iskraemeco
BY ELSEWEDY ELECTRIC

ISKRASONIC BULK EL

The battery-powered Iskrasonic Bulk EL water meters are intended for operational and invoicing measurements of instantaneous flow rate, pressure and consumption in water piping in observance of standard ISO 4064 in water works, water distribution systems and other industrial applications. These water meters are in compact or remote design 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 Iskrasonic Bulk EL water 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 (FL5024.1, FL5025.1) or dual-beam (FL5044.1, FL5045.1) 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 m^3/hour) and the total volume of water passed through the meter (in m^3) in the given flow direction. The measured data are converted into passive pulse output signals.

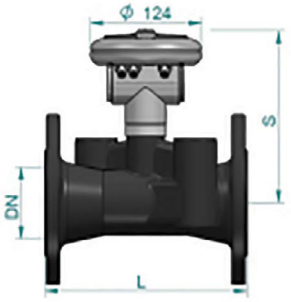
Optional meter accessories:

- 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

Technical Parameters

Iskrasonic Bulk EL										
nominal diameter		32	40	50	65	80	100	125	150	200
overload flowrate Q_4 [m^3/h]		12,5	20	31,25	50	78,75	125	200	312,5	500
permanent flowrate Q_3 [m^3/h]		10	16	25	40	63	100	160	250	400
minimum flowrate Q_1 [m^3/h]	FL502x.1	0,03	0,05	0,08	0,13	0,2	0,317	0,508	0,794	1,270
	FL504x.1			0,05	0,08	0,126	0,2	0,32	0,5	0,8
pulse output constant k_i [litres/pulse]		10	10	25	50	50	100	100	100	250
flowrate ratio Q_3 /Q_1	FL502x.1	315	315	315	315	315	315	315	315	315
	FL504x.1			500	500	500	500	500	500	500
water pressure class		MAP 16								
temperature class		T50 (FL5024.1, FL5044.1), T90 (FL5025.1, FL5045.1)								
Flow-profile sensitivity class	before meter	U5 (FL5044.1, FL5045.1), U10 (FL5024.1, FL5025.1)								
	after meter	D3 (FL5044.1, FL5045.1), D5 (FL5024.1, FL5025.1)								
pressure loss class		ΔP 25								
climatic and mechanical resistance class		B								
electromagnetic environment		E1, E2								
flowrate sampling period		1 sec								
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 (insulated)		measured flow-rate values indicated in the form of passive pulse output U = 3 to 30 V, I = 0.002 to 10 mA, t_{imp} = 30 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 imp – passive pulse output, U = 3 to 30 V, I = 0.002 to 10 mA, t_{imp} = 30 ms								
		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 or RS 232 + USB converter GSM module								

FL5024.1 (compact version), FL5025.1 (remote version), FL5044.1 (compact version), FL5045.1 (remote version)



Basic dimension and weight									
diameter [mm]	32	40	50	65	80	100	125	150	200
L [mm]	260	300	200	200	225	250	250	300	350
S [mm]	140	145	150	155	160	165	180	190	205
weight [kg]	4.5	7	8	9	15	18	20	22	36.5

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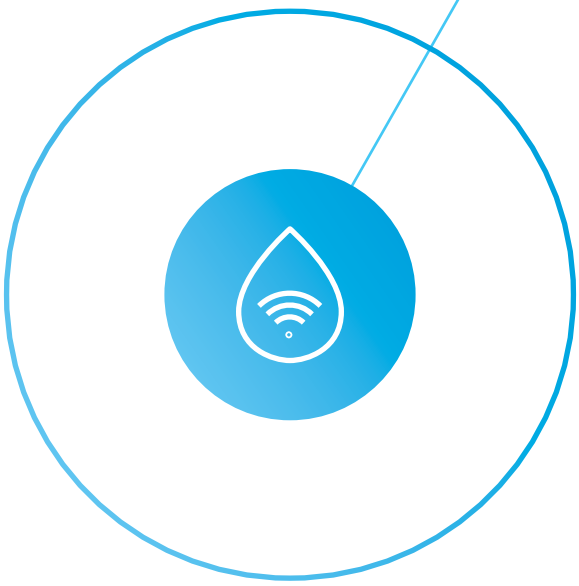
SMART WATER.

Every drop of water is precious for the planet and for the future life as we know it.



SW EN/2211/099/1