Metering flow switch for liquid media

Inline flow-captor 432x.1xM

The Inline **flow-captor** type 432x.1xM is a unique, compact, metering flow switch with adjustable set-point and analog display for industrial applications in stainless steel housing. The functionally is based on the calorimetric principle. The inline flow-captor allows to set an exact flow set-point and to measure simultaneously the flow rate up to the lowest flow conditions.

- Accurate switching flow monitor for water or oil-based solutions
- High accuracy also under low flow conditions
- Separate adjustment for "range"and "set-point"

- Analog display of actual flow rate and display of adjusted set-point value
- LED for output status

- **ISO 9001 : 2008**

Technical Data		
Typ	**4320.12/.13M**	**4321.12/.13M**
Medium	water based solution	oil-based solutions
Sensor Data (Inline Pipe)		
Measuring range	0-20 cm/s to 0-300 cm/s, cont. adjust [1]	0-30 cm/s to 0-300 cm/s, cont. adjust [2]
Flow rate at 300 cm/s	6x1: 2,25 l/min. 8x1: 5,1 l/min. 12x1: 14,1 l/min.	18x1,5: 31,8 l/min. 22x1,5: 51,0 l/m. 28x1,5: 88,4 l/min.
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	up to 30 bar	
Response time	2s - 10s, according to range setting	2s - 15s, according to range setting
Linearity deviation	< 5% [1]	< 5% [2]
Repeatability	< 2%	
Hysteresis	approx 10%	
Mechanical Data		
Protection class	IP 67	
Material housing	stainless steel WN 1.4404	
Sensor pipe	stainless steel WN 1.4571 (V4A), (Titanium, Hastelloy© C4 on request)	
Pipe dimensions (mm) (diameter x wall thickness/length)	6x1/200, 8x1/200, 12x1/200, 18x1,5/200, 22x1,5/200, 28x1,5/200	
Electrical connection	Plug M12x1, 4-pin	
Electrical Data		
Operating voltage	18 to 30 VDC, incl. residual ripple	
Switching current	≤ 400 mA	
Initial operation	approx. 10s after connection of power	
Electrical output	PNP n.c.[3] : 4320.12M PNP n.o.[4] : 4320.12M	PNP n.c.[3] : 4321.12M PNP n.o.[4] : 4321.12M

[1] all data applies to water   [2] calibrated with insulation oil type "Shell Diala" [3] switch open with flow [4] switch closed with flow

Connection diagram

weber

Technical data subject to alteration! · Rev. AG / 22.09.15