

# WP-QF

Turbine Water Meter  
for cold water up to 40 °C  
for hot water up to 130 °C  
PN16, DN 50 ... DN 300



## Main characteristics

### For cold water up to 40 °C

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

## Main characteristics

### For hot water up to 130 °C

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

# Pattern Approval Sign

**Cold Water Meter**  
 Nominal Diameter  
 DN 200 ... 300

D 80

6.132.01

Marking:  
 Metrological class B  
 30 °C

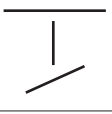
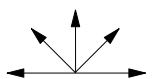
**Flow Sensor**  
 Nominal Diameter  
 DN 50 ... 200

22.16

82.04

Marking:  
 Metrological class B

## 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

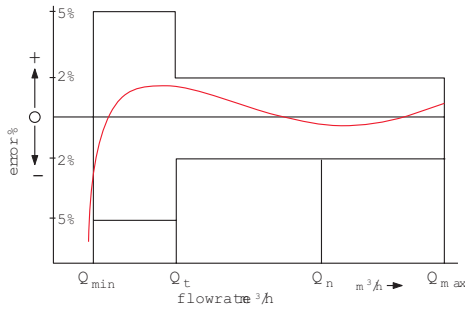
Nominal Diameter		DN	200	250	300
Size of meter (acc. to EEC)		Q <sub>n</sub>	250	400	600
Q <sub>max</sub>	Maximum peak flow (few minutes)	m <sup>3</sup> /h	800	1200	2000
Q <sub>n</sub>	continuous flow ± 2%	m <sup>3</sup> /h	550	750	1000
Q <sub>t</sub>	transitional flow ± 2%	m <sup>3</sup> /h	6.0	12	15
Q <sub>min</sub>	minimum flow ± 5%	m <sup>3</sup> /h	4.0	6.0	12
	starting flow	m <sup>3</sup> /h	1.8	3.0	9.0

For DN 50-150 please see MeiStream PN 40

## Performance Table 130 °C

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

## Typical Accuracy Curve



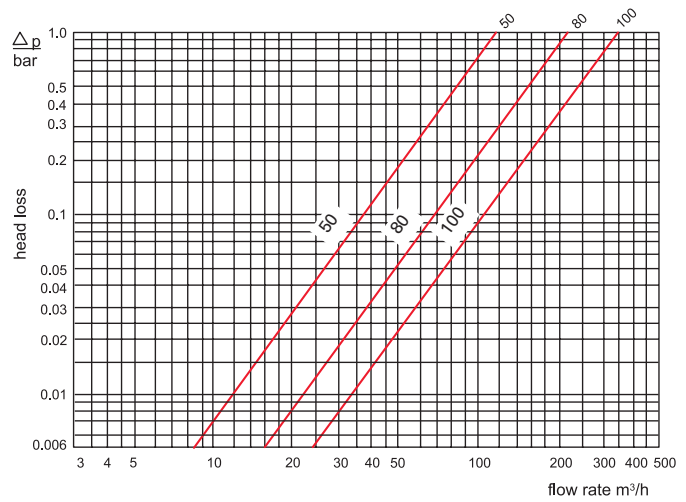
$Q_{max}$  = maximum peak flow

$Q_n$  = continuous flow

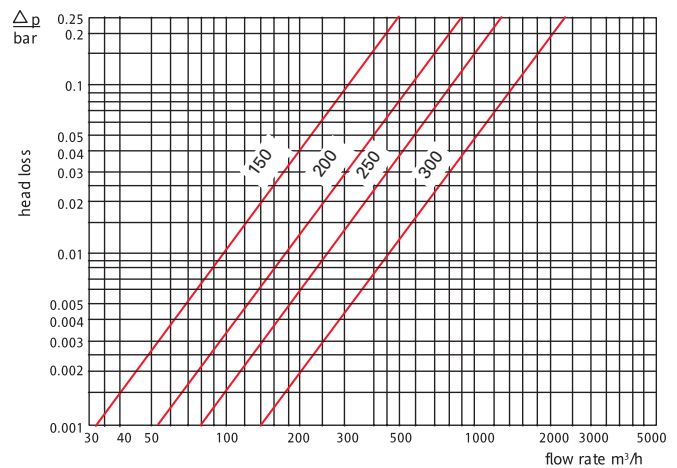
$Q_t$  = transitional flow  $\pm 2\%$

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

## Typical Head Loss Curve

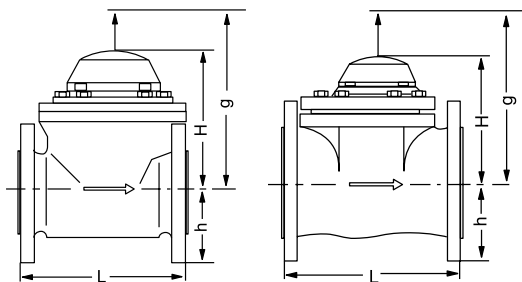


DN 50 ... 100



DN 150 ... 300

## Dimension Pictures



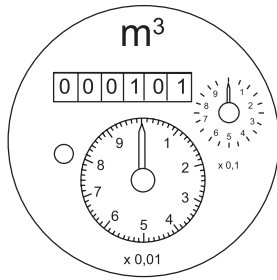
DN 50 ... DN 100

DN 150 ... DN 300

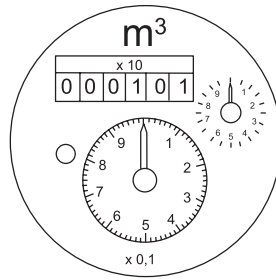
## Dimensions and Weights

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
Height	H	mm	175	175	175	233	233	321
	h	mm	82	100	110	135	162	194
	g	mm	360	360	360	470	470	680
Weight	meter	kg	15	18	24	43	57	118
	meas. unit	kg	3	3	3	9	9	22
	body	kg	12	15	21	34	48	96

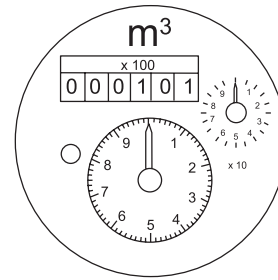
## Dials



DN 50 ... DN 100



DN 150 ... DN 250



DN 300

## Pulse Values

Nominal Diameter	DN		50 ... 100 1 pulse $\hat{=}$ ...	150 ... 250 1 pulse $\hat{=}$ ...	300 1 pulse $\hat{=}$ ...
Cold water meter	Standard	R 01		10 m <sup>3</sup> 1 m <sup>3</sup>	100 m <sup>3</sup> 10 m <sup>3</sup>
Hot water meter	Standard	R 02	0.25 m <sup>3</sup> 0.1 m <sup>3</sup>	2.5 m <sup>3</sup> 1 m <sup>3</sup>	25 m <sup>3</sup> 10 m <sup>3</sup>
	with special register	R 02	0.25 m <sup>3</sup> 0.025 m <sup>3</sup>	2.5 m <sup>3</sup> 0.25 m <sup>3</sup>	25 m <sup>3</sup> 2.5 m <sup>3</sup>
Cold water meter		OP 01 OP 03		0.01 m <sup>3</sup> 0.1 m <sup>3</sup>	0.1 m <sup>3</sup> 1.0 m <sup>3</sup>
Hot water meter		OP 02 OP 04	0.001 m <sup>3</sup> 0.01 m <sup>3</sup>	0.01 m <sup>3</sup> 0.1 m <sup>3</sup>	0.1 m <sup>3</sup> 1.0 m <sup>3</sup>

## Available Designs

### COSMOS WP DN 200 ... DN 300 • 40 °C / PN 25/40

Diameter Nominal	DN	200	250 *)	300 *)
Overall length L	mm	350	450	500
Order no.		827468	828182	828188

For DN 50-150 please see MeiStream PN 40

\* Only PN 25

### COSMOS WP DN 50 ... DN 300 • 130 °C / PN 25/40

Diameter Nominal	DN	50	80	100	150	200	250 *)	300 *)
Overall length L	mm	200	225	250	300	350	450	500
Order no.		828364	827451	827457	827463	827469	828183	828189

\* Only PN 25

## Order Example

WP-QF 50 130 / 40 L= 200 mm — type  
 according to EN 1092 PN 40 — diameter nominal  
 82 83 64 — working temperature  
 — working pressure  
 — overall length  
 — flange drillings  
 — order no.