# weber flow-captor





Operating Pressure now up to 100 bar (1.500 psi)



35 Vantage Point Drive Rochester, NY 14624 Call 1.800.800.5001

## flow-captor Type 4120.1- & 4121.1-

The flow-captor 4120.1- and 4121.1- is a family of compact industrial metering flow switches with adjustable set-point and analog display.

Their functionality is based on the calorimetric principle. The flowcaptor allows the user to set an exact flow set-point and to measure simultaniously the flow speed.

- Accurate switching flow monitor for water- or oil based solutions up to 100 bar.
- High accuracy even under low flow conditions.
- Separate adjustments for RANGE and SET-POINT.
- Analog display of actual flow and display of adjusted set-point.
- LED for output status.
- ISO 9000 certified manufacturing.
- CE approval.

#### Adjustments / Display

Measuring range adjustment	RANGE potentiometer
Measuring range display	9 LED display
Set-point adjustment	SET-POINT potentiometer
Set-point display	blinking LED
Switch output display	GREEN LED (on with flow)

#### Models

flow-captor 4020.1-	for water based solutions
flow-captor 4021.1-	for oil based solution

Metering flow switch for waterand oil-based medium with outstanding accuracy even at low flow conditions.



### flow-captor

Type 4120.1-, 4121.1metering flow switch

#### **Typical Application** Examples:

The flow-captor 412-./1- can be applied in all areas of industries, where exact flow set-points are required, e.g. in systems where a signal is required at a slight deviation of the flow rate above or below the nominal value.

The flow-captor can optimize existing processes in a wide variety of industrial applications.

#### **Technical Data**

Туре	4120.12/.13	4121.12/.13
Medium	water-based solutions	oil-based solutions

#### Sensor Data

Measuring Range	0 - 20 cm/s to 0 - 300 cm/s cont. adjust <sup>1)</sup>	0 - 30 cm/s to 0 - 300 cm/s cont. adjust <sup>2)</sup>		
Set-point range	approx. 15% - 90% of measuring range setting			
Medium temperature	- 20 °C to +80 °C (- 4 °F to +176 °F)			
Pressure	up to max. 100 bar (1,500 psi)			
Response time	2 s to 10 s, acc. to range setting	2 s to 15 s, acc. to range setting		
Accuracy	< 3 % <sup>1)</sup>	< 3 % 2)		
Repeatability	< 1 %			
Hysteresis	approx. 10 %			

#### **Mechanical Data**

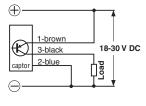
Protection class	IP 65		
Housing material	PBTP, glassfibre reinforced (Ultradur®)		
Sensor head	stainless steel WN1,4305 (V2A, 303 Ti)		
	WN1.4571(V4A, 316 Ti), Titanium, Hastelloy C4 <sup>®</sup> on request		
Thread	1/2" BSP or 1/2"-14 NPT		
Connection	integrated plug assembly with PG9 fitting, 2 m oilflex cable 3 x 0.5 mm <sup>2</sup> also available with M12, 4-pin industrial connector (option)		

#### **Electrical Data (Electronic housing)**

Operating voltage	18 to 30 V DC, incl. residual ripple				
Switching current	400 mA				
Ambient temperature	- 20 °C to +70 °C (-4 °F to +158 °F)				
Initial operation	approx. 10 s after connection of power				
Electrical output	PNP n.c. <sup>3)</sup> : 4120.12		PNP	n.c. <sup>3)</sup> : 4121.12	
	PNP n.o. <sup>4)</sup> : 4120.13		PNP	n.o. <sup>4)</sup> : 4121.13	
Notes: 1) data applies to water	2) depends on oil solution type	3) switch open v	vith flow <sup>4)</sup> swit	ch closed with flow	

#### **Connection Diagram:**

#### **PNP-transistor output**









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