

ULTRASONIC FLOWMETERS FLOMIC FL5034, FL5035 FLOMIC FL5054, FL5055

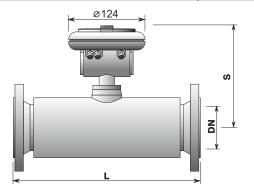
FLOMIC FL5034, FL5035, FL5054, FL5055

The battery-powered **FLOMIC FL5034**, **FL5035** and **FLOMIC FL5054**, **FL5055** ultrasonic flow meters are intended for operational and invoicing measurements of instantaneous flow rate, pressure and consumption in water piping in observance of standard EN 14154 in water works, water distribution systems and other industrial applications. These flow meters are in compact or remote version with the IP 68 protection class. They are characterised by high measurement accuracy and long-term stability over a wide range of measured values. The meters do not need any external power supply, do not include any moving parts and, have significantly lower hydraulic losses. The technical parameters and other features of the FLOMIC flow meters make them suitable not only for water consumption measurements, but also for water-leak tracking and monitoring of the general condition of water-supply networks, where the meter output signals can be connected via data transfer systems to remote computer control stations. The measurement method utilised by these meters is a single-beam (FL503x) or dual-beam (FL505x) transit-time pulse method based on evaluation of the time needed for an ultrasonic signal to cross the distance between two measuring transductors. In the standard version, the meter measures instantaneous flow rate (in m³/hour) and the total volume of water passed through the meter (in m³) in the given flow direction. The measured data are converted into passive pulse output signals.

OPTIONAL METER ACCESSORIES:

- •bi-directional flow rate and volume measurements with visual and electronic indication of the actual flow rate direction
- •measurement and display of instantaneous water pressure values within the range of 1 to 16 bar
- •using a passive current output signal 4 to 20 mA, monitoring the instantaneous flow rate or flow pressure values
- •measured data storage with user-selectable sampling period of 1 minute to 1 year
- •actual and stored data reading via the USB or RS 232 interface
- •connection to a remote data transfer system by means of a GSM module
- •use of alternative measurement units (Gal/min, or litre/sec)
- application of the meter within drinking-water supply systems
- •power supply via the 4 to 20 mA current line

				FLOMIC FL5054, FL5055									
TECHNICAL PARAMETERS			FLOMIC FL5034, FL5035										
nominal diameter			32	40	50	65	80	100	125	150	200	250	300
overload flowrate Q ₄ [m ³ /h]			20	31,25	50	78,75	125	200	250	312,5	500	787,5	1250
permanent flowrate Q ₃ [m³/h]			16	25	40	63	100	160	200	250	400	630	1000
11 2		FL503x	0,05	0,079	0,127	0,2	0,25	0,4	0,5	0,625	1,0	1,575	2,50
		FL505x		0,0625	0,1	0,157	0,2	0,32	0,4	0,5	0,8	1,26	2,0
pulse output constant k, [litres/pulse]		10	10	25	50	50	100	100	100	250	250	500	
flowrate ratio Q ₃ /Q ₁ for T30		FL503x	315	315	315	315	400	400	400	400	400	400	400
		FL505x		400	400	400	500	500	500	500	500	500	500
water pressure class			MAP 16 (FL503x, FL505x from DN 100 – DN 300), or MAP 40 (FL503x, FL505x)										
temperature class			T50 (FL5034, FL5054), T130 (FL5035, FL5055)										
flow-profile before meter			U5 (FL5054, FL5055), U10 (FL5034, FL5035)										
sensitivity class after meter		D3 (FL5054, FL5055), D5 (FL5034, FL5035)											
pressure loss class			ΔP 25										
climatic and mechanical resistance class			B (optional O)										
electromagnetic environment			E1, E2										
flowrate sampling period			1 s										
display unit			single line 8 character LC display										
power supply			Li battery 3.6 V/19 Ah - lifetime 8 years in standard meter version										
protection class			IP 68										
output signal			measured flow-rate values indicated in the form of passive pulse output										
			$U = 3 \text{ to } 30 \text{ V}, I = 0.002 \text{ to } 10 \text{ mA}, t_{imp} = 30 \text{ ms}$										
optional accessories			passive current output 4 to 20 mA, U = 10 to 24 V										
		bi-directional flow-rate measurement	+ passive pulse output, U = 3 to 30 V, I = 0.002 to 10 mA, t _{imp} = 30 ms										
			– passive pulse output, U = 3 to 30 V, I = 0.002 to 10 mA, t _{imp} = 30 ms										
	11100	acaromone	passive current output 4 to 20 mA, U = 10 to 24 V, in combination										
			with passive electric contact for indication of the actual flow-rate direction optically isolated interfaces USB, RS 232, RS 232 + USB converter GSM module										
			optical	iy isolate	ed interra	ices USI	5, KS 23	02, RS 2	32 + US	B conve	rter GSIV	/i module	2



FL5034 (compact version), FL5035 (remote version) FL5054 (compact version), FL5055 (remote version)

BASIC DIMENSION AND WEIGHT

diameter [mm]	32	40	50	65	80	100	125	150	200	250	300
L [mm]	360	360	360	360	360	360	360	360	450	450	450
S [mm]	175	180	185	190	200	210	225	235	255	280	305
weight [kg] 1.6 MPa						18	19	20	29	46	59
weight [kg] 4.0 MPa	10	10	12	13	16	18	21	22	38	71	85



