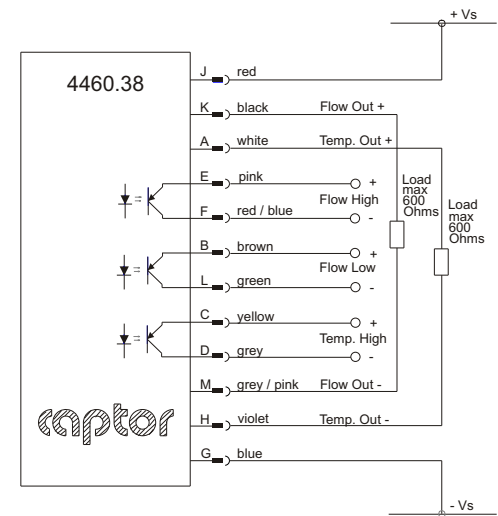


weber

flow-captor



Wiring diagram



Programmable flow-captor Type 4460.38

Inline flow and temperature meter for liquid media, applicable as a two- or three-point controller. The flow range of the flow-captor can be programmed by the user in simple steps through the 3-button operator interface. The table below shows the easily programmable displays and outputs available

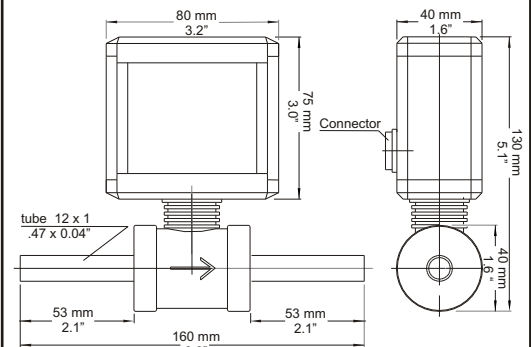
Signal	Display	Analog output	Switching output
flow	nom. 0-15 l/m nom. 0 to 3.9 GPM	4-20 mA	min./max. limit value
temperature	-20 to +100 °C -4 to +212 °F	4-20 mA	max. limit value

Accessories

Art.-No.	Type	Description
M51901	BS12GK **	Connection cable 12 x 0.25, 2m, w/coupling, straight
M51902	BS12WK*	Connection cable 12 x 0.25, 2m, w/coupling, angle
M51905	BS12GK KK*	Connection cable 12 x 0.25, 2m, w/coupling, straight and connection box
M51906	BS12WK KK*	Connection cable 12 x 0.25, 2m, w/coupling, angle and connection box
M51911	***	Connection cable 12 x 0.25, 2m, w/coupling, and connection box with DC/DC converter, 18 - 36 VDC Input
	12K	Connection cable 12 x 0.25, extension per meter
M24012	ER G12-LL	Ermeto 12/12, straight coupling
	ER AS12-PL	Ermeto 12, weld-on coupling
	ER *	Ermeto, straight reducer
	ER *	Ermeto, straight extender
	ER *	Ermeto, straight female stud fitting
	ER *	Ermeto, straight male fitting

* Accessories upon request resp. detailed specification ** Item supplied with the unit
*** Available with straight or angled coupling

Dimensions



Electrical Data

Supply voltage	24 VDC
Switching output	Optocoupler, potential free, max. 30 V / 200 mA
Ambient temperature	-20 °C up to +60 °C -4 °F to 140 °F
Medium temperature	-20 °C up to +80 °C -4 °F to 176 °F



Programmable flow-captor

Type 4460.38

Technical Data

Type	4460.38
Medium	all flowing media

Sensor Data

Flow rate measurement range	0 - 1.5 l/m to 0 - 15.0 l/m (l/m = liters/minute) 0 - 0.40 GPM to 0 - 4.00 GPM (GPM = gallons/minute)
Medium correction factor	programmable from 0.60 to 0.10 (thermal conductivity in W/m K)
Accuracy	< 3 % *
Repeatability	< 1 % *
Temperature drift	0.2 % / K *
Limit value Flow Low F_L	programmable within the full measurement range
Limit value Flow High F_H	programmable within the full measurement range
Hysteresis	approx. 5%

* Data applies to the medium water

Temp. measurement range	-20 °C to +100 °C	-4 °F to +212 °F
Linearity deviation**	20 °C to 60 °C: ± 1K 68 °F to 140 °F: ± 1K	<20 °C / > 60 °C : ± 3K < 68°F/ > 140 °F: ± 3K
Repeatability	1%	
Limit value Temp. High T_H	programmable within the full measurement range	
Hysteresis	approx. 2 %	

**accuracy at > 2.5 l/m / 0.6 GPM flow rate

Programming and Display Elements

Programming step display	7-segment display		
PS			
Display for function value	3 digit 7-segment display		
Value FLOW	1 LED for l/min (l/m) + 1 LED for GPM (g/m)		
Value TEMP.	1 LED for °C + 1 LED for °F		
Limit value	1 LED for F_L	1 LED for F_H	1 LED for T_H
Limit value display	LED on: FLOW < F_L	LED on: FLOW > F_H	LED on: TEMP. > T_H
F / T - button	change over for FLOW / TEMP. - display		
PS - button	programming steps		
S+ and S- -button	adjustment of the setting values + or -		

Mechanical Data

Protection standard	IP 65	
Electronic housing	aluminum , plastic enamelled	
Sensor housing	stainless steel WN 1.4571 (316 Ti)	
Sensor pipe	12x1 mm (OD X wall thickness), 160 mm (length)	
Connection	12 pin plug connection, Binder + 12 wire conn. cable , 2 m with coupling	
Mass	unit 800g, cable 250g	unit 1.8 lbs, cable 0.5 lbs
	(accessories: cable with clamp housing)	

Electrical Data

Supply voltage	24 VDC	
Supply current	400 mA peak	
Power consumption	approx. 6 W	
Circuit protection	reverse polarity, short-circuit and overload, manual re-start after overload condition	
Ambient temperature	- 20 °C to + 60 °C	-4 °F to +140 °F
Initial operation	2 s	
Analog outputs	FLOW	TEMP.
Current output	4-20 mA = prog. measurement range	4-20 mA = measurement range
Resistive load	0 - 600 Ohms	0 - 600 Ohms
Electrical outputs	F_L : n.c.	F_H : n.o. T_H : n.o.
Output load	Optocoupler with potential free output, max. 30 VDC / 200 mA	

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