

# Ultrasonic Flowmeter

Flowmax® 44i



Flowmax 44i is a flow meter calculating the volume flow of liquids. Based on the ultrasonic technology Flowmax 44i 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 PPSU. 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 44i is suitable for operation with piston diaphragm and peristaltic pumps.

SI 010E/FM44i/01.24

## Housing

Material	PPSU			
Protection class	IP67			
Medium temperature [°C]	-10 ... 80 (Optionally up to 95°C, respectively up to 140°C)			
Measuring range [l/min]	0.3 ... 21	0.9 ... 36	3.5 ... 60	5.0 ... 240
Nominal diameter [DN]	10	15	20	25
Nominal pressure	PN16	PN16	PN10	PN10
Process connection				
outside thread NPT or G	1/2"	3/4"	1"	1 1/4"
BKS-Clamp DIN 11864 Form A	34 mm	34 mm	50.5 mm	50.5 mm
Dimensions L/W/H [mm]	150/85/90	150/85/90	160/85/105	170/85/105
Weight	350 g	350 g	450 g	450 g

## Electronics

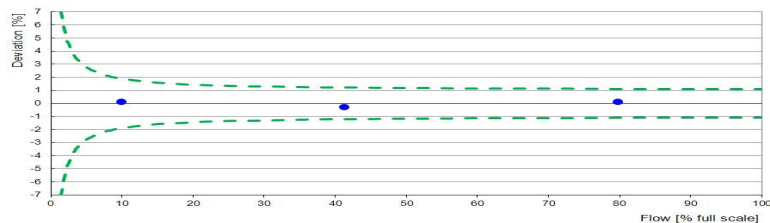
Power supply	24VDC, ca. 3.6W
Electrical connection	5 or 8-pin plug
Display (option)	Simultaneous display of volume flow, quantity, bar graph, lighted
Input	1 digital input, usable for dosing start or counter reset
Outputs	2 digital output, configurable as pulse output or empty pipe alarm, Current output configurable 0/4 ... 20mA, RS485-data interface.

Max. error of measurement ± 2% o.r. ± 0.15% f.s. (o.r. = of reading, f.s. = full scale)  
option ± 1% o.r. ± 0.15% f.s.

Repeatability Reference conditions (VDI/VDE 2642) ≤ 0.5%

All flow meter parameters are freely configurable by using the display or FlowCon. FlowCon is not part of the delivery of Flowmax 44i. 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!

