xylem
Let's Solve Water



WP-Dynamic

Turbine Water Meter for cold water up to 50 °C / PN 16 DN 40 ... DN 300

Main Features

- Hermetically sealed register (IP 68)
- Patented hydrodynamically balanced rotor
- Patented symmetrical calibration adjustment
- Register may be rotated through 360°
- High overload capability
- Pattern approved removable measuring element
- Powder coating affords max. corrosion protection
- Not affected by external magnetic fields

APPLICATIONS

Measurement of high, relatively constant flow rates, e.g. behind pumps

Available options

Up to 3 pulsers (1 x OD, 2 x RD) may be fitted without breaking the approval seal

¼" connection port for pressure sensors

INDORAYA POWER ENERGI

SENSUS
a xylem brand

WP-Dynamic

Turbine Water Meter for cold water up to 50 °C / PN 16 DN 40 ... DN 300

Installation

Pipe	horizontal vertical inclined	
Meter head	upwards sideways	

Installation Requirements

Unrestricted straight pipe upstream of the meter 3 x DN

No abrupt restrictions downstream the meter

Performance Data

Performance data WP-Dynamic 50 °C

Nominal Diameter			DN	40	50	65	80	100	125	150	200	250	300
Q_{max}	maximum peak flow once in life time 24 h Q_{max} or 5 min. 1.2 x Q_{max}	(±2%)	m³/h	60	90	120	200	300	350	600	1200	1600	2000
Q_n	continuous flow	(±2%)	m³/h	40	50	70	120	230	250	450	800	1250	1400
Q_t	transitional flow	(±2%)	m³/h	0.8	0.7	0.8	0.8	1.8	2.0	4.0	6.0	11.0	15.0
Q_{min}	minimum flow	(±5%)	m³/h	0.30	0.30	0.40	0.50	0.80	1.00	1.8	4.0	6.0	12.0
	starting flow		m³/h	0.15	0.15	0.20	0.25	0.25	0.5	1.0	1.5	3.0	8.0

Performance data acc. to OIML R-49 resp. ISO 4064:2014 specification

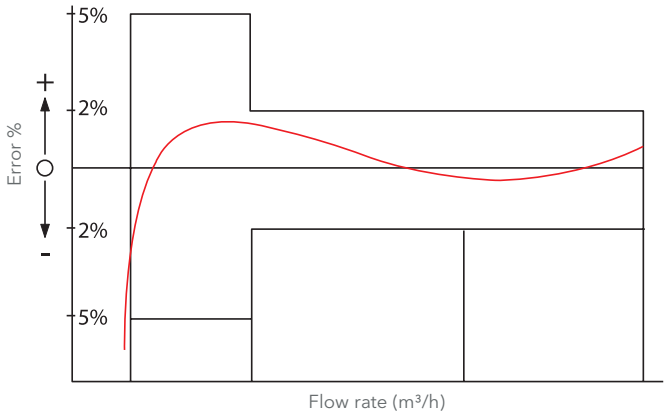
Nominal Diameter		DN	40	50	65	80	100	125	150	200	250	300
Size of meter (acc. to EEC)		Qn	10	15	25	40	60	100	150	250	400	600
Q_4	maximum peak flow short time	m³/h	31.25	50	78.75	125	200	312.5	500	787.5	1250	2000
Q_3	continuous flow	m³/h	25	40	63	100	160	250	400	630	1000	1600
Q_2	transitional flow	m³/h	0.63	0.64	1.01	1.6	2.6	4	6.4	10.1	16	40.6
Q_1	minimum flow	m³/h	0.4	0.4	0.63	1	1.6	2.5	4	6.3	10	25.4
	Ratio		63	100	100	100	100	100	100	100	100	63

INDORAYA POWER ENERGI

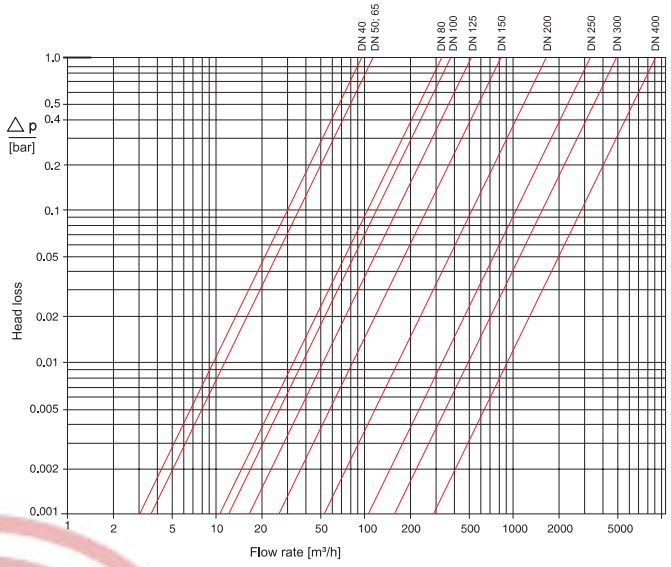
WP-Dynamic

Turbine Water Meter for cold water up to 50 °C / PN 16 DN 40 ... DN 300

Typical Accuracy Curve



Typical Head Loss Curve



Q_4 = maximum peak flow

Q_3 = continuous flow

Q_2 = transitional flow ±2%

Q_1 = minimum flow ±5%

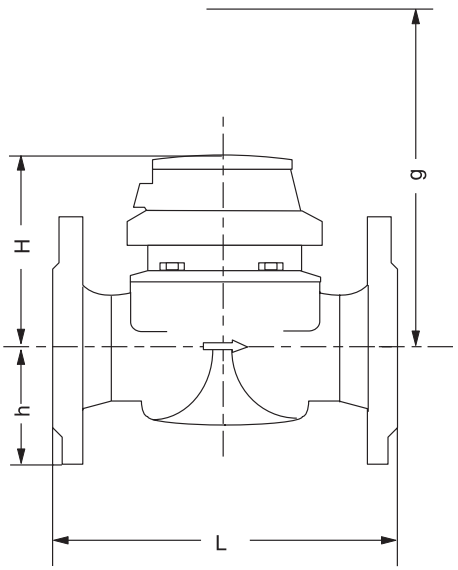
Dimensions and Weights

Nominal Diameter			DN	40	50	65	80	80	100	125	150	200	250	300
Dimension	overall length	L*)	mm	220	200	200	200	225	250	250	300	350	450	500
	height	H	mm	120	120	120	150	150	150	160	177	206	231	256
		h	mm	69	73	85	96	95	105	118	135	162	194	226
		g	mm	200	200	200	270	270	270	280	356	441	466	491
Weights	meter		kg	7.4	7.7	10.0	13.6	14.0	18.0	20.5	35.5	50.5	72.3	99.3
	measuring element		kg	1.4	1.4	1.4	3.0	3.0	3.0	3.0	5.5	7.5	7.5	7.5
	body		kg	6.0	6.3	8.6	10.6	11.0	15.0	17.5	30.0	43.0	63.8	91.8

*) Other overall lengths on request

INDORAYA POWER ENERGI

Dimensional Diagram



Materials

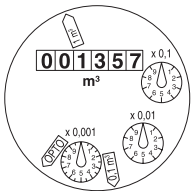
Body	PN16	cast iron
Measuring element		plastic
Rotor		plastic
We also use the following materials		brass, stainless, steel

WP-Dynamic

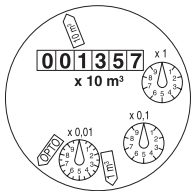
Turbine Water Meter for cold water up to 50 °C / PN 16 DN 40 ... DN 300

Dials

Diameter Nominal DN	Smallest Reading m^3	Max. Reading m^3
50 ... 125	0.0005	1 000 000
150 ... 300	0.005	10 000 000



DN 40 ... DN 125



DN 150 ...DN 300

Pulse Values

Pulser		pulse value DN 40 ... DN 125	pulse value DN 150 ... 300
RD 01		0.1 and 1 m^3 alternatively 0.01 and 1 m^3	1 and 10 m^3 alternatively 0.1 and 10 m^3
OD 01		0.001 m^3	0.01 m^3
OD 03		0.01 m^3	0.1 m3

Available Variants

Diameter Nominal	DN	40	50	65	80	80	100
Overall length *)	mm	220	200	200	200	225	250
Order no.	PN16	828593	828595	828597	828599	828601	828603

Diameter Nominal	DN	125	150	200	250	300
Overall length *)	mm	250	300	350	450	500
Order no.	PN16	828605	828607	828717	828719	828743

*) Other overall lengths on request

INDORAYA POWER ENERGI

Order Example

WP-Dynamic, DN 50, 50/16, L = 200 mm, 1/0.1 m^3
drilled according to EN 1092 PN 16
828595

- type
- diameter nominal
- working temperature
- pressure rate
- overall length
- pulse values
- flange drilling
- order no.

xylem

quality austria SYSTEM CERTIFIED ISO 9001:2015 No.03496/0

UK & Ireland Inquiries | **Sensus UK Systems Ltd.** | 3 Lindenwood Crockford Lane, Chineham Business Park | Basingstoke RG24 8QY UK | +44 1256 372800 | info.gb@xyleminc.com
International Inquiries | **Sensus GmbH Hannover** | Meineckestr. 10 | 30880 Laatzen | Germany | +49 5102 743177 | info.int@xyleminc.com

©2020 Sensus. All products purchased and services performed are subject to Sensus' terms of sale, available at sensus.com. Sensus reserves the right to modify these terms and conditions in its own discretion. The Sensus logo and other Sensus products or services referenced are registered trademarks of Sensus.

This document is for informational purposes only, and SENSUS MAKES NO EXPRESS WARRANTIES IN THIS DOCUMENT. FURTHERMORE, THERE ARE NO IMPLIED WARRANTIES, INCLUDING WITHOUT LIMITATION, WARRANTIES AS TO FITNESS FOR A PARTICULAR PURPOSE AND MERCHANTABILITY. ANY USE OF THE PRODUCTS THAT IS NOT SPECIFICALLY PERMITTED HEREIN IS PROHIBITED.