

XN

Multijet meter
Wet dial
Class B



Main Characteristics

DN 15 to 50(*) PN16
Robust and accurate
Insensitive to upstream flow turbulence
Suited to prolonged immersion
Removable single-piece mechanism

Application

The XN is a wet dial multijet meter with direct transmission, the product of Sensus long experience in high-performance domestic meters.

This meter provides the metrological accuracy of a Class B meter, while its design ensures that it is exceptionally robust.

Options Available

Connectors
Non-return valve
Metallic lid
Upstream and downstream stop valves

(*) DN 50 meter = PN10

UK & Ireland Enquiries
Sensus Metering Systems
11 The Quadrangle, Abbey Park,
Romsey, Hampshire SO51 9DL UK
T: +44 (0) 1794 526100
F: +44 (0) 1794 526101
Email: info.gb@sensus.com

www.sensus.com

International Enquiries
Sensus Metering Systems GmbH Ludwigshafen
Industriestrasse 16,
67063 Ludwigshafen Germany
T: +49 (0) 621-6904-0
F: +49 (0) 621-6904-1409
Email: info.int@sensus.com

www.sensus.com

 **SENSUS**
METERING SYSTEMS

Accuracy

The balanced force and upward movement of the water in the injection box means that the starting flow rate is small.

Reliability

The XN meter has high protection against corrosion, shock, pressure and heat due to the use of high quality copper alloy (type UZ-Y 30) and thick mineral glass.

The XN can remain submerged permanently as it is completely sealed.

The internal components, made of high-grade polymers, have been designed to preserve the initial performance of the meter:

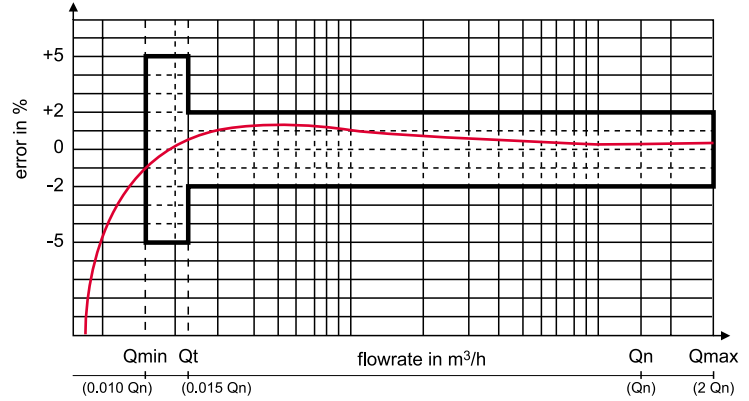
- the turbine is supported by sapphire which prevents shaft wear
- the surface finish of the injection box prevents deposits forming
- the double filtration provided by the pipe strainer and seat filter prevents foreign bodies passing through the mechanism.

Legibility

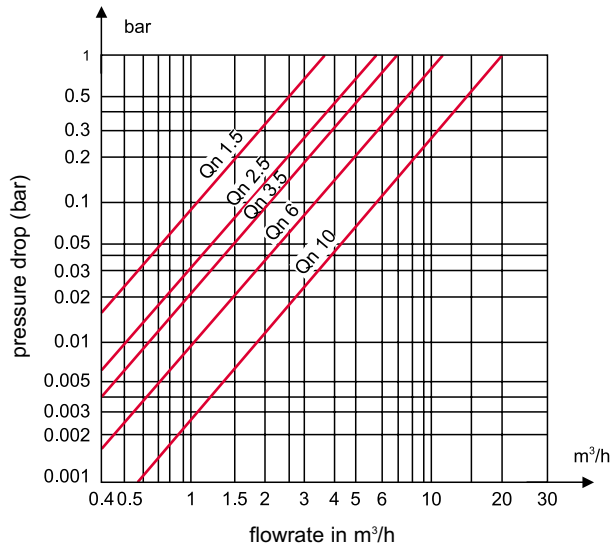
The 5-drum display has large black digits (5mm high) on a white background. This means the meter can be read from a distance of over one meter.

Needles on the dial show sub-multiples of a m³. There is no risk of condensation with the wet dial. This is protected by a very thick (13 mm) scratch-proof mineral glass cover.

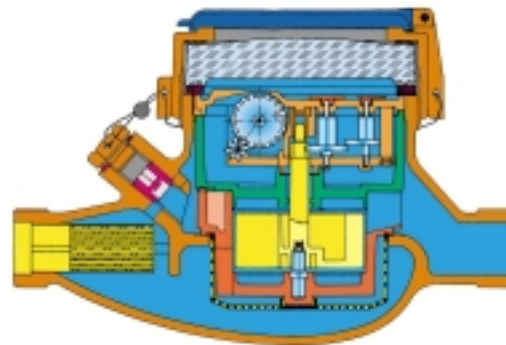
Typical Accuracy Curve



Typical Pressure Drop Curve



Cross Section



Compliance

The XN meter complies with:

- ISO 4064
- the requirements of recommendation n°49 of the OIML
- EEC directive 75/33.

Pattern Approval No.

The XN meter has received EEC pattern approval for horizontal operation under number:

D.86	Qn 1.5, 2.5, 3.5, 6 and 10
6.131.96	Class 6

Marking

Two arrows on the body show the direction of flow.

The year of manufacture and the individual manufacturing number are engraved on the head.

The manufacturer's name, the type of the meter, the nominal flowrate, the metrological class and the EC pattern approval number are printed on the dial.

Installation and maintenance instructions

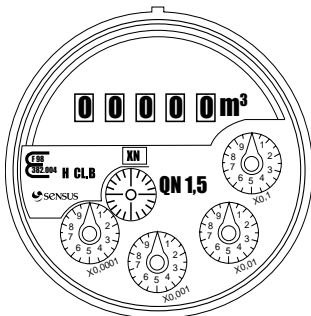
The XN meter must be installed in the horizontal position only, dial turned upwards, in a low point of pipeline with the orientation arrows correctly aligned with the direction of flow.

Before fitting the water meter, all the pipework must be flushed out to remove all impurities.

An upstream stop valve is recommended to allow installation and removal of the meter.

When connecting the meter with the water network, the upstream valve must be opened slowly in order fill the meter with water smoothly.

No special maintenance is required.



Technical characteristics

Metrological characteristics - EEC directive n° 75/33

Nominal diameter	DN	mm	15	20	25	30	40	50
Nominal flowrate	Qn	m³/h	1.5	2.5	3.5	6	10	15
Maximum flowrate	Qmax	m³/h	3	5	7	12	20	30
Minimum flowrate ±5%	Qmin	l/h	30	50	70	120	200	300
Transitional flowrate ±2%	Qt	l/h	120	200	280	480	800	1200

Operational characteristics

Nominal diameter	DN	mm	15	20	25	30	40	50
Nominal flowrate	Qn	m³/h	1.5	2.5	3.5	6	10	15
Starting flow		l/h	5	8	15	15	25	
Totalizer	maximum registration	m³	10 ⁵ (99999)	10 ⁵ (99999)	10 ⁵ (99999)	10 ⁵ (99999)	10 ⁵ (99999)	10 ⁵ (99999)
	lowest reading unit	l	0.05	0.05	0.05	0.05	0.05	0.05
Nominal pressure	PN	bar	16	16	16	16	16	10

Dimensions and Weights

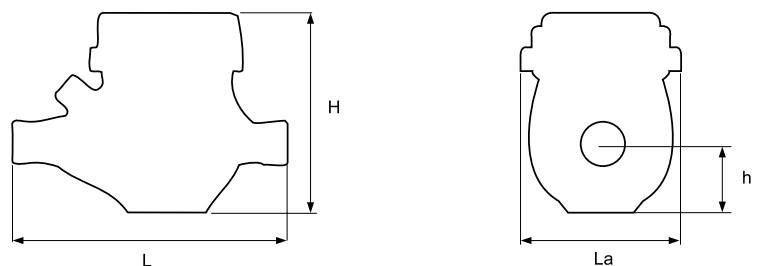
Nominal diameter	DN	mm	15	20	25	30	40	50
Nominal flowrate	Qn	m³/h	1.5	2.5	3.5	6	10	15
Length	L	mm	165 ⁽¹⁾	190	260	260	300	270
Width	La	mm	96	96	103	103	131	145
Height	H	mm	113	112	133	133	160	204
Height	h	mm	34	36	46	46	62	83
Thread of pipe	diameter	inch	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2" ⁽²⁾
		mm	26.44	33.25	41.91	47.80	59.61	75.18
	pitch	mm	1.814	2.309	2.309	2.309	2.309	2.309
Weight		kg	1.36	1.6	2.3	2.7	5.4	9

(1) also available in lengths 145 and 170 mm.

(2) Also available with flange ends

Drilling acc. PN10/16
 Drilling circle dia. = 125 mm
 Hole dia. = 18 mm
 Number of holes = 4
 Flange width = 165 mm
 Weight = 13,8 kg

Dimensions



XN

Operating Conditions

The pulser emits pulses with a duration proportional to the flow rate. Possibly, when the meter is at rest, a continuous electrical contact may occur.

It is therefore necessary to make sure that the equipment connected to the pulser can support a continuous signal.

If not, the equipment must be protected by suitable relays.