Flow monitor for liquid media

flow-captor 4220 S102 + 4020.46

The **flow-captor** type 4220 S102 + 4020.46 is a family of compact, precise measurement flow switches with analog temperature output and analog display. They operate based on the calorimetric principle. The flow-captor allows to set an exact flow set-point and will display simultaneously the flow rate up to the lowest flow conditions. The 4020.46 has a separate, adjustable temperature output.

- precise switching flow monitor for water based solutions
- high accuracy also under low flow conditions
- separate adjustment for "range"and "set-point"
- analog display of actual flow and display of them adjusted set-point value
- LED display for output status
- separate, adjustable temperature output
- ISO 9001: 2015



Technical Data	
Туре	4220 S102 + 4020.46
Medium	water based solutions
Sensor Data	
Measuring range	0—20 cm/s to 0—300 cm/s, cont. adjust
Set-point range	approx. 15 %-90 % of measuring range setting
Medium temperature	-10 °C to +90 °C
Ambient temperature	-20 °C to +70 °C
Pressure	max. 100 bar
Response time	2 s - 10 s, according to range setting
Temperature drift	< 0,3 % K
Temperature output, adjustable	from -10 °C to +90 °C
Linearity deviation	< 5 %
Repeatability	< 2 %
Hysteresis	approx. 10 %
Mechanical Data	
Protection class	sensorhead IP67, electronic IP65
Material housing	Macrolon®
Sensor pipe	stainless steel WN1.4305 (AISI 303) alt. WN 1.4571 (AISI 313 Ti): A , other materials on request
Thread	G ½" BSP, alt. ½" - 14 NPT
Electrical connection	4220 S102: 2 m shielded cable with Binder-coupling/ 4026.46: 2 m oilflex cable 3 x 0,5 mm²
Electrical Data	
Operating voltage	24 VDC ± 10 %
Switching load	\leq 5 A, 120 VAC / \leq 3A, 250 VAC / \leq 5A, 150 W at VDC
Electrical output	2 relays with potential-free single pole double throw contact
Initial operation	approx. 10 s after connection of power
Flow < set-point	.46
- LED, green flow	off
- LED, red temp.	on
- Output relay	not activated





Connection diagram:



Temperature switch-point adjustment (sensor in contact with medium)

- 1. Turn temp.-potentiometer to the left Stopp. (LED red)
- 2. Turn temp.-potentiometer slowly clockwise until the LED switches to green (Switch point). For example: If the medium temperature is 20 °C the switch-point will be at 20 °C \pm 2,5 °C.