

WP-QF

Turbine Water Meter
for cold water up to 40 °C
for hot water up to 130 °C
PN25/40, DN 50 ... DN 300



For cold water up to 40 °C

For hot water up to 130 °C

Special Features

- Sealed register water proof (IP 67)
- Sealed register may be rotated through 360°
- Up to 3 pulsers can be fitted without breaking the meter seal
- Maximum corrosion protection by powder coating
- Not affected by external magnetic fields
- Interchangeable measuring element
- Performance data better than class B

Application

Measuring of cold water up to 40 °C (overloadable up to 50 °C) in water supply pipelines with pressure up to 25/40 bar

Special Features

- Sealed register water proof (IP 67)
- Sealed register may be rotated through 360°
- Up to 3 pulsers can be fitted without breaking the meter seal
- Maximum corrosion protection by powder coating
- Not affected by external magnetic fields
- Interchangeable measuring element

Application

Flow sensor for heat meters
Measuring of hot water up to 130 °C (overloadable up to 150 °C) in heating systems with pressure up to 25/40 bar

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

Pattern Approval Sign

D 79
Cold Water Meter
Nominal Diameter
DN 50 ... 100

6.132.02
Marking:
Metrological class B
30 °C

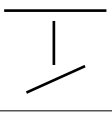
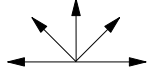
D 80
Cold Water Meter
Nominal Diameter
DN 150 ... 300

6.132.01
Marking:
Metrological class B
30 °C

22.16
81.20
Hot Water Meter
Nominal Diameter
DN 50 ... 200

Marking:
Metrological class A

Installation

Pipe	horizontal vertical inclined	
Meter head	upwards sideways	

Installation Requirements

- Unrestricted straight pipe in front of the meter 3 x DN
- No abrupt restrictions directly behind the meter

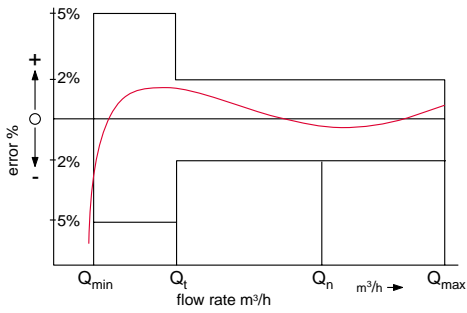
Performance Table 40 °C

Nominal Diameter	DN	50	80	100	150	200	250	300	
Size of meter (acc. to EEC)	Q _n	15	40	60	150	250	400	600	
Q _{max}	Maximum peak flow (few minutes)	m ³ /h	80	200	250	600	800	1200	2000
Q _n	continuous flow ± 2%	m ³ /h	40	120	180	400	550	750	1000
Q _t	transitional flow ± 2%	m ³ /h	1.0	1.0	2.5	4.0	6.0	12	15
Q _{min}	minimum flow ± 5%	m ³ /h	0.5	0.6	1.2	2.75	4.0	6.0	12
	starting flow	m ³ /h	0.2	0.25	0.3	1.7	1.8	3.0	9.0

Performance Table 130 °C

Nominal Diameter	DN	50	80	100	150	200	250	300	
Size of meter (acc. to EEC)	Q _n	15	40	60	150	250	400	600	
Q _{max}	Maximum peak flow (few minutes)	m ³ /h	30	90	140	300	500	1000	1200
Q _n	continuous flow ± 3%	m ³ /h	15	45	70	150	250	500	600
Q _t	transitional flow ± 3%	m ³ /h	1.8	3.2	4.8	12	20	45	50
Q _{min}	minimum flow ± 5%	m ³ /h	1.0	1.4	2.0	4.5	8	25	30
	starting flow	m ³ /h	0.25	0.35	0.6	1.7	2.0	10	15

Typical Accuracy Curve



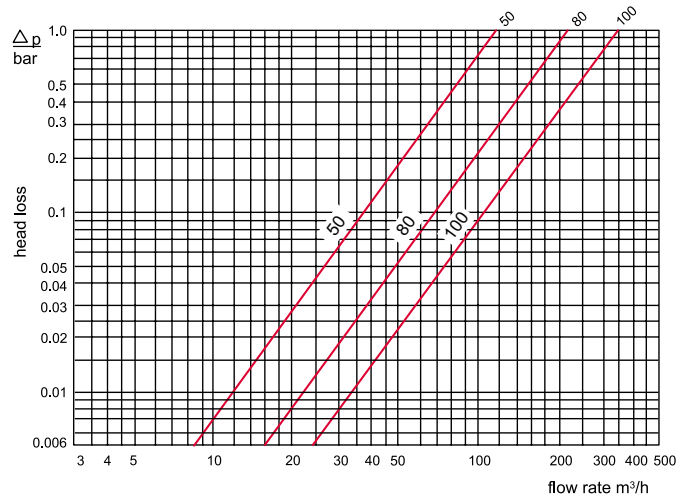
Q_{max} = maximum peak flow

Q_n = continuous flow

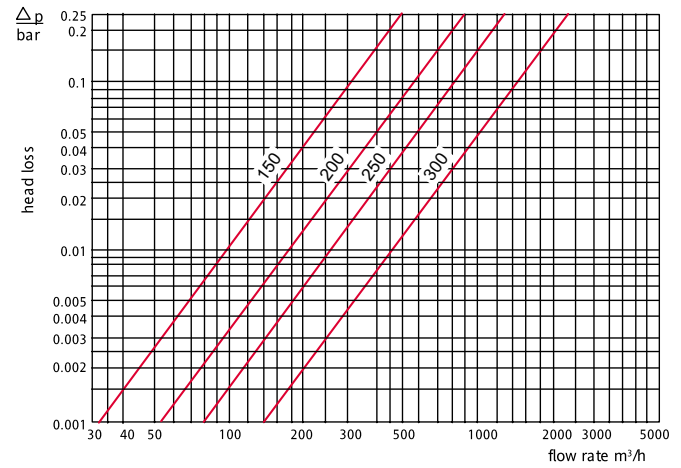
Q_t = transitional flow $\pm 2\%$

Q_{min} = minimum flow $\pm 5\%$

Typical Head Loss Curve

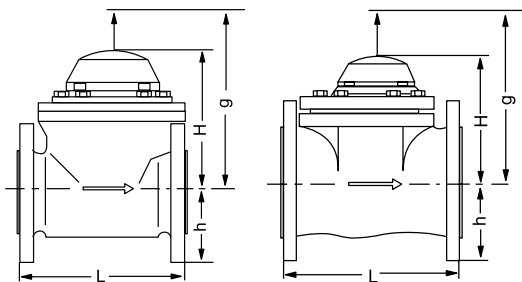


DN 50 ... 125



DN 150 ... 300

Dimension Pictures



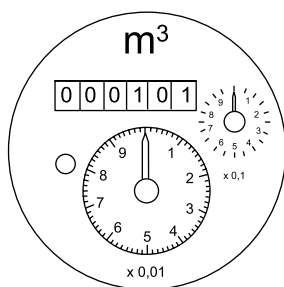
DN 50 ... DN 100

DN 150 ... DN 300

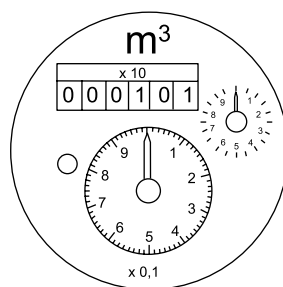
Dimensions and Weights

Nominal Diameter	DN	50	80	100	150	200	250	300
Size of meter (EEC)	Q_n	15	40	60	150	250	400	600
Working pressure	PN bar	40	40	40	40	40	25	25
Overall length	L mm	200	225	250	300	350	450	500
Height	H mm	175	175	175	233	233	321	321
	h mm	82	100	110	135	162	194	219
	g mm	360	360	360	470	470	680	680
Weight	meter kg	15	18	24	43	57	118	154
	meas. unit kg	3	3	3	9	9	22	22
	body kg	12	15	21	34	48	96	132

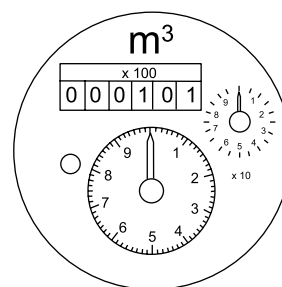
Dials



DN 50 ... DN 100



DN 150 ... DN 250



DN 300

Pulse Values

Nominal Diameter	DN		50 ... 125 1 pulse = ...	150 ... 250 1 pulse =	300 1 pulse = ...
Cold water meter	Standard	R 01	1 m ³ 0.1 m ³	10 m ³ 1 m ³	100 m ³ 10 m ³
Hot water meter	Standard	R 02	0.25 m ³ 0.1 m ³	2.5 m ³ 1 m ³	25 m ³ 10 m ³
	with special register	R 02	0.25 m ³ 0.025 m ³	2.5 m ³ 0.25 m ³	25 m ³ 2.5 m ³
Cold water meter		OP 01 OP 03	0.001 m ³ 0.01 m ³	0.01 m ³ 0.1 m ³	0.1 m ³ 1.0 m ³
Hot water meter		OP 02 OP 04	0.001 m ³ 0.01 m ³	0.01 m ³ 0.1 m ³	0.1 m ³ 1.0 m ³

Order Text

Quantity:

Specification: WP-QF

Nominal Diameter: DN

Size of meter: Q_n

Working temperature: 40 °C / 130 °C

Working pressure: PN 25 / 40

Metrological class: A / B

Overall length L: mm

Pulse values: / m³

Flange drilling: acc. to DIN 2501, PN

Certification: with / without

Order Example

Quantity: 2

Specification: WP-QF

Nominal Diameter: DN 50

Size of meter: Q_n 15

Working temperature: 40 °C

Working pressure: PN 25

Metrological class: B

Overall length L: 200 mm

Pulse values: 0.1 / 1 m³

Flange drilling: acc. to DIN 2501, PN 25

Certification: with

WP QF