

# MEH Multi-Jet/Turbine Flowmeters

## Sizes: 15 to 300mm

### Mechanical Totaliser & optional Reed Switch Pulse Output

#### FEATURES

- Ideal for potable water, general irrigation, water cooling towers, data logging and process applications
- Ideal for gravitational flows.
- Running (non-resettable) mechanical total.
- Optionally also with contact closure pulse output (can be retrofitted to multi-jet models 15-50mm).
- Accuracy:  $\pm 2\%$  (full scale flow). Temp to 50 °C.
- ISO 4064 Class B Compliant. Pressure to 10bar.
- Can pass small impurities without blockage.
- Can connect the optional pulse output to ManuFlo Indicators to provide resettable total display, or for batching applications.

To: ISO4064 Class B



MEH flowmeter

The MEH and MEHR Multi-Jet flowmeters are available in sizes of 15 to 50mm (these sizes have an internal strainer), and as turbines in 50 – 300mm sizes, and are suitable for volume measurement of potable water.

They are available as MEH type which is a pure mechanical totalizer meter, or as MEHR type which has a contact closure Reed Switch pulse output module (1 Litre/pulse for sizes 15 - 50mm, 10 Litre/pulse for sizes 40 & 50mm, 100 Litres/pulse for 80-100mm, and 1000 Litres/pulse for 150–300mm sizes), for indication, data logging and process control applications. The Contact Closure output module can be retrofitted on 15-50mm multijet flowmeters, but must be ordered with the flowmeter if required for the Turbine type sizes  $\geq 80$ mm.

Measurement is in the forward flow direction only. The register system operates by means of magnetic drive, and is sealed and separated from the water measurement system. Small impurities are able to be passed without blockage.

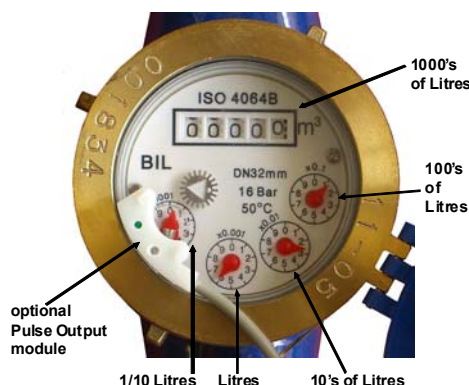
MEHR meters can be used as a resettable meter for transfers or for monitoring of totals if connected to a ManuFlo ME4, ME5 or ME7 resettable totalizer display unit.

The meters capture low to medium flow measurement ranges, and so are ideal for gravitational flows or low pressure installations for potable water, cooling towers, irrigation and process applications.



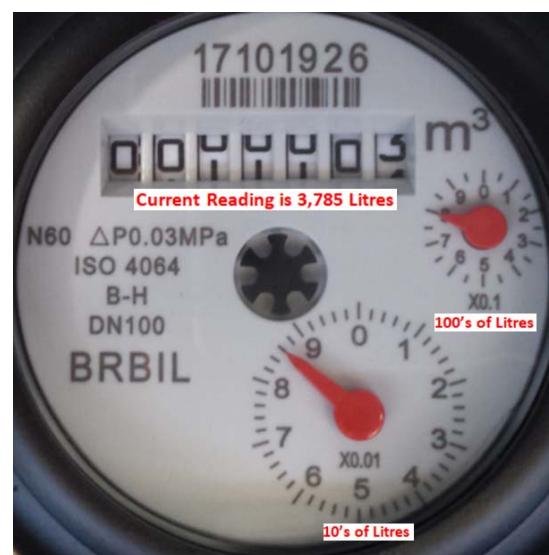
20mm size  
(multijet)

100mm size (turbine)



MEH totaliser display sizes 15 - 50mm  
(adding all indicators total = 126.03 Litres)

Hermetically vacuum-sealed register ensures no moisture issues.



MEH totaliser display sizes 50 - 300mm

Hermetically vacuum-sealed register ensures no moisture issues.

**INSTALLATION**

- Minimum straight pipe lengths before (upstream of) and after the flowmeter are recommended to meet the accuracy statement:
  - For 15 – 50mm multi-jet pipe size: 5x diameter before, and 3x diameter after (**horizontal preferred**),
  - For  $\geq 50$ mm turbine pipe size: 10x diameter before, and 5x diameter after (horizontal or vertical)
- Before installation. flush out all pipe works.
- During installation, make sure the arrow marked on the meter body is in same direction as the water flow.
- To maintain the stated accuracy, the meter ideally should be installed in a horizontal position, with the display face up.
- Avoid freezing conditions.

**FLOWRANGES** <sup>\*</sup>  $\pm 5\%$  accuracy  $\pm 2\%$ 

DN (mm)	Flowrate (Litres/minute)			
	Q minimum <sup>#</sup>	Q transitional*	Q nominal*	Q maximum*
15mm	0.5	2	25	50
20mm	0.8	4	42	83
25mm	1.2	6	58	115
32mm	2.4	10	100	200
40mm	3.3	17	167	330
50mm	7.5	25	250	500
50mm	15	35	350	800
80mm	27	133	667	2000
100mm	40	200	1000	3333
150mm	75	500	2500	5000
200mm	125	833	4167	8333
250mm	200	1333	6666	13333
300mm	300	2000	10000	25000

\* Note: there is no current limiting resistor, so if the flowmeter is connected to non-ManuFlo equipment then you may need to fit a 470 $\Omega$  current limiting resistor in series with the pulse output.

**ORDER CODES**

Size (mm)	Totaliser only		Totaliser with Reed Switch pulse output			Weight KG	Description
	Order Code	ends <sup>#</sup>	Order Code	Pulse Output	ends <sup>#</sup>		
15	MEH15	BM	MEH15R1	1 Pulse / 1 Litre	BM	1.5	1 pulse / 1 Litre Reed Switch module and 1 metre cable for retro-fitting to flowmeter sizes 15-50mm
20	MEH20	BM	MEH20R1	1 Pulse / 1 Litre	BM	1.9	
25	MEH25	BM	MEH25R1	1 Pulse / 1 Litre	BM	2.7	
32	MEH32	BM	MEH32R1	1 Pulse / 1 Litre	BM	3.1	
40	MEH40	BM	MEH40R1	1 Pulse / 1 Litre	BM	5.1	
40	MEH40	BM	MEH40R10	1 Pulse / 10 Litres	BM	5.1	
50	MEH50	BM	MEH50R1	1 Pulse / 1 litre	BM	6.0	1 pulse / 10 litres Sizes 40, 50mm
50	MEH50	BM	MEH50R10	1 Pulse/10 Litres	BM	6.0	
50	MEH50F	E	MEH50-F-R10	1 Pulse/10 Litres	E	9.0	
80	MEH80	E	MEH80R100	1 Pulse/100 Litres	E	12.0	
100	MEH100	E	MEH100R100	1 Pulse/100 Litres	E	14.5	
150	MEH150	E	MEH150R1000	1 Pulse/1000 Litres	E	31.0	
200	MEH200	E	MEH200R1000	1 Pulse/1000 Litres	E	43.0	
250	MEH250	E	MEH250R1000	1 Pulse/1000 Litres	E	63.0	
300	MEH300	E	MEH300R1000	1 Pulse/ 1000 Litres	E	91.0	

# connection ends: BM: BSP male couplings (coupling connectors supplied) E: Table E flanged (flange connection kits available)

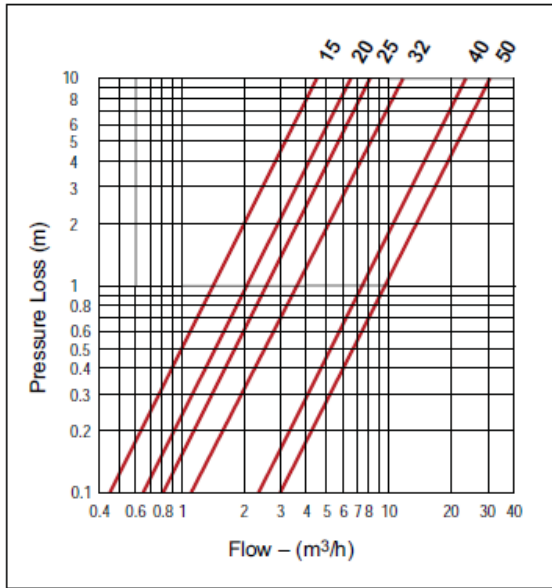
**Optional Pulse Output**

**Via contact closure Reed Switch.**  
**Can switch up to 30VDC, 100mA.**  
 with 1 metre pulse cable lead. Red = signal; Black = common

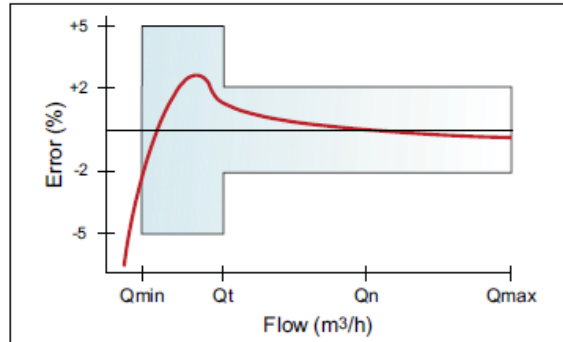
15-50mm: can retro-fit the pulse o/p via simple screw on front of register.  
 $\geq 80$ mm: order with flowmeter.

## 15-50mm Multi-jets

Pressure Loss Curve



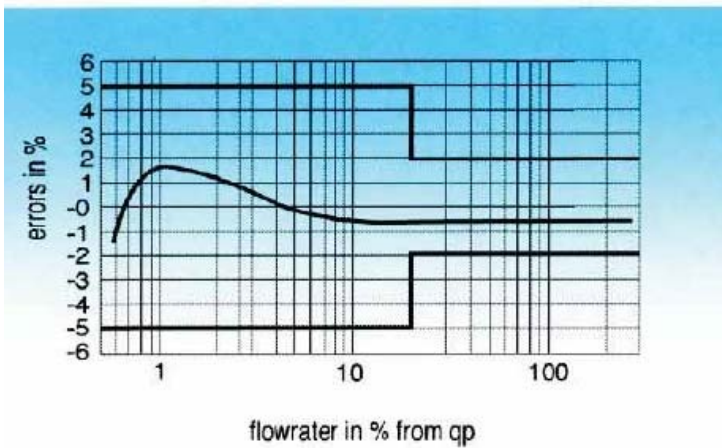
Accuracy Curve



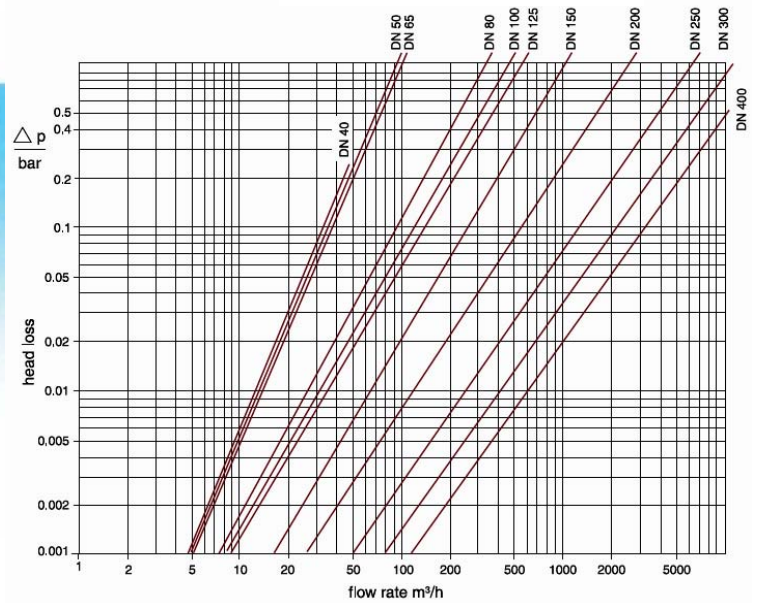
Pressure rating to: 10bar / 1000kpa

## 50-300mm Turbines

Error curve



Pressure Loss Curve



ME5 5 digit LCD



ME4 4 digit LCD

Resettable Display Options  
IP65 , 10+ yr battery life.

Due to continuous product improvement, specifications may change without notice.