Building technology

AXONIC

Ultrasonic volume measuring meter
for hot water up to 130°C
DN 65, 80, 100, 150

Your benefits

- Robust, high grade wear resistant materials:
  Excellent measuring stability and reliability
- Outstanding metrological properties:
  Increased cost effectiveness
- Universal applicable with diverse calculators:
  Meets various requirements also with regard to interfaces
- Integrated intelligence (status and warning messages):
  Simple and quick on-site troubleshooting

Features

- Universal installation position
- Maximum operating pressure PN 16 bar / PN 25 bar
- Temperature up to 130°C
- Rotatable hinged flanges
- 2D-Barcode with Serial No. and meter details
- CE Conformity according to European Measuring Instruments Directive (MID)
- Pulser with 3m cable
  (Standard pulse value: DN 65–100: 10 liters, DN 150: 100 liters)
- Environmental class C, Accuracy class 2

Application

- As a replacement for mechanical impeller heat meters
- Metering of heat and/or cooling consumption in building management

Options

- Pulser with 10m cable

Technical Data

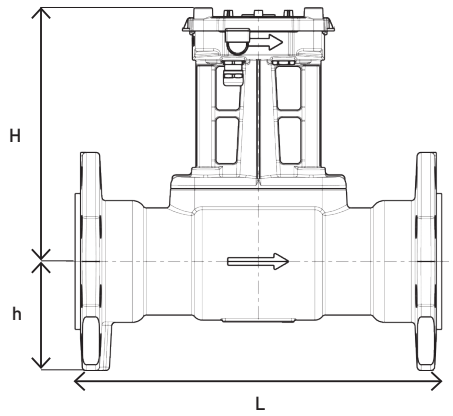
Execution			AXONIC							
Nominal diameter	DN	mm	65	65	80	80	100	100	150	150
Operating pressure	PN	bar	16	25	16	25	16	25	16	25
Nominal flow rate	q_p	m³/h	25	25	40	40	60	60	150	150
Maximum flow rate	q_s	m³/h	50	50	80	80	120	120	300	300
Minimum flow rate	q_i	m³/h	0,1	0,1	0,16	0,16	0,24	0,24	0,6	0,6
Starting flow		app. m³/h	0,04	0,04	0,08	0,08	0,1	0,1	0,3	0,3
Kvs-value		m³/h	80	80	110	97	160	160	390	390
Temperature range		°C	1...130	1...130	1...130	1...130	1...130	1...130	1...130	1...130
Measuring range	q_i/q_p		1:250	1:250	1:250	1:250	1:250	1:250	1:250	1:250

Dimensions and weights			AXONIC							
Length	L	mm	200	300	225	300	360[1]	360	500[2]	500
Height	H	mm	204	204	209	209	219	219	244	244
Height	h	mm	93	93	100	100	111	118	143	150
Flange external dimension	D	mm	185	185	200	200	220	235	285	300
Hole circle diameter	L	mm	145	145	160	160	180	190	240	250
Number of screws		Pcs.	4	8	8	8	8	8	8	8
Weight		app. kg	8	9	9,6	10,4	14	16	28	31

[1] Also supplied in length 250mm

[2] Also supplied in length 300mm

Dimension Diagram



Materials

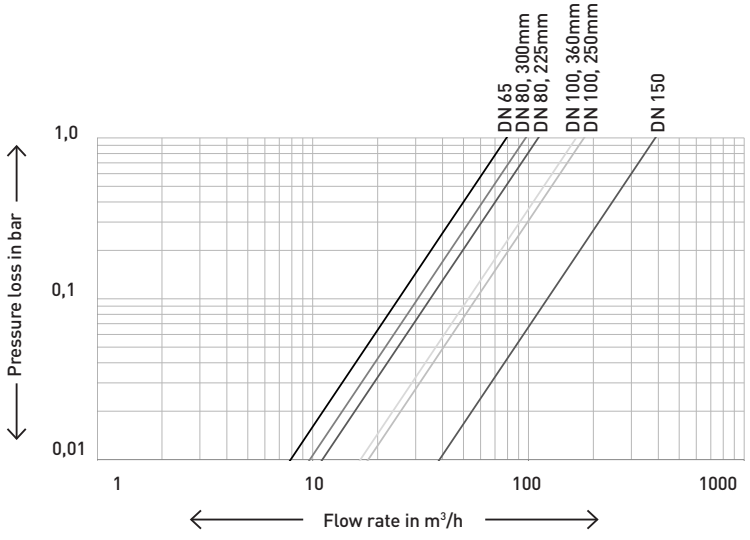
Body: Bronze

Installation

Pipeline: horizontal —
vertical |

Meter head: upwards
sideways
downwards

Typical Head Loss Curve



Installation - Recommendation

A straight inlet or outlet section is not required for AXONIC ultrasonic volume measuring meters. However, an inlet and outlet section of at least 5 x DN is recommendable if sufficient space is available.

Installation recommendations
The choice of installation site must ensure air cannot collect in the meter.

Technical data Pulse generator

Switching element		
Type		Passive Open collector
Switching voltage	U_{max}	30V DC
Switching current	I_{max}	27mA
Switching capacity	P_{max}	0,81W
Pulse length		100ms

Pulse value table

Pulse generator	DN 65...100 1 Pulse = ... Liters	DN 150 1 Pulse = ... Liters
Pulse	10	100

Installation – Recommendations

Pulse transmission interference
In case of interference during the pulse transmission between the pulse generator and the pulse receiver, (i.e. cable is in the same duct as power cable), we recommend shielded and twisted cables.

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