MeiStream

Bulkmeter for cold potable water DN 40...150

Main characteristics

- Meter with MID pattern approval acc. to annex MI001
- Exchangeable metrological unit with MID pattern approval acc. to annex MI001
- Unique measuring range; $Q_3/Q_1 \geq 100$
- High overload capability
- No straight inlet length necessary (U0D0 acc. to OIML R49 and EN 14154)
- Installation position horizontal and vertical
- Meter body in short (WP) and long (WS) overall length acc. to DIN 19625 and EN 14154 available
- Meter can be submerged; protection class IP68
- Used materials are temperature resistant up to 70 °C
- Register prepared for HRI-Mei pick-up
- Use of optical pulsers type OD is still possible

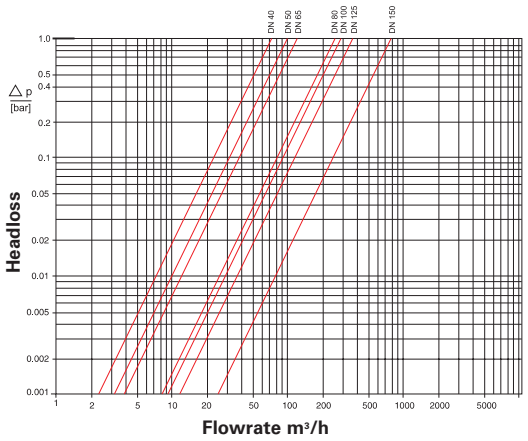
Applications

- Measurement for billing of cold potable water up to 50 °C
- Measurement of high flowrates e.g. in pumped pipes
- Measurement of low flow e. g. in light load periods
- For leakage control

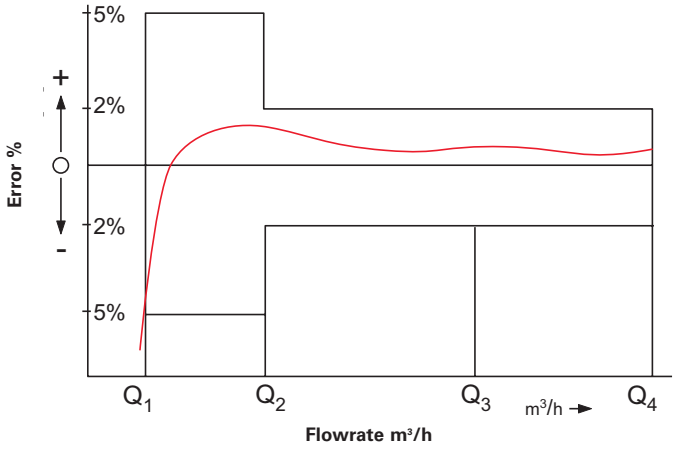
Available options

- Encoder register with different data protocols (M-Bus, MiniBus, Sensus, IEC 1107)
- Version free of copper alloy for aggressive water
- Version for high pressure up to PN 40
- Version for use in hazardous area
- HRI-Mei factory mounted
- ¼" pressure monitoring port

Typical Headloss



Typical Error Curve



Performance Data

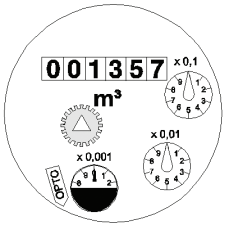
Metrological Data acc. to Manufacturers Values

	Size	DN	40	50	65	80	100	125	150
Q_s	Max. Peak Flow	m³/h	60	90	120	200	300	350	600
Q_3'	Continuous Flow	m³/h	40	50	70	120	230	250	450
Q_{2h}	Transitional Flowrate horizontal acc. to MID	m³/h	0.32	0.4	0.63	0.51	0.81	1.02	1.6
Q_{1h}'	Minimum Flow horizontal	m³/h	0.2	0.15	0.2	0.2	0.3	0.5	0.8
Q_{2v}	Transitional Flowrate vertical acc. to MID	m³/h	0.4	0.51	0.81	0.8	1.28	1.6	3.2
Q_{1v}'	Minimum Flow vertical	m³/h	0.25	0.28	0.4	0.5	0.5	1	1.6
	Starting Flow	m³/h	0.05	0.05	0.07	0.1	0.11	0.15	0.3

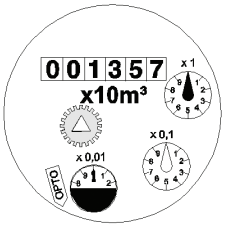
Metrological Data acc. to 2004/22/EC (MID)

	Size	DN	40	50	65	80	100	125	150
Q_4	Overload Flowrate acc. to MID	m³/h	31.25	50	78.75	125	200	200	500
Q_3	Permanent Flowrate acc. to MID	m³/h	25	40	63	100	160	160	400
Q_{2h}	Transitional Flowrate horizontal acc. to MID	m³/h	0.32	0.4	0.63	0.51	0.81	1.02	1.6
Q_{1h}	Minimum Flowrate horizontal acc. to MID	m³/h	0.2	0.25	0.39	0.32	0.51	0.64	1
Q_{2v}	Transitional Flowrate vertical acc. to MID	m³/h	0.4	0.51	0.81	0.8	1.28	1.6	3.2
Q_{1v}	Minimum Flowrate vertical acc. to MID	m³/h	0.25	0.32	0.5	0.5	0.8	1	2
Q_3/Q_1 h	max. Ratio horizontal		125	160	160	315	315	250	400
Q_3/Q_1 v	max. Ratio vertical		63	100	100	125	160	125	200
Q_3/Q_1	Standard Marking		63	100	100	100	100	100	100
Δp	Headloss at Q_3 acc. to EN 14154	bar	0.08	0.18	0.37	0.16	0.34	0.36	0.32

Dial



DN 40...125



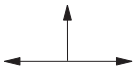
DN 150

Nominal diameter DN	Smallest reading m³	Max. reading m³
40 ... 125	0.0005	999,999.999
150	0.005	9,999,999.99

Pulse Values

Pulser Type		DN 40 ... 125 Pulse Value	DN 150
HRI-Mei (Leaflet see LS 8400)		0.01; 0.05; 0.1 or 1 m^3	0.1; 0.5; 1 or 10 m^3
OD 01 (Leaflet see LB 8300)		0.001 m^3	0.01 m^3
OD 03 (Leaflet see LB 8300)		0.01 m^3	0.1 m^3

Installation

Pipe	horizontal vertical	
Meter head	upwards sideways	

Installation Requirements

- Unrestricted straight pipe upstream 0 x DN
- No abrupt restrictions directly downstream of the meter

Materials

Body	Cast iron (PN16) Ductile iron (PN40)
Measuring element	Plastic
Rotor	Plastic
We also use the following materials	Brass Stainless steel

Available Lengths

Nominal diameter		40	50	65	80	100	125	150
Overall length L WS (DIN / ISO)	mm		270 / 300*	300	300 / 350*	360 / 350*		500
Overall length L WP (DIN / ISO)	mm	220*	200	200*	225 / 200*	250	250*	300

* PN16 only

Approval Mark

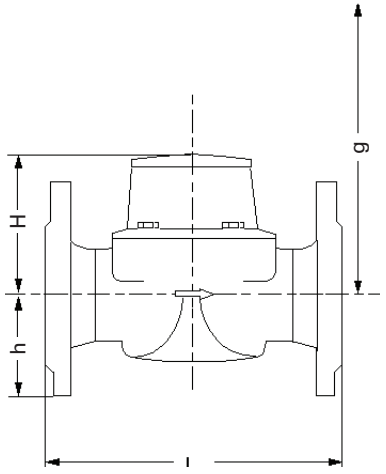
Meter cpl. and exchangeable metrological unit

Marking CE M-XX* 0102

DE-09-MI001-PTB 010

* year of production

Dimension Picture



Dimensions and Weights

Dimensions

Nominal diameter		DN	40	50	50	50	65	65	80	80
Overall length	L	mm	220	200	270	300	200	300	200	225
Height	H	mm	120	120	120	120	120	120	150	150
	h	mm	69	73	73	73	85	85	95	95
Dismantling height	g	mm	200	200	200	200	200	200	270	270

Nominal diameter		DN	80	80	100	100	100	125	150	150
Overall length	L	mm	300	350	250	350	360	250	300	500
Height	H	mm	150	150	150	150	150	160	177	177
	h	mm	95	95	105	105	105	118	135	135
Dismantling height	g	mm	270	270	270	270	270	280	356	356

Weight PN16

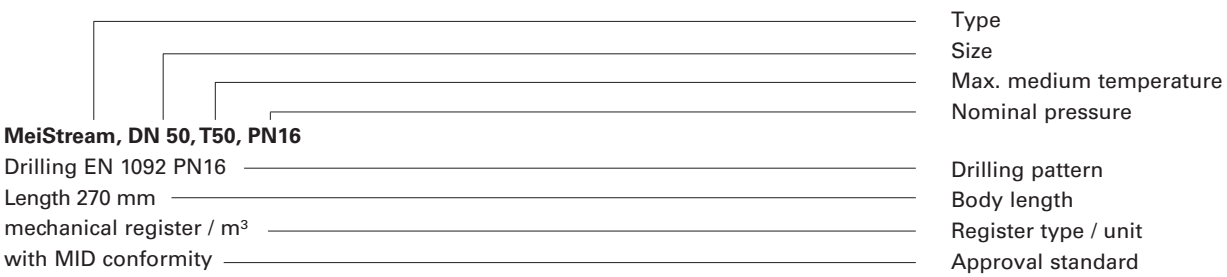
Nominal diameter		DN	40	50	50	50	65	65	80	80
Overall length	L	mm	220	200	270	300	200	300	200	225
Meter cpl.		kg	7.5	7.8	9.6	9.9	10.1	12.0	13.8	14.2
Measuring unit		kg	1.5	1.5	1.5	1.5	1.5	1.5	3.2	3.2
Body		kg	6.0	6.3	8.1	8.4	8.6	10.5	10.6	11.0

Nominal diameter		DN	80	80	100	100	100	125	150	150
Overall length	L	mm	300	350	250	350	360	250	300	500
Meter cpl.		kg	16.3	17.7	18.2	20.0	20.2	20.7	35.9	44.2
Measuring unit		kg	3.2	3.2	3.2	3.2	3.2	3.2	5.9	5.9
Body		kg	13.1	14.5	15.0	16.8	17.0	17.5	30.0	38.3

Weight PN40

Nominal diameter		DN	50	50	65	80	80	100	100	150	150
Overall length	L	mm	200	270	300	225	300	250	360	300	500
Meter cpl.		kg	9.7	10.7	13.1	17	18.6	20.4	22.9	44.6	500
Measuring unit		kg	1.7	1.7	1.7	4	4	4	4	9.3	52.9
Body		kg	8	9	11.4	14.6	14.6	16.4	18.9	35.3	43.6

Order example



UK & Ireland Enquiries
Sensus UK Systems Ltd, International House, Southampton International Business Park,
George Curl Way, Southampton SO18 2RZ UK
T: +44 (0) 1794 526100 F: +44 (0) 1794 526101 Email: info.gb@sensus.com **www.sensus.com**

International Enquiries
Sensus GmbH Hannover, Meineckestraße 10, D-30880 Laatzen Germany
T: +49 (0) 5102-74-0 F: +49 (0) 5102-74-3341 Email: info.int@sensus.com **www.sensus.com**