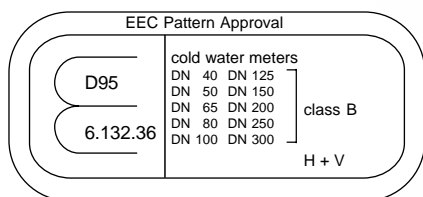
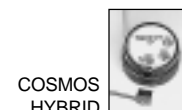


Turbine Water Meter COSMOS WPD DN 40 ... DN 300

for cold water up to 50 °C



Prepared for
electronic registers



Special Features

- Hermetically sealed register (IP 68)
- Hydrodynamically balanced rotor (Meinecke Patent)
- Symmetrical calibration adjustment (Meinecke Patent)
- Register may be rotated through 360°
- High overload capability
- Pattern approved removable measuring element
- Powder coating affords max. corrosion protection

Options

- May be equipped with 3 different electronic registers (see leaflet ML 3910 e - 3930 e)
- Up to 3 pulsers (1 x Opto OD, 2 x Reed RD) may be fitted without breaking the approval seal
- 1/4" connection port for pressure sensors

Application

- Measuring of cold water up to 50 °C

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

! MEINECKE Cold Water Meters
pressure rate PN 40
■ please see leaflet ML 5050 e



Quality Management System
DQS-certified according to DIN ISO 9001,
Reg.-No. 2173-02
Laboratory Accreditation according to DIN EN 45001
DAR Registration No. LED-P-08.001



MEINECKE
An Invensys company

ML 3000 e

Technical Data

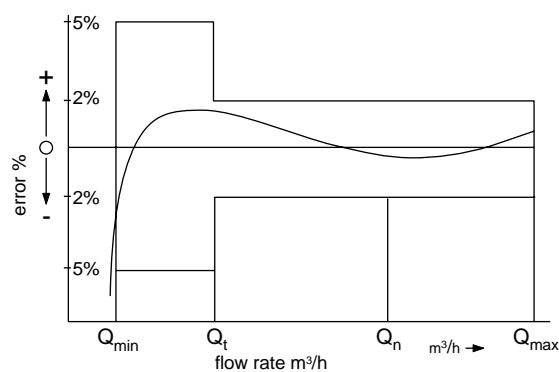
Performance Table COSMOS WPD

Size of meter	DN	40	50	65	80	100	125	150	200	250	300	
Q_{max}	maximum peakflow once in life time 24 h Q_{max} or 5 min. $1.2 \times Q_{max}$	m^3/h	60	90	120	200	300	350	600	1200	1600	2000
Q_n	continuous flow ($\pm 2\%$)	m^3/h	40	50	70	120	230	250	450	800	1250	1400
Q_t	transitional flow ($\pm 2\%$)	m^3/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 ($\pm 5\%$)	m^3/h	0.30	0.30	0.40	0.50	0.80	1.00	1.8	4.0	6.0	12.0
	starting flow	m^3/h	0.15	0.15	0.20	0.25	0.25	0.5	1.0	1.5	3.0	8.0

Performance Table according to EEC-specification class B

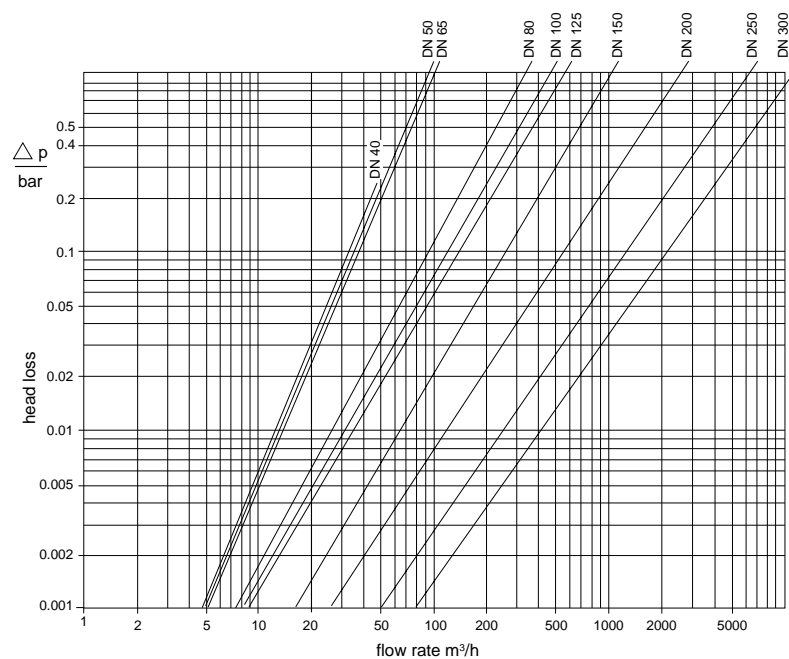
Size of meter	DN	40	50	65	80	100	125	150	200	250	300	
Q_{max}	maximum peakflow short time	m^3/h	30	30	50	80	120	200	300	500	800	1200
Q_n	continuous flow	m^3/h	15	15	25	40	60	100	150	250	400	600
Q_t	transitional flow	m^3/h	3.0	3.0	5.0	8.0	12.0	20.0	30	50	80	120
Q_{min}	minimum flow	m^3/h	0.45	0.45	0.75	1.20	1.80	3.00	4.5	7.5	12.0	18.0

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

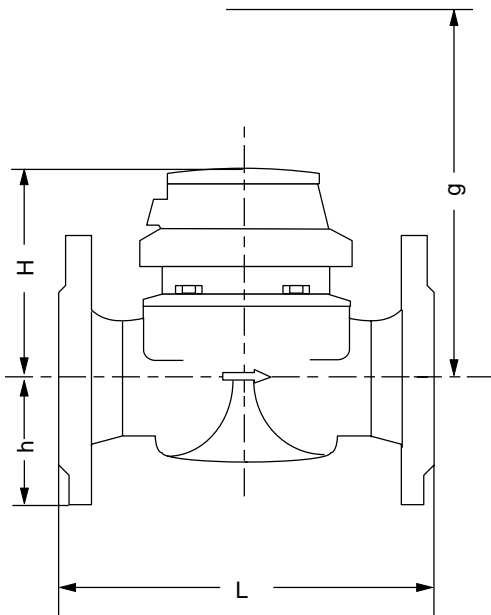


Dimensions and Weights for pressure rating PN 16

Size of meter		DN	40	50	65	80	80	100	125	150	200	250	300
Dimensions	overall length *) L mm		220	311	200	200	413	483	250	500	520	450	500
	height	H mm	120	120	120	150	150	150	160	177	206	231	256
		h mm	69	73	85	95	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

Dimension Picture

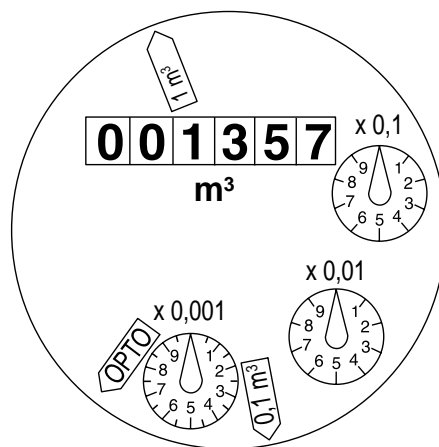


Material

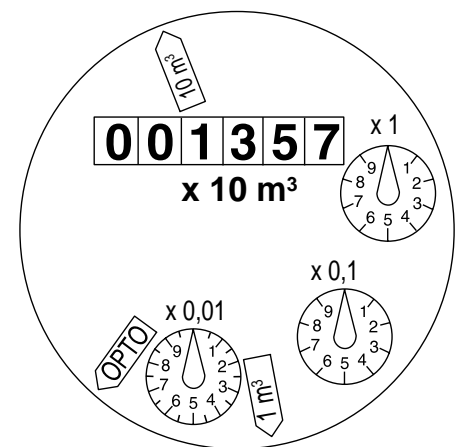
Body	PN16	cast iron
Measuring element		plastic
Rotor		plastic
We also use the following materials		brass stainless steel

Dials



DN 40 ... DN 125



DN 150 ... DN 300



Pulse Values

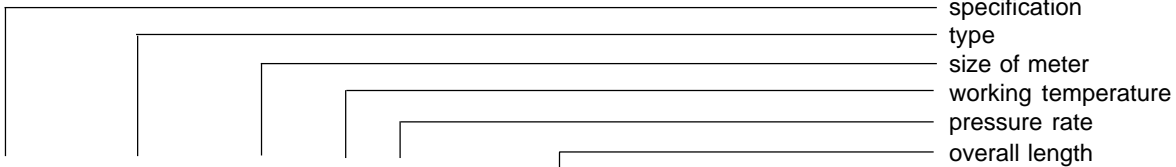
Pulser		pulse value	
		DN 40 ... DN 125	DN 150 ... DN 300
Reed RD 01		0.1 and 1 m ³ alternatively 0.01 and 1 m ³	1 and 10 m ³ alternatively 0.1 and 10 m ³
Opto OD 01		0.001 m ³	0.01 m ³
Opto OD 03		0.01 m ³	0.1 m ³

Available Designs

Size of meter	DN	40	50	65	80	80	100
Overall length *)	mm	220	200	200	200	225	250
Order no.	PN 16	828593	828595	828597	828599	828601	828603
Size of meter	DN	125	150	200	250	300	
Overall length *)	mm	250	300	350	450	500	
Order no.	PN 16	828605	828607	828717	828719	828743	

*) Other overall lengths on request

Order Example

	specification
	type
	size of meter
	working temperature
	pressure rate
	overall length
COSMOS WPD, DN 50, 50/16, L= 200 mm, 1/0.1 m³	pulse values
drilled according to DIN 2501 PN 16	flange drilling
828595	order no.

Subject to change without notice
11.00



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