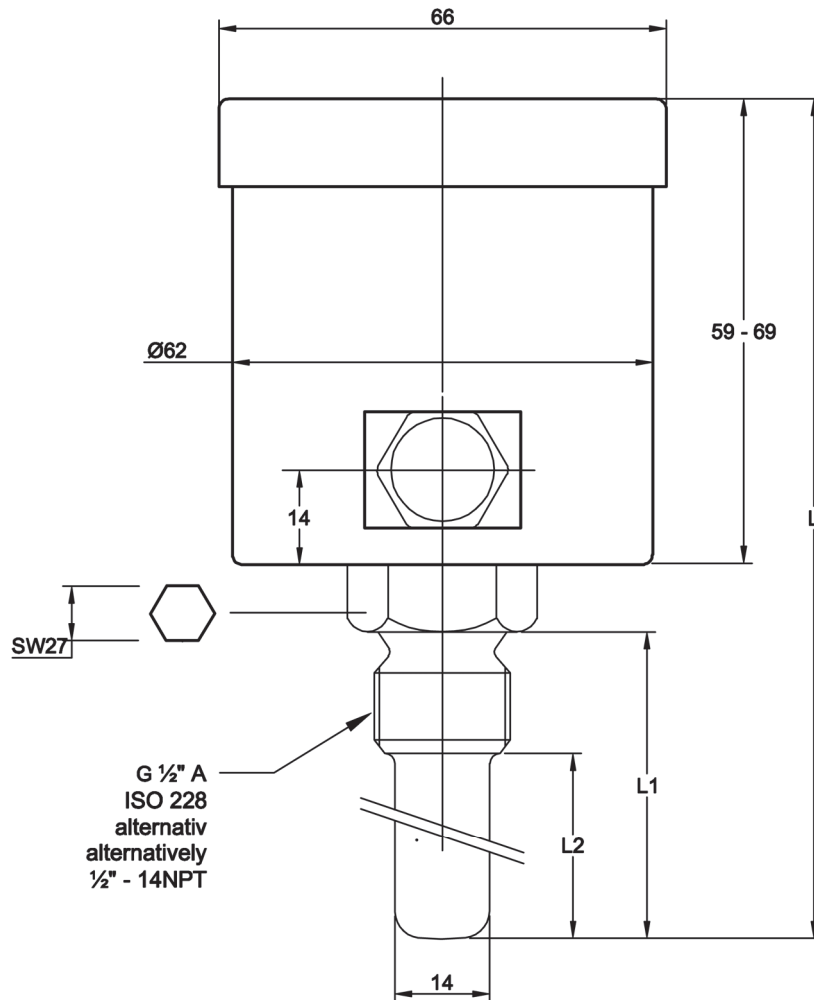
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### Connection diagram:



### Dimensions:



Typ/Type	L	L1	L2
Standard	109 / 119	30	12,5
S110/45	124 / 134	45	27,5
S110/67	146 / 156	67	49,5
S110/90	169 / 179	90	73,0

**weber**

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