

# E-BULK



## STATIC METER

E-BULK is the modern solution for large volume metering in the utility, industrial and commercial sectors. Thanks to the ease of use of ultrasonic technology in these fields, E-BULK provides excellent levels of performance in all conditions of installation. Its extremely low starting flow rate, its wide measuring range and the absence of moving parts allow the accounting of the entire consumption, making it easier to identify leaks. E-BULK makes mechanical meters obsolete, particularly combined meters. Robust, long lasting and suitable for the most challenging environments. It can be equipped with the latest remote data transmission technologies.

# E-BULK

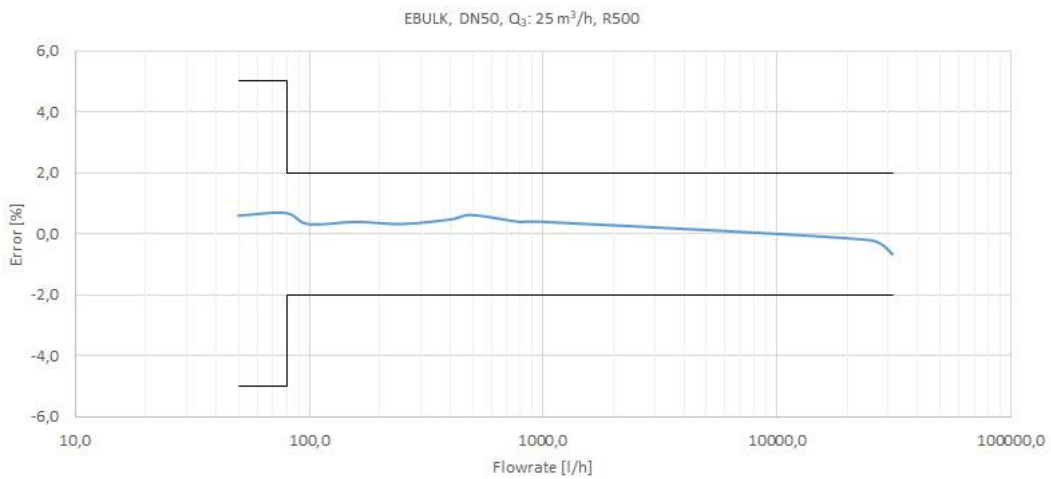
## FEATURES

- Ultrasonic meter for cold water
- Ideal for large volumes for utilities and industrial use
- MID-certified: R max 500
- DN: 50÷300\*
- Optional 4–20mA analog output, 24V passive
- Health certifications available for a number of countries
- No moving parts
- Can be installed in all positions while maintaining its metrological characteristics
- Large display with information on volume, flow rate and alarms
- IP68 protection rating
- Battery life: 13 years
- Can be provided fitted with wired (Split) or integrated radio communication module (wireless m-Bus)
- Ready for pulse emitter (DN 50÷100) 1P=10L, (DN 125÷200) 1P=100L

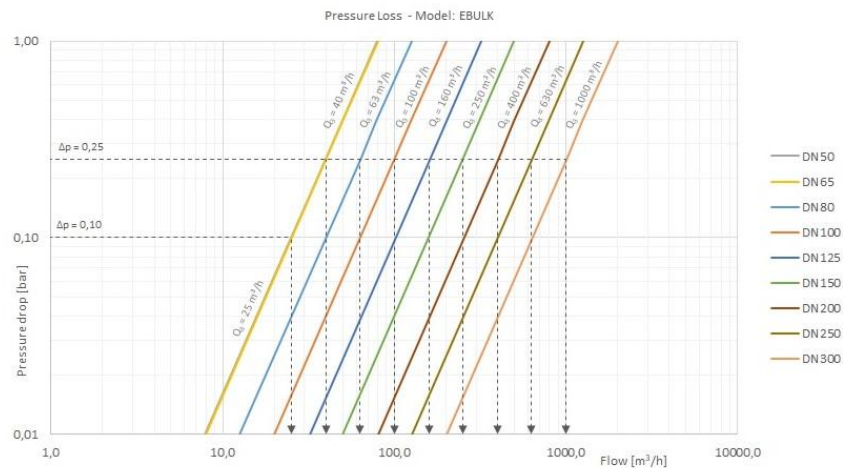


\*Up to DN400 on request

## TYPICAL ERROR CURVE



## HEAD LOSS DIAGRAM



## METROLOGICAL PERFORMANCE

<b>Size</b>	<b>mm</b>	50	65	80	100
	<b>in</b>	2	2 ½	3	4
<b>Module B no.</b>	RO-2275-19454				
<b>Module D no.</b>	0119-SJ-A010-08				
<b>Q<sub>3</sub>/Q<sub>1</sub> = R</b> Referred to installation position	≤ 500				
<b>MID standard performance *</b>					
<b>Q<sub>3</sub></b>	<b>m<sup>3</sup>/h</b>	25	40	63	100
<b>Q<sub>4</sub></b>	<b>m<sup>3</sup>/h</b>	31,25	50	78,75	125
<b>R</b>	<b>500</b>				
<b>Q<sub>1</sub></b>	<b>l/h</b>	50	80	126	200
<b>Q<sub>2</sub></b>	<b>l/h</b>	80	128	201,60	320

\* Other values of R available upon request.

## TECHNICAL DATA

<b>Maximum permissible error between Q<sub>1</sub> and Q<sub>2</sub> (excluded)</b>	+/- 5%				
<b>Maximum permissible error between Q<sub>2</sub> (included) and Q<sub>4</sub></b>	+/- 2% with water temperature ≤ 30°C +/- 3% with water temperature > 30°C				
<b>Temperature class</b>	T30,T50				
<b>Flow profile sensitivity classes</b>	U0 - D0				
<b>Starting flow rate</b>	<b>l/h</b>	10			
<b>Head loss</b>	ΔP25				
<b>Nominal pressure</b>	<b>bar</b>	16			
<b>Maximum reading</b>	<b>m<sup>3</sup></b>	9.999.999			
<b>Minimum reading</b>	<b>l</b>	1			
<b>Indicative weight</b>	<b>kg</b>	10,3	13	16	17,25

## METROLOGICAL PERFORMANCE

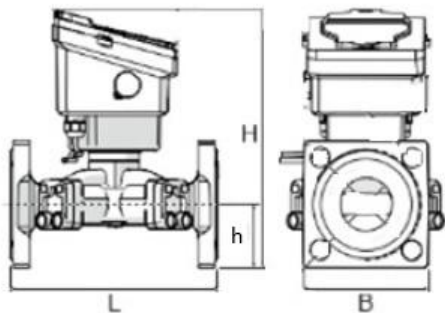
Size	mm	125	150	200	250	300
	in	5	6	8	10	12
Module B no.		RO-2275-19454				
Module D no.		0119-SJ-A010-08				
Q <sub>3</sub> /Q <sub>1</sub> = R Referred to installation position		≤ 500				
MID standard performance *						
Q <sub>3</sub>	m <sup>3</sup> /h	160	250	400	630	1000
Q <sub>4</sub>	m <sup>3</sup> /h	200	312,50	500	787,50	1250
<b>R</b>		<b>500</b>				
Q <sub>1</sub>	l/h	320	500	800	1260	2000
Q <sub>2</sub>	l/h	512	800	1280	2016	3200

\* Other values of R available upon request.

## TECHNICAL DATA

Maximum permissible error between Q <sub>1</sub> and Q <sub>2</sub> (excluded)		+/- 5%				
Maximum permissible error between Q <sub>2</sub> (included) and Q <sub>4</sub>		+/- 2% with water temperature ≤ 30°C +/- 3% with water temperature > 30°C				
Temperature class		T30,T50				
Flow profile sensitivity classes		U0 - D0				
Starting flow rate	l/h	10				
Head loss		ΔP25				
Nominal pressure	bar	16				
Maximum reading	m <sup>3</sup>	99.999.999				
Minimum reading	l	1				
Indicative weight	kg	25	28	35	67	80

## DIMENSIONS



Size	mm	50	65	80	100
	in	2	2 ½	3	4

L	mm	200/270/300	200/300	225/300/350	250/360
H	mm	245	250	275	290
h	mm	65	70	90	100
B	mm	130	140	180	200

Size	mm	125	150	200	250	300
	in	5	6	8	10	12

L	mm	250	300	350	400/450	450/500
H	mm	380	400	470	525	575
h	mm	125	130	170	198	223
B	mm	250	285	340	396	446

## COMMUNICATION MODULES



ARROW<sup>EVO</sup> 868  
SPLIT



ARROW<sup>WAN</sup> 169  
SPLIT



ARROW<sup>WAN2</sup>  
SPLIT



ARROW<sup>WAN</sup> NB-IoT  
SPLIT



For more information on all the accessories available, consult the specific technical data sheets on the website [www.maddalena.it](http://www.maddalena.it)