

Flow switch for TRI-CLAMP® System



flow-captor 4120.1xA S114/xx S110/xx

The flow-captor type 4120.1xA S114/xx S110/xx is ideally suited for use in automation processes in the food industry where liquid media must be monitored. The sensor was specially designed for TRI-CLAMP connections. The sensor operates according to the calorimetric measuring principle, fully electronically and without mechanically moved parts. The flow-captor detects the flow velocity of the medium and converts it into an electrical signal.



- precise switching flow monitor
- high switching accuracy even with lower flows
- separate setting for set-point and range
- display of flow condition and adjusted switch point via LED chain
- LED for output status
- robust industrial version (special potting)
- **ISO 9001:2015**

Technical data

Type	4120.1xA S114/xx S110/xx
Medium	water-based

Sensor data

Measuring range	0 - 20 cm/s to 0 - 300 cm/s, continuously adjustable ¹⁾
Medium temperature	-20 °C to +130 °C / -4 °F to +266 °F
Ambient temperature	-20 °C to +70 °C / -4 °F to +158 °F
Set-point range	approx. 15 % - 90 % of range setting
Pressure	up to 100 bar
Response time	2 sec. - 10 sec., according to range setting
Linearity deviation	< 5 % ¹⁾
Repeatability	< 2 %
Hysteresis	approx. 10 %
Temperature drift	< 0.3 % / K

Mechanical data

Protection class	IP65
Material housing	PBTP, glass fibre reinforced (Ultradur®)
Material sensor head	stainless steel AISI 316
Flange diameter	D50.5 mm / D64.0 mm
Cable connection	integrated plug assembly with PG9 fitting, 2 m oilflex cable 3 x 0.5 mm ²

Electrical data (Electronic unit)

Operating voltage	18 to 30 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 and overload
Voltage drop	< 2.5 V at max. load
Initial operation	approx. 10 sec. after connection of power

Electrical output

	.12	.13
Switching condition with flow < switching point	energized, switched	currentless, not switched
LED	off	off
Switching condition with flow > switching point	currentless, not switched	energized, switched
LED	green	green

¹⁾ related to water

weber

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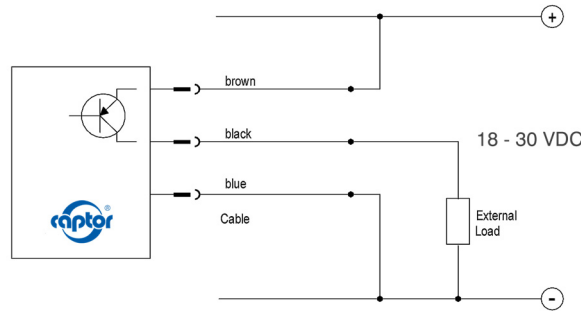
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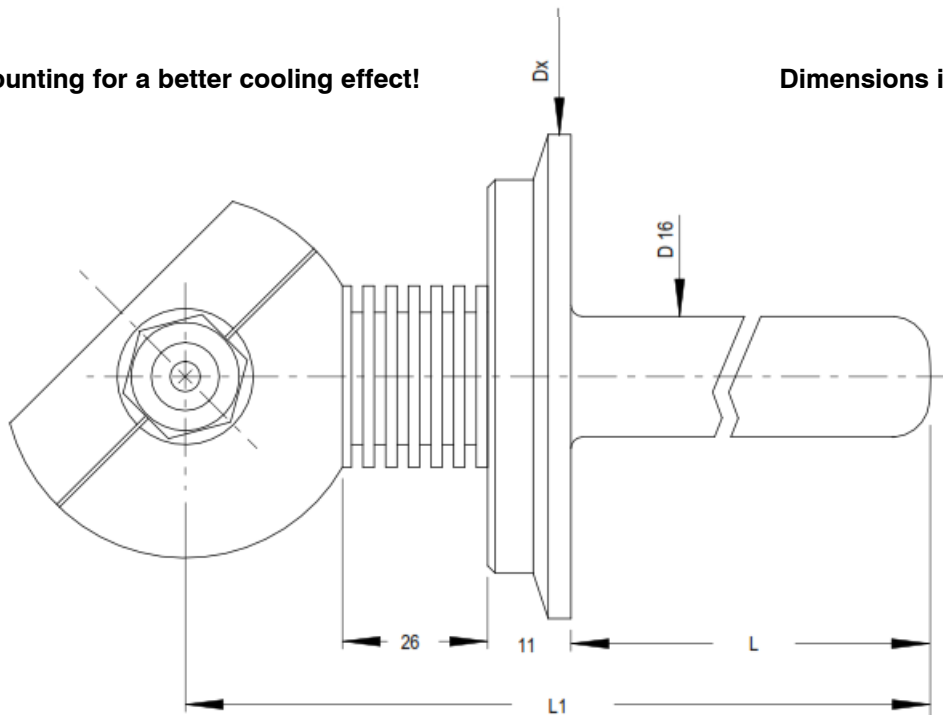
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Connection diagram:



Horizontal mounting for a better cooling effect!

Dimensions in mm



Please note that the ratio of the ambient temperature to the medium temperature is maintained!

	S114/xx	S110/xx	
part - no.	Dx	L	L1
07031252	50.5	47.5	110.5
07031255	50.5	67.0	130.0
07031254	64.0	47.5	110.5

max. ambient temp.	max. medium temp.
30 °C	130 °C
40 °C	120 °C
50 °C	110 °C
60 °C	100 °C
70 °C	90 °C
min. ambient temp.	min. medium temp.
- 20 °C	- 20 °C

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