



VALVE AND FLOW CONTROL SPECIALISTS
SERVICE AND RELIABILITY

Sensus

WP-Dynamic

Turbine Water Meter
for cold water up to 50 °C / PN 16
DN 40 ... DN 400



Main characteristics

Hermetically sealed register (IP 68)
Hydrodynamically balanced rotor
(≤DN 300)
Symmetrical calibration adjustment
(≤DN 300)
Register may be rotated through 359°
High overload capability
Powder coating affords max. corrosion protection
Australian Standard lengths
ISO lengths
Range exceeds Australian Standard
AS3651.1 measurement class 2 requirements

Application

Measurement of high, relatively constant flow rates

Available options

Pattern Approved NMI-M10-1
Up to 3 pulsers (1 x OD, 2 x RD) may be fitted
1/4" connection port for pressure sensors

Installation

Installation Requirements

For Irrigation and all other applications – refer to Government requirements and relevant standards, certifications and approvals.

For general industrial applications – general guidelines are, unrestricted straight pipe in front of the meter 3 x DN (DN400 5 x DN), No abrupt restrictions behind the meter.

Performance Table

Performance data according to NMI-M10 – DN40-DN125 meters

Meter size	DN40	DN50	DN65	DN80	DN100	DN125
Minimum flow rate Q1 (m ³ /h)	0.4	0.63	0.79	1.11	1.90	3.65
Maximum continuous flow rate Q3 (m ³ /h)	25	40	50	70	120	230
Overload flow rate Q4 (m ³ /h)	40	50	62.50	87.50	150	287.5

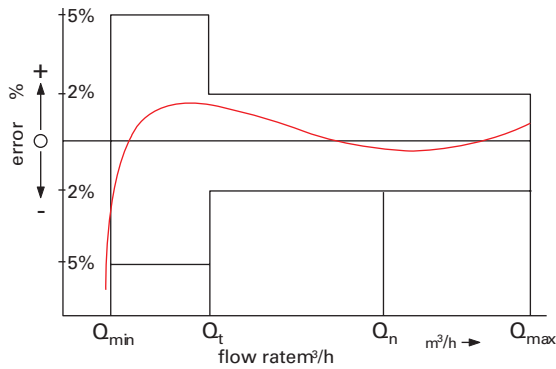
Performance data according to NMI-M10 – DN150-DN400 meters

Meter size	DN150	DN200	DN250	DN300	DN400
Minimum flow rate Q1 (m ³ /h)	3.97	7.14	12.70	15.87	31.75
Maximum continuous flow rate Q3 (m ³ /h)	250	450	800	1000	2000
Overload flow rate Q4 (m ³ /h)	312.5	562.5	1000	1250	2500

Performance data according to EEC-specification 30 °C class B

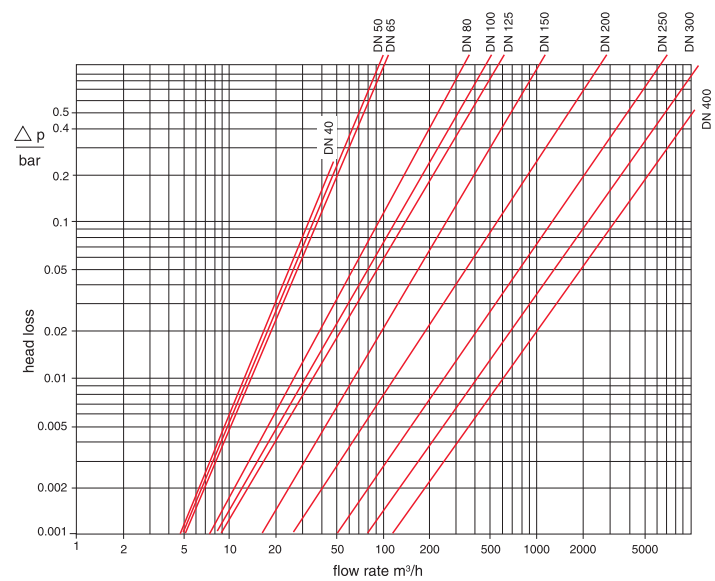
Nominal Diameter		DN	40	50	65	80	100	125	150	200	250	300	400
Size of meter (acc. to EEC)		Q _n	10	15	25	40	60	100	150	250	400	600	1000
Q _{max}	maximum peak flow short time	m ³ /h	30	30	50	80	120	200	300	500	800	1200	2000
Q _n	continuous flow	m ³ /h	15	15	25	40	60	100	150	250	400	600	1000
Q _t	transitional flow	m ³ /h	3.0	3.0	5.0	8.0	12.0	20.0	30	50	80	120	200
Q _{min}	minimum flow	m ³ /h	0.45	0.45	0.75	1.20	1.80	3.00	4.5	7.5	12.0	18.0	30

Typical Accuracy Curve



Q_{max} = maximum peak flow
 Q_n = continuous flow
 Q_t = transitional flow $\pm 2\%$
 Q_{min} = minimum flow $\pm 5\%$

Typical Head Loss Curve



Dimensions and Weights

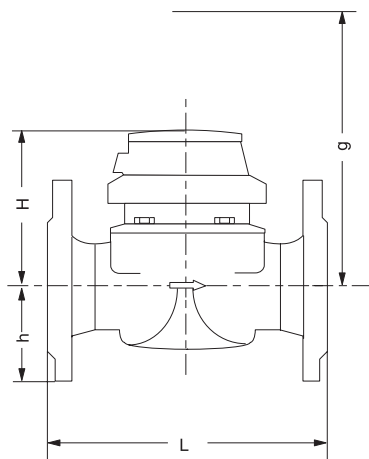
Nominal Diameter		DN	40	50	80	100	150	150	200	250	300	400	
Size of meter (acc. to EEC)		Q_n	10	15	40	60	500	150	250	400	600	1000	
Dimensions	overall length	L *)	mm	220	311	413	483	300	500	350	450	500	
	height	H	mm	120	120	150	150	177	177	206	231	256	380
		h	mm	69	73	95	105	135	135	162	194	226	295
		g	mm	200	200	270	270	356	356	441	466	491	785
Weights	meter	kg	7.4	7.7	14.0	18.0	30.9	35.5	50.5	72.3	99.3	187	
	measuring element	kg	1.4	1.4	3.0	3.0	5.9	5.5	7.5	7.5	7.5	25	
	body	kg	6.0	6.3	11.0	15.0	35	38.3	43.0	63.8	91.8	162	

*) Other overall lengths on request

Meter lengths (consult supplier for stock availability)

Size	40	50	65	80	100	125	150	200	250	300
ISO Short	220	200	200	-	250	250	300	350	450	500
ISO Long	-	-	-	225	-	-	500	350	450	500
Aust STD	-	311	-	413	483	-	500	520	450	500

Dimension Picture

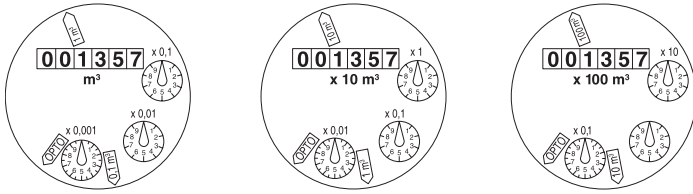


Materials

Body	PN16	cast iron
Measuring element		plastic
Rotor		plastic
We also use the following materials		brass stainless steel

Dials



Examples



Options available on request

Diameter Nominal DN	Smallest reading m³	Max. reading m³
50 ... 125	0.0005	1 000 000
150 ... 300	0.005	10 000 000
400	0.05	100 000 000

Pulse Values

Pulser		pulse value		
		DN 40 ... DN 125	DN 150 ... DN 300	DN 400
RD 01		0.01 and 1 m³		10 and 100 m³
OD 01		0.001 m³	0.01 m³	0.1 m³
OD 03		0.01 m³	0.1 m³	1 m³

Order Example

