

## M150 Multi-jet cold water meters

Permanent flow rate	qp	m <sup>3</sup> /h	1.5	2.5	3.5	6	10
Size		mm	15	20	25	30	40

The M150 is a multi-jet water meter with a dry dial register. It operates on the velocity principle in which water enters the measuring chamber through a number of ports and drives the inner rotor. This movement is transmitted via a gear-train and magnetic coupling to the vacuum-sealed register which records the reading.



### Pulse unit

A standard feature is a pulse output with the pulse unit incorporated within the register. The pulse element is a volt-free contact reed switch. Versions without a pulse output are also available.

### Standard features

- Tamper-resistant construction
- The register is dust-free, waterproof and vacuum-sealed to avoid condensation
- Numbered rollers show cubic metres, with pointers indicating litres
- Headloss is less than 1 bar at overload flow rate (qs)

- The rotor is suspended by hydrodynamic forces to give minimum load on the bearings
- The magnetic drive is unaffected by external magnetic interference
- Meter is supplied complete with couplings
- Maximum working pressure of 16 bar

### Installation

The meter is installed with the direction of flow as indicated by the arrow cast in the meter body. A horizontal position with the register face upwards is recommended. No adjustments are necessary before installation as it is calibrated before despatch.

### Pulse generator specifications

Vmax:	24V
I <sub>max</sub> :	200mA
P <sub>max</sub> :	4W
Frequency:	Pulse per 10 litres (all sizes)
Pulse per litre:	(15mm and 20mm only) to special order
Cable:	2 core, 1.6 metres long, 4mm diameter
	Bare wire termination (flying lead)



## Performance BS5728, ISO4064 Class B

Size of meter	mm	15	20	25	30	40	
Permanent flow rate	qp±2%	m³/h	1.5	2.5	3.5	6	10
Overload flow rate	qs±2%	m³/h	3	5	7	12	20
Transitional flow rate	qt±2%	l/h	120	200	280	400	800
Minimum flow rate	qmin±5%	l/h	30	50	70	100	200
Starting flow rate approx	l/h	10	14	18	20	30	
Headloss at qs	bar	less than 1 bar					
Headloss at qp	bar	0.25					
Metering capacity	m³	100000					
Minimum scale value	litre	0.2					

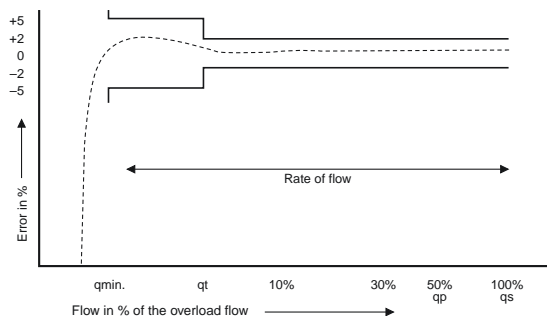
## Dimensions

Connection thread	BSPT	in	G½	G¾	G1	G1¼	G1½
Meter thread	BSP	in	G¾	G1	G1¼	G1½	G2
Length w/o connections	L1	mm	190	190	260	260	300
Length with connectors	L2	mm	275	281	365	371	431
Height to centre line	H1	mm	32.5	40	47	47	58
Height lid open	H3	mm	165	170	185	185	210
Height lid closed	H2	mm	117	124	137	137	147
Width		mm	84	94	100	100	122
Weight w/o connections		kg	1.35	1.5	2	2.1	3.3
Weight with connections		kg	1.52	1.80	2.51	2.91	4.35

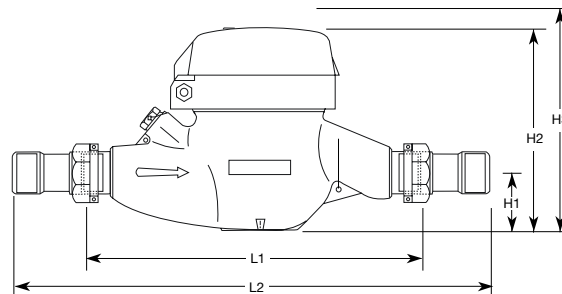
## Materials of Construction

Body	Copper alloy 62%
Shaft	Stainless steel 18/8 / polyamide
Thimble filter	High density polyethylene
Measuring chamber	Polystyrene
Rotor	Polyamide 12
Lower plate	Polystyrene
Wet gear train	Graphited polyamide 12
Upper plate	Polyphenylene oxide glass loaded
<b>Sealing elements:</b>	
O ring	Elastomer / nitrite
Washer	Polyamide 6
Locking ring	acetal resin 25% glass loaded
<b>Register:</b>	
Case and bottom plate	Polycarbonate
Gears	Graphited polyamide 12
Rollers	Polystyrene
Number roller	ABS
Clamping ring	Polyamide 6
Lid	Polycarbonate
Compatibility with these materials of construction should be confirmed on treated water applications.	

## Typical error curve



## Dimensions



## Pressure equipment directive 97/23/EC

This product is applicable in networks for the supply, distribution and discharge of water and associated equipment and is therefore exempt.



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