

# Flow switch for gaseous media



## vent-captor 3302.1x/xx

The vent-captor type 3302.1x/xx is ideally suited for use in automation processes or other industrial applications where gaseous media must be monitored. The 3302.1x/xx is an "inline model" specially designed for installation in operating systems with small pipe diameters. The sensor operates according to the calorimetric measuring principle. Detection takes place in the inline tube whereby the sensor reads the flow velocity of the medium and converts it into an electrical signal.



- for small pipe diameters from  $\varnothing 8$  to  $\varnothing 28$
- high switching accuracy and reproducibility
- temperature compensated
- electronic function without mechanically moved parts
- robust industrial design (special potting)
- **ISO 9001:2015**

Technical data		
Type	<b>3302.1x/xx</b>	
Medium	gaseous <sup>1</sup>	
Sensor data *1		
Outer diameter in mm	$\varnothing 8$	$\varnothing 12 - 28$
Measuring range	1.5 - 20 m/s	0.5 - 20 m/s
Set-point adjustment	stepless over the entire measuring range	
Switching hysteresis	< 20 %	
Switching delay	approx. 2 sec. when flow exceeds or falls below the set-point by more than 2 m/s.	
Repeatability tolerance	< 3 %	
Medium temperature	-20 °C bis +70 °C	
Ambient temperature	-20 °C bis +70 °C	
Pressure	10 bar	
Temperature drift	< 0.3 % pro Kelvin	
Mechanical data		
Protection class	IP65	
Material sensor pipe	stainless steel AISI 316	
Pipe diameters (OD x wall thickness) in mm	8 x 1 / 12 x 1 / 18 x 1.5 / 22 x 1.5 / 28 x 1.5	
Torsion pipe against housing	no torsion allowed	
Material sensor probe	ceramic, platinum with overglaze	
Material housing	Makrolon®	
Electrical connection	2 m oilflex cabel / 3 x 0.5 mm <sup>2</sup>	
Body dimensions	see next page	
Electrical data		
Electrical output	<b>.12</b>	<b>.13</b>
Switching condition with flow > switching point	currentless, not switched	energized, switched
LED	red	green
Switching condition with flow < switching point	energized, switched	currentless, not switched
LED	green	red
Supply voltage	24 VDC (18 to 30 VDC incl. residual ripple)	
Power consumption	approx. 800 mW to 2.4 W	
Switching current	0 - 400 mA	
Circuit protection	reverse polarity	
Output protection	short circuit and overload, pulsing	
Operational readiness	after approx. 10 sec.	
Set-point adjustment	18 turn potentiometer	

\*1 all data related to air at atmospheric pressure

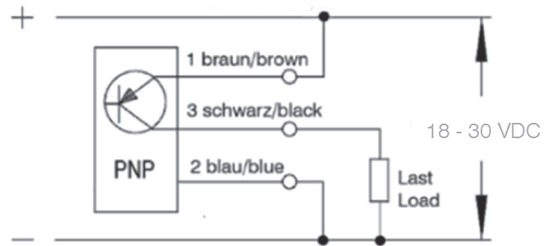


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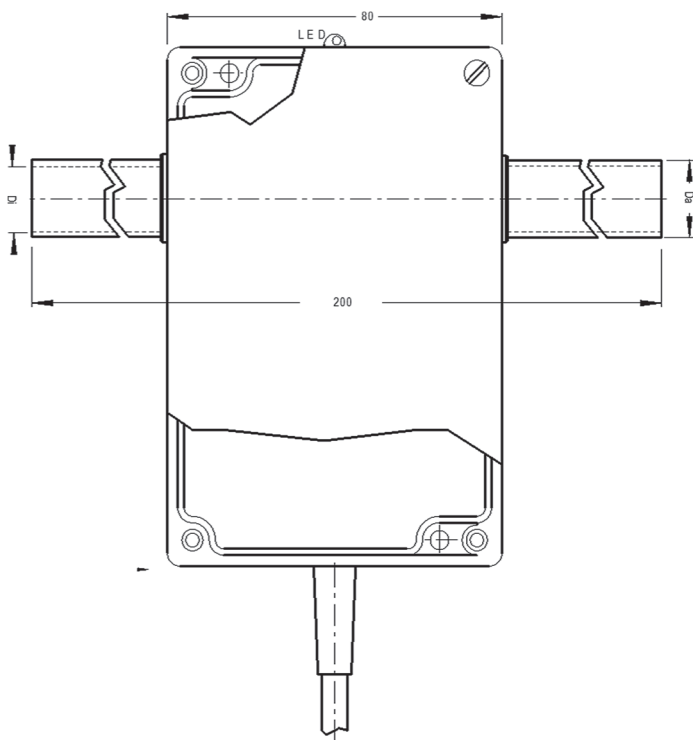
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Connection diagram:



Dimensions:

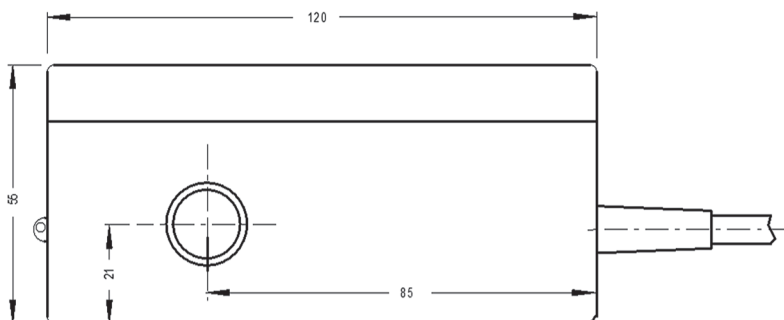


### Note

Please specify pipe diameter with order.

OD x wall thickness	8 x 1
	12 x 1
	18 x 1,5
	22 x 1,5
	28 x 1,5

Matl. of pipe: stainless steel AISI 316



Output	Type	OD	ID
Switch	3302.12	8	6
		12	10
		18	15
		22	19
		28	25
	3302.13	8	6
		12	10
		18	15
		22	19
		28	25
Analog	3302.3x	8	6
		12	10
		16	15
		22	19
		28	25
Frequency	3302.21	8	6
		12	10
		18	15
		22	19
		28	25

