

Ultrasonic Flowmeter

Flowmax® 242i

Flowmax242i is a flow meter calculating the volume flow of liquids. Based on the ultrasonic technology Flowmax242i is able to measure conductive and non-conductive liquids contact free. 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 PE-HD. Flowmax242i has the USP Class VI approval and is resistant to gamma irradiation. It is very suitable for single-use applications like; MF and UF / DF applications, feed control of bioreactors and PID control system in combination with pumps.

Thanks to its technical properties Flowmax242i is able to measure all kinds of liquids, even aggressive media. It is characterized by its high measurement accuracy and repeatability. Empty pipe detection is integrated. The calculated flow is provided with a response rate of a few milliseconds on the outputs.

Flowmax242i is suitable for operation with piston diaphragm and peristaltic pumps. Thus even lower flow rates can be measured for pulsating flow.

The measuring system Flowmax242i consists of measuring tube (Flowmax242iM), dongle (Flowmax242iD) and evaluation (Flowmax242iE). The calibration data of the measuring tube are deposited in the dongle. This is plugged into the electronics, so that the evaluation can be accessed on the measuring tube associated calibration. This ensures that the evaluation is always working with the correct measuring tube data.



Electronics (Flowmax 242iE)

Material housing:	PPSU
Power supply:	18...30 VDC, ca. 3.6 W
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 outputs, configurable as pulse output or empty pipe alarm Current output configurable 0/4 - 20 mA RS485-data interface
Max. error of measurement:	±2% o.r. ±3 mm/s (o.r. = of reading), option ±1% o.r. ±3 mm/s Reference conditions (VDI/VDE 2642)
Repeatability:	≤ 0.5%

All flow meter parameters are freely configurable by using the display.

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

Housing Measuring Pipe (Flowmax 242iM)

Material:	PE-HD
Protection class:	IP65
Medium temperature:	0°...50°C
Measuring range (l/min)	
with continuous flow:	0.012 - 24.0
Nominal diameters:	3, 5, 7 or 10 DN
Nominal max. pressure:	7 bar
Process connection	
inner thread:	G1/2"
Dimensions LxWxH:	148x83x42 mm
Weight:	390 g

Dongle (Flowmax 242iD)

Connection:	Plug 5 pins
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