DE/EN Kurzbetriebsanleitung/Quick Start Guide

Inline-Durchflussmesser FCMI-3/4D12DYA4P-LIUP8X-H1141 | Inline Flow Meter FCMI-3/4D12DYA4P-LIUP8X-H1141

Programming

Step			
Start of the programming	The programming is started by pushing buttons (S1/-) and (mA/+) together for 3 s. The display starts to flash. The flow monitoring is still activated. Use the M-button for selecting the desired function.		
	Cod	0 … 255	Enter access code Factory setting: 0
1	SP	1.0…20.0 or 3.7…75.7	Switch point [gpm] or [l/min]
2	hS	0.1…2.0 or 0.2…7.5	Hysteresis of Switch point [gpm] or [l/min]
3	OU	nO / nC	Output [normally open/normally close]
4	dS	0.0…50.0	Switch-on time delay setpoint [s]
5	dr	0.0…50.0	Switch-off time delay setpoint [s]
6	nF	0 / 1 / 2 / 4 / 8	Averaging time [s]
7	A4	0.0…15.0 or 0.0…56.8	MIN-value in [gpm] or [l/min] for 4 mA
8	A20	5.0…20.0 or 18.9…75.7	MAX-value in [gpm] or [l/min] for 20 mA
9	Cod	0…255	Change access code
Finish the programming	To finish the programming push the button (M) for approximate 3 s. The display stops flashing and the current flow rate is shown on the display.		

Display/Measuring Mode

Step			
	The flow sensor is in the measuring/display mode. Use the M-button for selecting the desired parameter. The parameters can't be changed in this mode.		
1	SP	1.0…20.0 or 3.7…75.7	Switch point [gpm] or [l/min]
2	hS	0.1…2.0 or 0.2…7.5	Hysteresis of Switch point [gpm] or [l/min]
3	OU	nO / nC	Output [normally open/normally close]
4	dS	0.0…50.0	Switch-on time delay setpoint [s]
5	dr	0.0…50.0	Switch-off time delay setpoint [s]
6	nF	0 / 1 / 2 / 4 / 8	Averaging time [s]
7	A4	0.0…15.0 or 0.0…56.8	MIN-value in [gpm] or [l/min] for 4 mA
8	A20	5.0…20.0 or 18.9…75.7	MAX-value in [gpm] or [l/min] for 20 mA

Selection of the unit and supply frequency

Step	Press buttons (M) **and** (mA/+) and connect the unit to the power supply.		
1	Cod	0 … 255	Enter access code and confirm with (M)-button
2	GAL or Lit		The unit of the flow rate appears in the display, Change unit by pressing button (mA/+) and confirm with (M)-button
3	50 or 60		The value of the frequency (in Hz) appears in the display, Change frequency by pressing button (mA/+) and confirm with (M)-button
4	Setup - procedure		

Each time after changing the unit the following parameters are set to default values:

Parameter	[gpm]	[l/min]
SP	5.0	5.0
hS	0.2	0.5
A4	0.0	0.0
A20	20.0	75.7

Reset

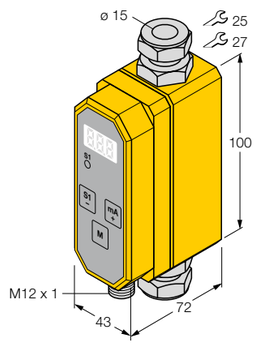
Step	Press button (M) and connect the unit to the power supply.		
1	rES		Appears in the display
2	Cod	0 … 255	Enter access code and confirm with (M)-button
3	rES		
4	Setup - procedure		

After achieving the RESET-function all parameters are set to default values:

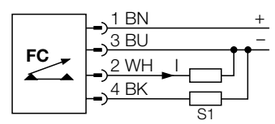
Unit	GAL
Supply frequency	60
Parameter	[gpm]
Cod	0
SP	5.0
hS	0.2
OU	nO
dS	0.0
dr	0.0
nF	8
A4	0.0
A20	20.0

FCMI-3/4D12DYA4P-LIUP8X-H1141

Geräteübersicht/Device Overview



Anschlussbild/Wiring Diagram



Technische Daten/Technical Data

Technical Data	
Versorgungsspannung/Supply Voltage	24 VDC ± 10 % (1BN: + / 3BU: -)
Stromaufnahme/Current consumption	100 mA
Umgebungstemperatur/Ambient temperature	32 °F…140 °F / 0…60 °C
Ausgang Schaltpunkt/Output switch point	PNP (4BK)
Ausgang Analog/Output analogue	4…20 mA (2WH)
Schaltstrom/Switching current	max. 0.2 A
Last/Load	200…500 Ω
Mediumtemperatur/Medium temperature	41 °F…140 °F / 5…60 °C
Erfassungsbereich/Detection range (für leitfähige Medien/for conductive media ≥ 20 µS/cm für Wasser/for water ≥ 35 µS/cm)	(-4.9) 0…20.0 gpm (-9.9) 0…75.7 l/min
Messwertabweichung*/Measuring tolerance* 0.0 … 2.0 gpm / 0.0 … 7.6 l/min 2.1 … 20.0 gpm / 7.7 … 75.7 l/min	 ≤ ± 0.1 gpm / 0.37 l/min ≤ ± 2 % of measuring value
Einstellbereich Schaltpunkt/Adjustment range SP1	1.0…20.0 gpm / 3.7…75.7 l/min
Hysterese Schaltpunkt/Hysteresis switch point SP1	0.1…2.0 gpm / 0.4…7.5 l/min
Einschaltverzögerung/Switch-on delay	0…50 s
Ausschaltverzögerung/Switch-off delay	0…50 s
Reaktionszeit/Response time	0.5…8 s
Material Sensor/Sensor material	PVDF / 1.4571
Material Gehäuse/Housing material	PBT
Schutzart/Protection class	IP 65
Druckfestigkeit/Pressure resistance	10 bar
Zugangscode (Werkseinstellung)/ Access code (factory setting)	0

* Ambient temperature 20…30 °C, Medium temperature 20 °C, electr. conductivity 300…500 µS/cm

Hans Turck GmbH & Co. KG | 45472 Muelheim an der Ruhr | Germany | Witzlebenstraße 7 | Tel. +49 208 4952-0 | Fax +49 208 4952-264 | more@turck.com | www.turck.com