### flow switch for oil-based media

## flow-captor 4321.1xM/xx 10.5 - 36 VDC



The flow-captor type 432x.1xM/xx is a flow monitor which is used in automation processes or other industrial applications where liquid media need to be monitored. The 432x.1x-series offers inline models which have been specially designed for installation in smaller pipe diameters. The sensor works according to the calorimetric measuring principle. The detection takes place inside the inline tube, whereby the sensor measures the flow velocity of the medium and converts it into an electrical signal.

- for small pipe sizes from OD 6mm up to OD 28mm
- precise switching flow monitor with high accuracy even with low flows
- separate adjustment of flow range and switching point
- analogue flow display and indication of the adjusted set-point via LED chain.
- · fully electronic
- · no mechanically moved parts
- ISO 9001:2015



Technical data					
Type	4321.1xM/xx 10.5 - 36 VDC				
Medium	oil-based				
Sensor data					
Measuring range	0 - 30 cm/s to 0 - 300 cm/s, cont. adjustable $^{\star 1}$				
Flow volume at 300 cm/s	8 x 1 mm	12 x 1 mm	18 x 1,5 mm	22 x 1,5 mm	28 x 1,5 mm
	5,1 l/min	14,1 l/min	31,8 l/min	51 l/min	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	max. 30 bar (3000 kPa)				
Response time	2 sec. to 10 sec. (according to range setting)				
Linearity deviation	< 5 % * <sup>1</sup>				
Repeatability	< 2 %				
Hysteresis	ca. 10 %				
Temperature drift	< 0,3 % K				
Mechanical data					
Protection rate	IP67				
Housing material	stainless steel 316 Ti				
Sensor material	stainless steel 316Ti (other material on request)				
Pipe sizes OD x wall thickness	8 x 1 mm	12 x 1 mm	18 x 1,5 mm	22 x 1,5 mm	28 x 1,5 mm
Connection	4-pin M12-plug (cable type 4940 must be ordered separately)				
Dimensions of housing in mm	see drawing				
Electrical data					
Operating voltage	10.5 to 36 VDC, incl. residual ripple				
Current consumption	max. 150 mA (pulsed)				
Power consumption	approx. 1 W				
Switching current	≤ 400 mA				
Circuit protection	reverse polarity / short circuit / overload				
Voltage drop	< 2 V at max. load				
State of readiness	approx. 10 sec. after connection of power				
Electrical output	4321.12M/xx PNP n. c. (opener)				
Without flow:	4321.13M/xx PNP n. o. (closer)				

<sup>\*1</sup> calibrated with insulation oil type "Shell Diala S2 ZU-I Dried"

#### weber

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#### Connection diagram:



