

BULK METERS EMS

50mm – 300mm Class C Woltman Water Meter

APPLICATION:

- Measures the volume of clean, cold water passing through a pipeline.
- DMA (District Metered Areas).
- MNF (Minimum Night Flow).
- Water Preservation Management.
- Leakage Detection.

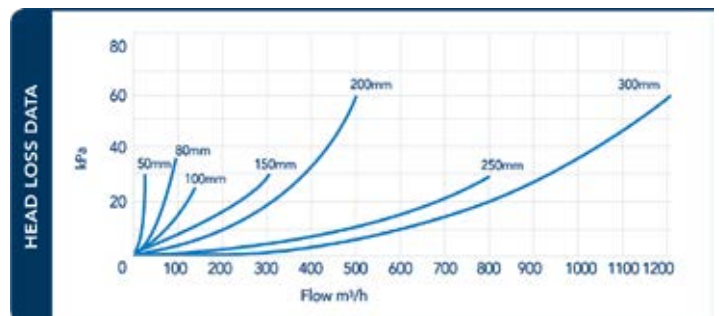
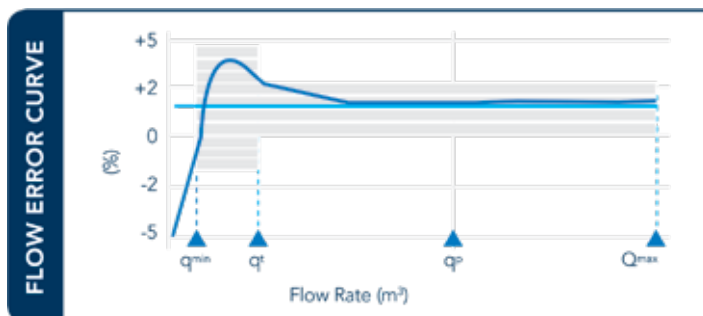
FEATURES:

- Accuracy Performance Class C Approval.
- Easy to read LCD Display protected from condensation.
- Various communication options.
- Digital encoding with Transfer Interface to Output 4-20mA, Pulse, RS-485, Modbus (RTU).
- Reliably starts measuring with low water flows.
- Wide measuring range.
- Built-in filter to block foreign bodies.
- Built-in flow straightener.
- Built-in 8 years life expectancy Lithium battery (Under normal use).
- Replaceable battery.
- Easy installation and maintenance.
- Gear free, with electronic sensing devices.
- Meter not affected by magnetic interference.
- Enclosure Rating: IEC60529 IP68 / Gauss 1500 Protection.
- Cast Iron epoxy coated body.
- Verification certification available on request.
- Each meter has a unique serial number.



MAIN TECHNICAL SPECIFICATIONS

Type	Size (mm)	Class	m ³ /h				m ³		Factor	Pulse Values (Per Pulse) Available on request
			q ⁺	q ⁿ	q ^t	q ^{min}	Min. Reading	Max. Reading		
			Max. Flow	Nominal Flow	Transitional Flow	Min. Flow				
EMS - 50	50	C	30	15	0,225	0,09	0,0001	99 999	x 1	1 ℓ or 10 ℓ or 100 ℓ
EMS - 80	80	C	80	40	6	0,24	0,0001	99 999	x 1	1 ℓ or 10 ℓ or 100 ℓ
EMS - 100	100	C	120	60	0,9	0,36	0,0001	99 999	x 1	1 ℓ or 10 ℓ or 100 ℓ
EMS - 150	150	C	300	150	2,25	0,9	0,001	999 999	x 1	10 ℓ or 100 ℓ or 1000 ℓ
EMS - 200	200	C	500	250	3,75	1,5	0,001	999 999	x 1	10 ℓ or 100 ℓ or 1000 ℓ
EMS - 250	250	C	800	400	6	2,4	0,001	999 999	x 1	10 ℓ or 100 ℓ or 1000 ℓ
EMS - 300	300	C	1200	600	9	3,6	0,01	999 999 9	x 1	100 ℓ or 1000 ℓ



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INTELLIGENT MANAGEMENT FUNCTIONS:

- Anti-Magnetic Symbol.
- Leakage Indicator (Days).
- Forward & Reverse Flow Direction Indicator.
- Battery Level Indicator.
- Tamper-proof indicator.
- Instantaneous Flow Rate Value.
- Accumulated Flow Rate Value.
- Overload Flow Rate Chart.
- Accumulated Flow Rate Chart.

MAXIMUM PERMISSIBLE ERRORS:

- In the lower zone from q_{min} inclusive up to but excluding q_t is $\pm 5\%$.
- In the upper zone from q_t inclusive up to and including q_s is $\pm 2\%$.

WORKING CONDITIONS:

- Maximum fluid temperature: $\leq 60^\circ\text{C}$ for cold water: 1600 kPa (16 Bar).
- Maximum fluid temperature: $\leq 60^\circ\text{C}$ for cold water: 2400 kPa (24 Bar) on request.
- Ambient working temperature: -25°C to 70°C .

COMPLIANCE STANDARD:

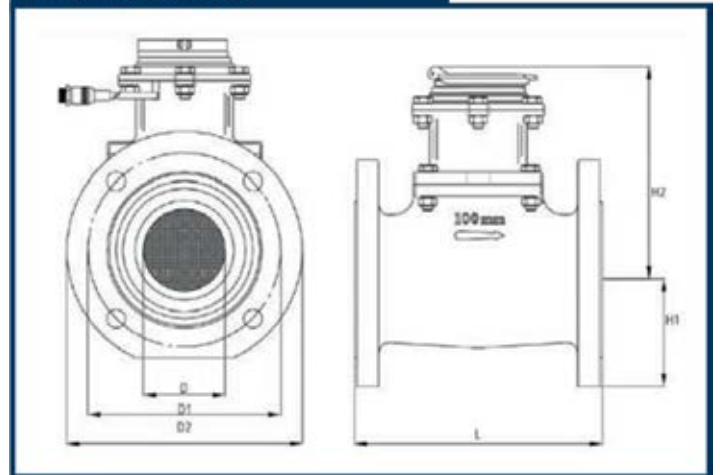
- Compliance with SANS 1529 – 1: 2006 for sizes: 50mm – 100mm (Class C).
- Compliance with ISO4064 for sizes: $>100\text{mm}$ (Class C).

INSTALLATION REQUIREMENTS:

- Must be installed on a horizontal pipeline only.
- Pipeline must be flushed before installation.



DIMENSIONS



DIMENSIONS TABLE

Type	Size (mm)	L Length (mm)	D2 Flange Diameter (mm)	H Height (H1 + H2) (mm)	Available Connecting Flange BS4505			One Meter Per Wooden Crate	
					D Outside Diameter (mm)	D1 Bolt Circle Diameter (mm)	n-M Connecting Bolts	± Weight (kg)	Dimensions (mm)
					T16	T16	T16		
EMS - 50	50	200	165	285	165	125	4-M16	19	330 x 330 x 390
EMS - 80	80	200	200	310	200	160	8-M16	21	330 x 330 x 390
EMS - 100	100	250	238	319	220	180	8-M16	23	330 x 330 x 390
EMS - 150	150	300	290	384	285	240	8-M20	30	420 x 400 x 470
EMS - 200	200	350	342	411	340	295	12-M20	54	420 x 400 x 470
EMS - 250	250	440	410	525	405	355	12-M24	82	550 x 530 x 620
EMS - 300	300	500	464	557	460	410	12-M24	108	550 x 530 x 620
Working Pressure (Bar)					16				