

# Ultrasonic Flowmeter

Flowmax<sup>®</sup> 400i



Flowmax 400i is a flow meter calculating the volume flow of liquids. Based on the ultrasonic technology Flowmax is able to measure conductive and non-conductive liquids contactfree. Flowmax has no moving parts and is absolutely free of wear. The design of the pipe minimizes dead space over the whole geometry.

All parts having contact to the medium are PFA (New Teflon). Thanks to its technical properties Flowmax is able to measure all kinds of liquids like: DI-Water, Body care liquids, Cosmetics, liquid food, and also aggressive and/or toxic acids and alkalis. Flowmax is characterized by its high measurement accuracy and repeatability. Empty pipe detection is integrated. Optionally Flowmax have a PID controller function. The calculated flow is provided with a response rate of a few milliseconds on the outputs.

Flowmax has by default a preset quantity counter. The start signal can optionally be fed from the outside. A control signal for activation of the pump or valve control is also standard.

Flowmax 400i is very good for operation with piston diaphragm and peristaltic pumps.

SI 005E/FM400i/04.17

## Housing

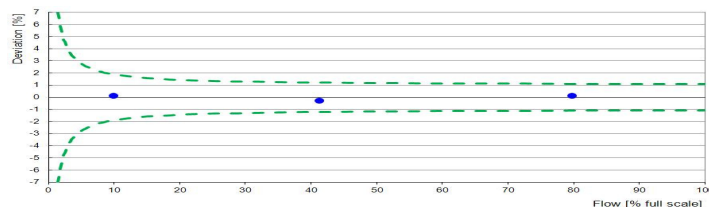
Material	pipe	PFA (Perfluoralkoxy)		
	electronics	PP (Polypropylene)		
	nut	PVDF (Polyvinylidene fluoride) or PFA		
Protection class		Optional, NPT Adapter (Flare to NPT), PFA		
Medium temperature [°C]		IP65		
Measuring range [l/min]		0...60		
Nominal diameter [DN]		0.03/0.09-6	0.3-24	0.9-60
Nominal pressure max. [bar]		7	10	15
Process connection		7	7	7
Connection flare or NPT thread		3/8"	1/2"	3/4"
Dimensions L/W/H [mm]		1"		
Weight [kg] in PE-HD		209/120/79	209/120/79	209/120/82
		1.3	1.3	1.3
				209/120/92
				1.6

## Electronics

Power supply	24VDC, ca. 3.6W
Electrical connection	5 or 8-pin plug, alternative 10-cors teflon-coated cable, length 5m
Input	1 digital input, usable for dosing start
Outputs	2 digital outputs, configurable as pulse output or empty pipe alarm, Current output configurable 0/4-20mA, RS485-data interface.
Max. error of measurement	±2%o.r. ±3mm/s (o.r. = of reading), option ±1%o.r. ±3mm/s
Repeatability	Reference conditions (VDI/VDE 2642) ≤ 0.5%

All flow meter parameters are freely configurable by using FlowCon. FlowCon is not part of the delivery of Flowmax 400i. It can be ordered separately.

The variety of outputs / input depends on the plug selection.



Example: Measuring points of a calibrated Flowmax in error graph according definitions

## Further information:

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Technical subjects to be changed!

