Brunata

Hydrometer multi-jet water meter type MNR for utility water

Cold-water meter for utility water – wet runner

Characteristics

- Multi-jet cold-water meter for utility water
- Suitable for use with cold water up to 30 °C (for short periods safe up to 50 ° C)
- Model MNR for horizontal installation
- Model MNSR for installation in rising pipes
- Sturdy meter
- 'Easy-to-read', mechanical counter
- Available with pulse generator for remote reading
- Approved according to EEC, verified
- Approval classes: A and B
- Protective class: IP65

Further information

The MNR-series is a multi-jet meter with very low head loss (wet runner). The meter series has an extended measuring range which ensures recording of even very low consumption and long-term accuracy.

The sturdy design of the meter makes it capable of withstanding short-term stress. The built-in strainer can be cleaned without breaking the meter seal.

The MNR meter measures any reflux that may occur and it is absolutely corrosion-resistant.

Meters with pulse outputs are equipped with terminals.

Models and flow volume

Type	Nominal flow q_n (m^3/h)
Multi-jet impeller meter	
MNR-K	2.5 · 6 · 10
Multi-jet impeller meter, rising pipe	
MNSR-K	2.5 · 6 · 10
Multi-jet impeller meter, downpipe	
MNRFR-K	2.5 · 6 · 10
Multi-jet impeller meter, 10 litres/pulse	
MNR-K10-K	2.5 · 6 · 10
Multi-jet impeller meter, rising pipe 10 litres/pulse	
MNSR-K10-K	2.5 · 6 · 10

Brunata is a 100 % Danish owned company. We have more than 85 years of experience within developing and producing heat cost allocators and heating accounts. Brunata has implemented a quality system in accordance with EN ISO 9001. Please contact us for further information on our products.

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Technical data

Type				MNR			MNSR / MNFR		
Nominal flow rate		q_n	m³/h	2.5	6	10	2.5	6	10
Maximum flow rate, transitory		q_{max}	m³/h	5	20	30	5	10	20
Transitory flow rate		q_t	l/h	250	600	1000	250	600	1000
Minimum flow rate		q_{min}	l/h	20	40	80	20/70	40/160	80/350
Starting		q_{start}	l/h	4-6	6-8	20-25	4-6	6-8	20-25
EU accuracy class				B			B/A		
	with pulse output			A			-		
Accuracy of measurement	verification limits	q_{min}-q_t		± 5 %					
		q_t-q_{max}		± 2 %					
Max temperature	Approval			30 °C					
	Design			50 °C					
Pressure class			Bar	PN16					
Pressure drop q_n		Δ_p	kPa	15	23	20	15	23	20
Approval no.	Cold-water meter	30 °C		D82/6.131.10	D84/6.131.73		D82/6.131.10	D84/6.131.73	
	Cold-water meter with pulse	30 °C		D82/6.131.42	D98/6.131.04		D82/6.131.42	D98/6.131.04	
Pulse output	Passsive reed switch	Litres/pulse		10					

Dimensions

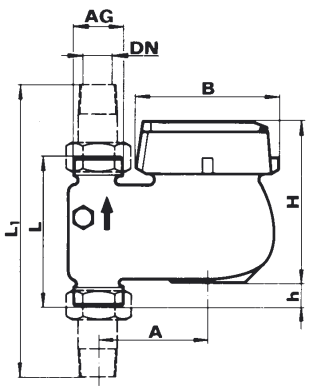
Type			MNR / MNFR			MNSR		
		q_n	2.5	6	10	2.5	6	10
Nominal connection		mm	20	25	40	20	25	40
Lenght	L	mm	190	260	300	105	150	200
Lenght with coupling	L1 *)	mm	270	378	438	185	268	338
Width	B	mm	96	102	137	98	101	136
	A	mm	-	-	-	82	95	120
Height	H	mm	120	130	150	134	145	157
	h	mm	41	44	46	18	31	21
Connection thread	Meter	Inches	G1B	G1¼B	G2B	G1B	G1¼B	G2B
	Coupling	Inches	R¾	R1	R1½	R¾	R1	R1½
Weight without coupling		kg	2.2	3.4	6.6	1.9	3.2	6.3
Position			Horizontal/vertical downpipe			Vertical rising pipe		

*) *Standard coupling, not included when delivered*

Dimensional outline

MNR / MNFR

MNSR



Head loss graph