Flow monitor for liquid media

flow-captor 412x.8xMK S140

The flow-captor type 412x.8xMK 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)
- high temperature version with heat sink (K)
- plug design with Brad-Harrison coupling
- separate setting of range and set-point
- pressure resistant up to max. 100 bar
- display of flow condition and switching point via LED chain
- **ISO 9001:2015**

Technical data		
Type	**4120.8xMK S140**	**4121.8xMK S140**
Medium	water-based	oil-based
Sensor data		
Measuring range	0 - 20 cm/s to 0 - 300 cm/s, cont. adjust [1]	0 - 30 cm/s to 0 - 300 cm/s, cont. adjust [2]
Set-point range	approx. 15 % - 90 % of measuring range setting	
Medium temperature	-20 °C - +130 °C / -4 °F - +266 °F	
Ambient temperature	-20 °C - +70 °C / -4 °F - +158 °F	
Pressure	max. 100 bar / 1450 psi	
Response time	2 sec. - 10 sec., according to range setting	2 sec. - 15 sec., according to range setting
Linearity deviation	< 5 % [1] [2]	
Repeatability	< 2 %	
Hysteresis	approx. 10 %	
Mechanical data		
Protection class	IP 67	
Material housing	stainless steel AISI 303	
Material sensor head	stainless steel AISI 303 (other material on request)	
Thread	G ½ " BSP, or ½ " - 14 NPT	
Housing dimensions	see drawing on page 2	
Electrical connection	5-pin Brad-Harrison male socket (2 m cable type 4930E must be ordered separately)	
Electrical data		
Operating voltage	90 - 250 VAC	
Power consumption	max. 150 mA (pulsed)	
Switching current / contact load	≤ 5 A (120 VAC), ≤ 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	.80	.81
- LED green - Output relay	Off activated	Off not activated

[1] data relate to water [2] calibrated with " Shell Diala"

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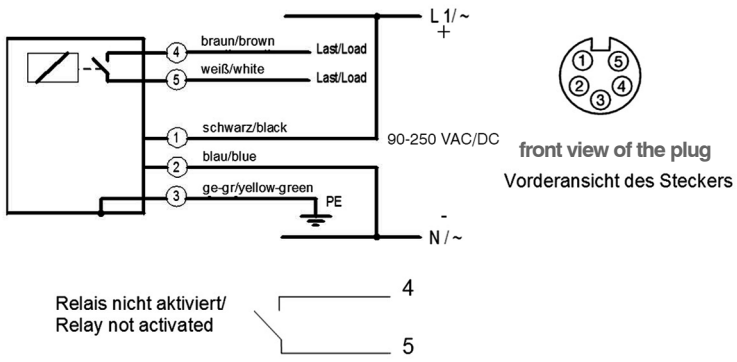
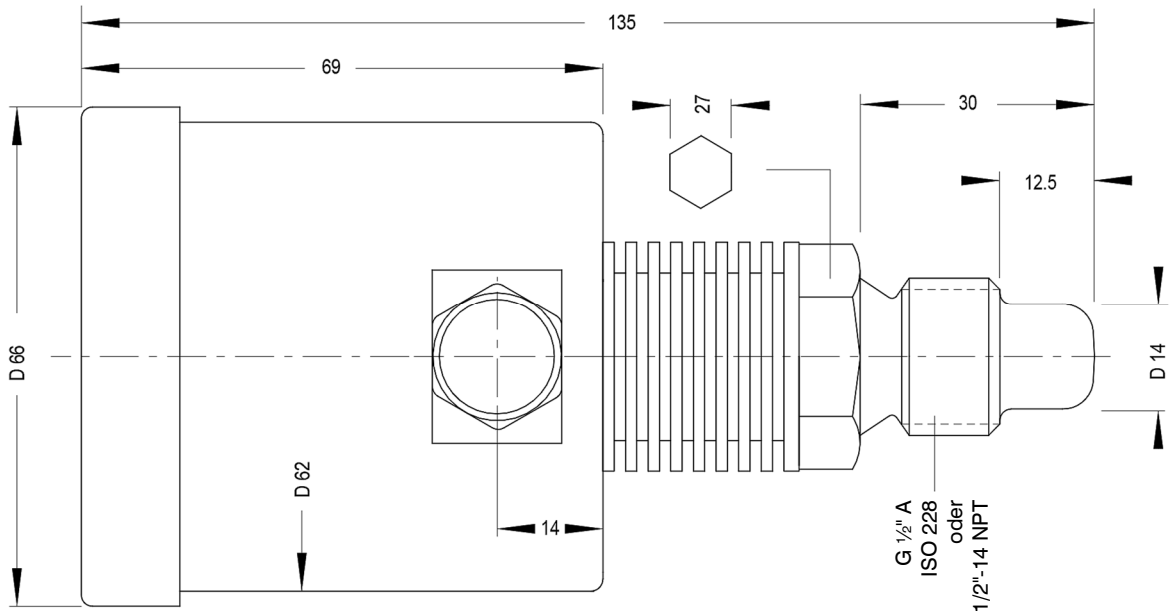
Relation between ambient temperature and medium temperature			
temperature max			
ambient		medium	
°C	°F	°C	°F
30	86	130	266
40	104	120	248
50	122	110	230
60	140	100	212
70	158	90	194
temperature min			
-20	- 4	-20	- 4
-10	14	-30	- 22

Anschlussdiagramm
Connection diagram



Abmessungen
Dimensions



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