

# Flow monitor for liquid media

## flow-captor 412x.4xM S140



The flow-captor type 412x.4xM S140 is used in automation processes and other industrial applications where liquid media must be monitored. The sensor works according to the calorimetric measuring principle and without mechanically moved parts. The flow-captor detects the flow velocity of the medium and converts it into an electrical signal.

- robust metal construction (M)
- plug design for Brad-Harrison coupling (S140)
- separate setting of "Range" and "Set-point"
- pressure resistant up to max. 100 bar
- analogue display of flow condition and switching point via LED chain
- **ISO 9001:2015**



Technical data		
Type	4120.4xM S140	4121.4xM S140
Medium	water-based	oil-based
Sensor data *1		
Measuring range	0 - 20 cm/s to 0 - 300 cm/s, cont. adjust	0 - 30 cm/s to 0 - 300 cm/s, cont. adjust
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. 100 bar (1000 Kpa)	
Response time	2 sec. - 10 sec., according to range setting	2 sec. -15 sec., according to range setting
Linearity deviation	< 5 % <sup>1)</sup>	< 5 % <sup>2)</sup>
Repeatability	< 2 %	
Hysteresis	approx. 10 %	
Mechanical data		
Protection class	IP67	
Material housing	stainless steel AISI 303	
Material of sensor probe	stainless steel AISI 303; (A: AISI 316Ti; B: Titanium; C: Hastelloy® C4; or D: Hastelloy® C22 on request)	
Thread	G 1/2" BSP alt. 1/2" 14 - NPT	
Housing dimensions ODxH	see drawing	
Electrical connection	Brad-Harrison male socket, 5-pin (order cable type 4930E separately)	
Electrical data		
Operating voltage	18 - 30 VDC	
Power consumption	-	
Switching current	max. 5 A (120 VAC) / max. ≤ 3 A (250 VAC) / max. 5 A (150 W at VDC)	
Initial operation	approx. 10 sec. after connection of power	
Electrical output	relay with potential free contact	
Flow < set-point	.40	.41
- LED, green	off	off
- Output relay	activated	not activated

<sup>1)</sup> data relate to water <sup>2)</sup> calibrated with insulation oil type "Shell Diala"

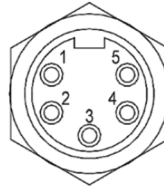
# Flow monitor for liquid media

## flow-captor 412x.4xM S140

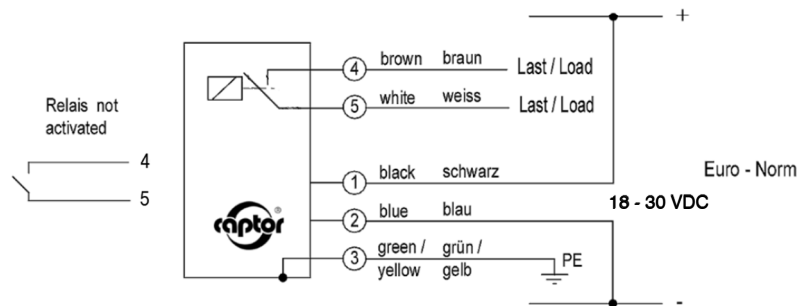


### Connection diagram

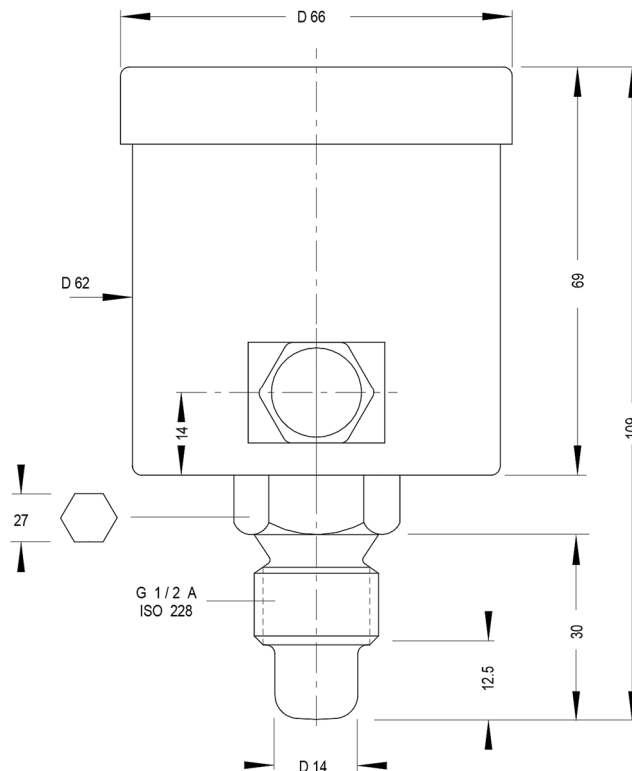
5 pin BRAD HARRISON



Face view of male Stecker - Vorderansicht



### Abmessungen / Dimensions



**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. AK 27.02.18