

Flow switch for water-based media



flow-captor 4320.1xM/xx 10.5 - 36 VDC

The flow-captor type 4320.1xM/xx 10.5 - 36 VDC is a flow monitor which is used in automation processes or other industrial applications where liquid media need to be monitored. The 4320.1x-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 8mm up to OD 28mm
- fully electronic
- no mechanically moved parts
- separate adjustment of flow range and switching point
- analogue flow display and indication of the adjusted set-point via LED chain.
- precise switching flow monitor with high accuracy even with low flows
- **ISO 9001:2015**

Technical data					
Type	4320.1xM/xx 10.5 - 36 VDC				
Medium	water-based				
Sensor data					
Measuring range	0 - 20 cm/s to 0 - 300 cm/s, cont. adjustable *1				
Flow volume*1 at 300 cm/s related to tube inner diameter	8 x 1 mm 5,1 l/min	12 x 1 mm 14,1 l/min	18 x 1,5 mm 31,8 l/min	22 x 1,5 mm 51 l/min	28 x 1,5 mm 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. - 10 sec. (according to range setting)				
Linearity deviation	< 5 % *1				
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)				
Torsion between pipe and housing	≤ 10 Nm		≤ 80 °C		
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-coupling (cable type 4940 has to be ordered separately)				
Dimensions of housing	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	4320.12M/xx PNP n. c. (opener)				
Without flow:	4320.13M/xx PNP n. o. (closer)				

*1) all data refer to water

weber

Sensors GmbH Strohdeich 32
Sensors Ltd. 66 Eastbourne Road, Southport
Sensors LLC. 4462 Bretton Court, Building 1, Suite 7

DE-25377 Kollmar
Merseyside PR8 4DU, UK
Acworth, Georgia 30101, USA

Tel.: +49 (0)4128 - 591 · Fax: - 593
Tel.: +44 (1704) - 551684 · Fax: - 551297
Tel.: +1 (770) 592 - 6630 · Fax: - 592 6640

www.captor.de
info@captor.de
sales@captor.co.uk
sales@captor.com

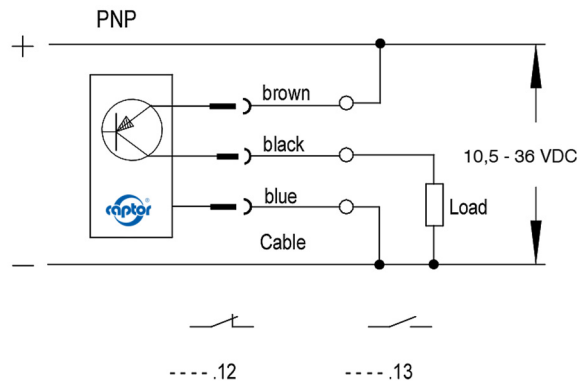
Technical data subject to alteration! Rev. AC 07.11.18

Flow switch for water-based media

flow-captor 4320.1xM/xx 10.5 - 36 VDC

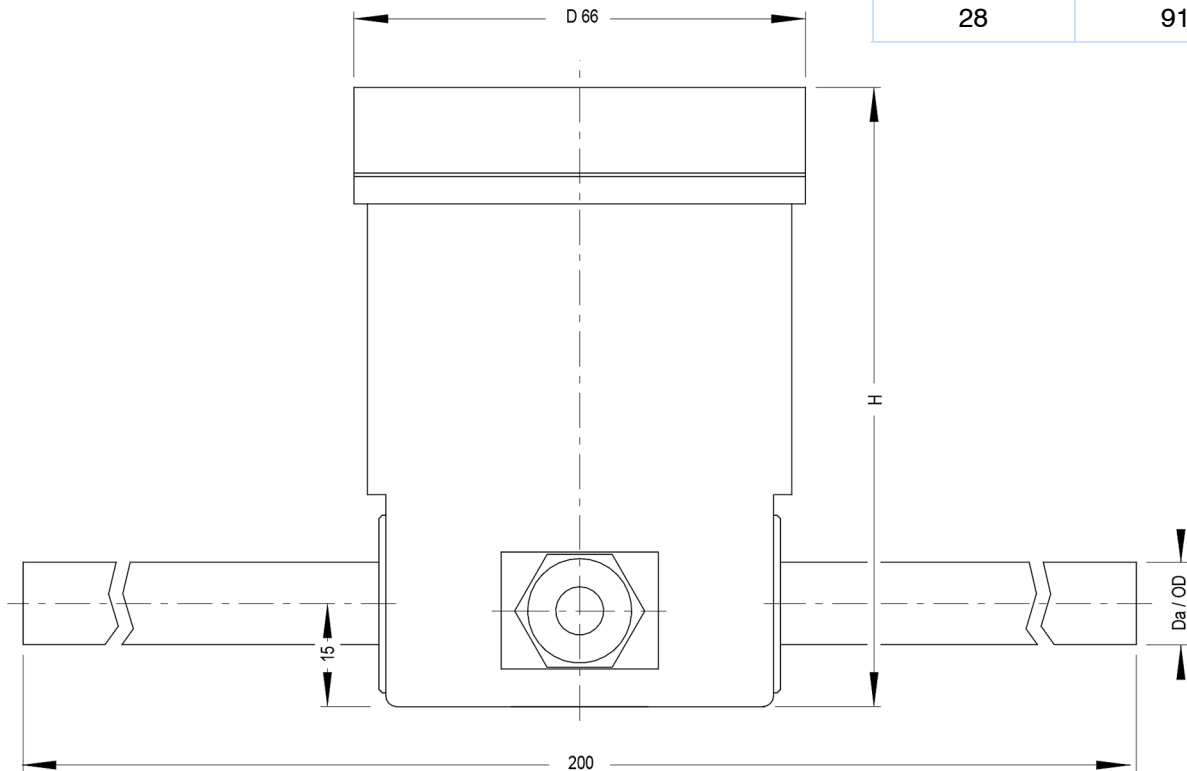


Connection diagram



Gehäuseabmessungen Dimensions

Da/OD	H
8, 12, 18, 22	69
28	91



weber

Sensors GmbH Strohdeich 32
Sensors Ltd. 66 Eastbourne Road, Southport
Sensors LLC. 4462 Bretton Court, Building 1, Suite 7

DE-25377 Kollmar
Merseyside PR8 4DU, UK
Acworth, Georgia 30101, USA

Tel.: +49 (0)4128 - 591 · Fax: - 593

Tel.: +44 (1704) - 551684 · Fax: - 551297

Tel.: +1 (770) 592 - 6630 · Fax: - 592 6640

www.captor.de

info@captor.de

sales@captor.co.uk

sales@captor.com

Technical data subject to alteration! Rev. AC 07.11.18