

ResidiaJet

Single jet water meter with
modular register
and communication module option



Main Characteristics

DN 15 - 20

Single jet dry dial meter with magnetic coupling
Magnetic transmission
Suitable up to 50 °C as a cold water meter
Suitable from 30 °C to 90 °C as a warm water meter
Insensitive to upstream disruptive elements
355° rotating register
High resistance to water impurities
AMR pre-equipped for pulse or radio interface
Available with non return valve

Special features

Protection against external magnetic fields in accordance with EN 14 154, but over the whole measuring range

Modular register; prepared to take an electronic communication module (e.g. M-Bus)

Option Factory fitted with an electronic communication module

Residia-M M-Bus module for systems in accordance with EN 13757-3 (IEC 870/EN 1434-3)

Residia-P Pulse module for digital pulses (e.g. for remote counting)

Legibility

The display on 8 drums (5 for m³, 3 for litres) and 1 pointer ensures perfect readability. The lowest resolution is 0.05 litres. The dial has a central disc whose rotation indicates the water flow. This indicator can be used to reveal a downstream leak.

The ResidiaJet water meter operates in horizontal position and its dry dial can rotate up to 355°. The dial can therefore be easily read under all conditions of use.

Approvals

EC type-examination certificate

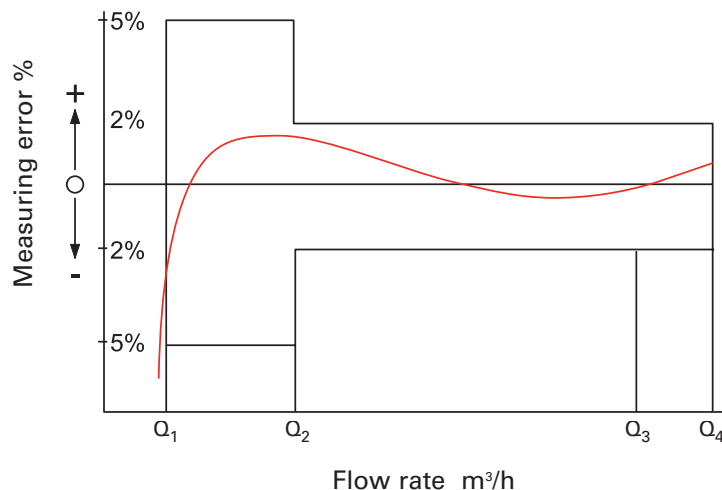
in conformity with

- 2014/32/EU (MID)
- OIML R49:2013
- EN 14154:2005+A2:2011
- ISO 4064:2014

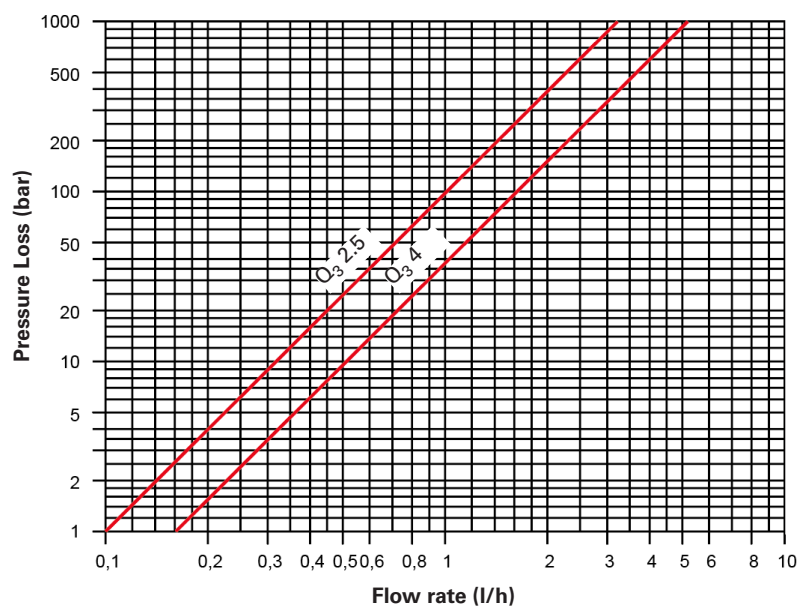
DE-12-MI001-PTB013 (Q₃ 2.5)

DE-16-MI001-PTB008 (Q₃ 4)

Typical Accuracy Curve



Typical Head Loss Curve



Technical characteristics

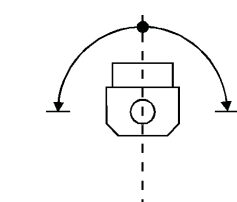
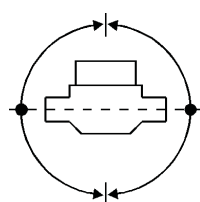
Metrological characteristics

Nominal Size	2.5 m³/h				4 m³/h			
Temperature Range	0.1 °C to 50 °C		30 °C to 90 °C		0.1 °C to 50 °C		30 °C to 90 °C	
Installation Position	Horizontal ¹⁾	Vertical	Horizontal ¹⁾	Vertical	Horizontal ¹⁾	Vertical	Horizontal ¹⁾	Vertical
Flowrate Range:								
Q ₃ /Q ₁	80 ²⁾	40	80 ²⁾	40	80 ²⁾	40	80 ²⁾	40
Q ₂ /Q ₁	1,6							
Q ₁	0.025 m³/h	0.063 m³/h	0.025 m³/h	0.063 m³/h	0.040 m³/h	0.100 m³/h	0.040 m³/h	0.100 m³/h
Q ₂	0.040 m³/h	0.1 m³/h	0.040 m³/h	0.1 m³/h	0.064 m³/h	0.160 m³/h	0.064 m³/h	0.160 m³/h
Q ₃	2.5 m³/h				4 m³/h			
Q ₄	3.125 m³/h				5 m³/h			
Accuracy Class	± 2% (Q ₂ ≤ Q ≤ Q ₄) for water temperatures ≤ 30 °C ± 3% (Q ₂ ≤ Q ≤ Q ₄) for water temperatures > 30 °C ± 5% (Q ₁ ≤ Q ≤ Q ₂)							
Pressure Range	0.3 bar (0.03 MPa) to 16 bar (1.6 MPa)							
Pressure Loss Class ΔP	0.63 bar (at Q ₃)							
Stream pofile sensitivity	U0D0							
Environmental Class	O							
Mechanical Environmental Conditions	M2							
Climatic Environmental Conditions	5 °C to 70 °C							
Electromagnetic Conditions	E2							

1) no top down installation

2) Also available in other ratios

Permissible installation position



Register max. 90° to the side
(not the overhead position)

Metrological performance up to R125 for Q_3 2.5 and R100 for Q_3 4 is achieved only with horizontal installation, register upwards. In vertical installation only R40.

Installation position optional, except overhead position

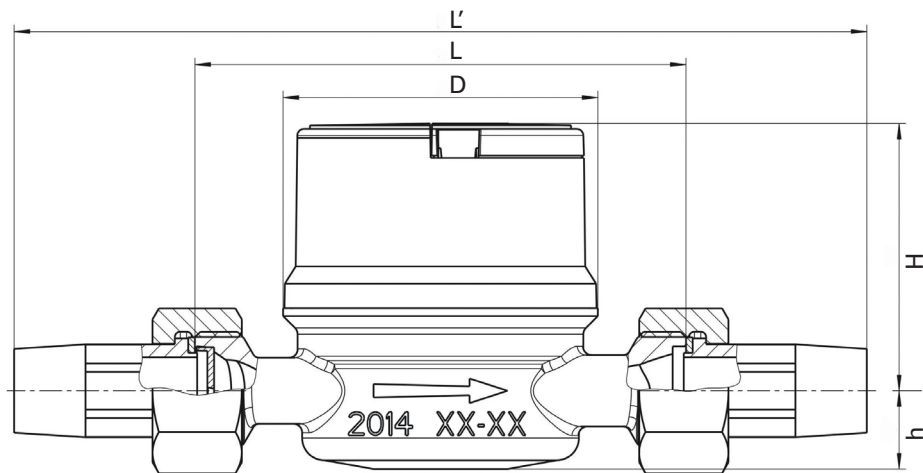
Meter head can be aligned for best readout position

Sizes and weight

Nominal Size	DN	mm	15					20
Length	L	mm	80	110	115		130	130 ¹⁾
Length with connectors	L'	mm	159	189	194	212	209	227
Width	D	mm	70	70	70		70	70
Total height	H	mm	60	60	60		60	60
Height to pipe axis	h	mm	17.5	17.5	17.5		17.5	17.5
Piping dimension		inch	R½"	R½"	R½"		R½"	R¾"
Tail	Diameter		G¾"B	G¾"B	G¾"B	G7/8" x ¾"	G¾"B	G1"
Weight		g	0.41	0.45	0.47		0.48	0.50

1) Also available in 80 mm, 110 mm and 130 mm

Dimensions



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Quality Management System Quality Austria Reg.no. 3496/0



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ResidiaJet-C Qn 1,5

Single jet water meter with composite housing and modular register and communication module option



Main characteristics

Housing made of high grade composite material

Modular register; prepared to take an electronic communication module (e.g. Radio, M-Bus)

Option Factory fitted with an electronic communication module

base r Radio module, fully compatible with "SensusBase" submeter radio system

Residia-M M-Bus module for systems in accordance with EN 13757-3 (IEC 870/EN 1434-3)

Residia-P Pulse module for digital pulses (e.g. for remote counting)

Single jet dry dial meter with magnetic coupling

Protection against external magnetic fields in accordance with EN 14 154, but over the whole measuring range

Suitable up to 30 °C as a cold water meter

Suitable up to 90 °C as a hot water meter

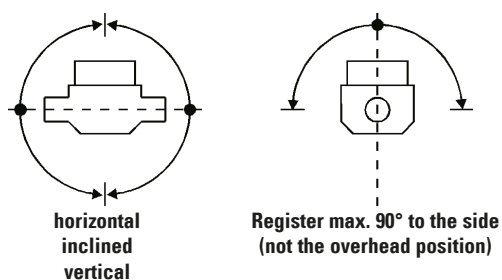
Installation position optional, except the overhead position

Meter head can be aligned for the best readout position

Meter fitted with a push on cowl and hinged plastic protective cover, dark blue



Permissible Installation position



Metrological Class B is achieved with horizontal installation, register upwards

Performance Data

Rated flow rate	Q_n	m^3/h	1.5
Maximum flow rate	Q_{\max}	m^3/h	3,0
Transitional flow rate	Q_t	l/h	120
Minimum flow rate:			
horizontal installation; register upwards	Q_{\min}	l/h	30
vertical installation or register inclined	Q_{\min}	l/h	60
Maximum Working pressure	PN	bar	10
Test pressure	P	bar	16
Pressure loss at Q_{\max}		bar	1
Flow rate at 1 bar pressure loss		m^3/h	3
Maximum water temperature:			
Cold water version		°C	30
Hot water version		°C	90
Display range		m^3	100000
Minimum reading (can only be read off if no module is fitted on)		l	0.1

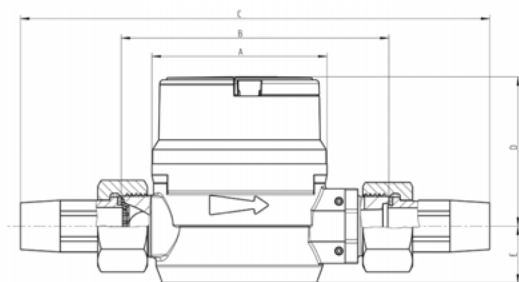
Technical Data for the optional communication module

Base r radio module

Working voltage	DC 3 V (Lithium battery)
Battery life	12 + 1 years
Radio frequency	868,3 MHz
Transmission power	< 5 mW
Transmission frequency	6 times / 24 h
Ambient temperature	
For transport and storage	- 25 ... + 60 °C
In operation	0 ... 55 °C
Enclosure class	IP 65

Other communication modules on request

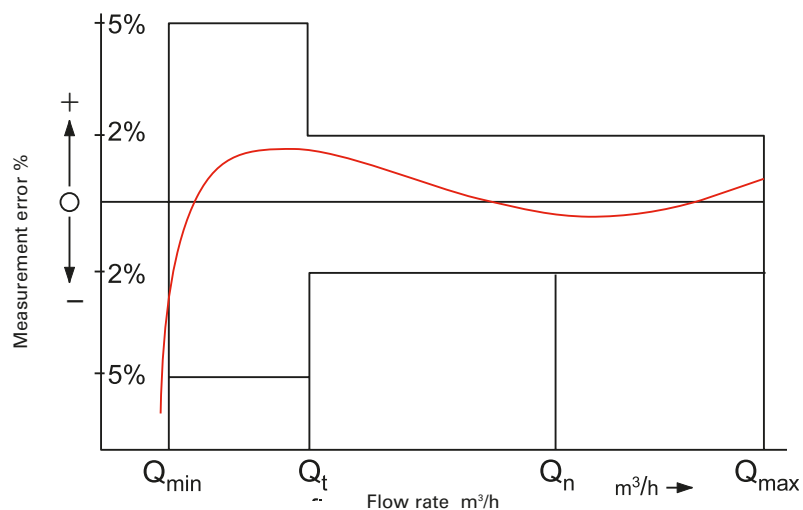
Dimensional picture



Materials

Housing:	Composite
Impeller:	Plastic
Impeller shaft:	Bronze
Annular magnets:	Ceramic permanent magnets
Sealing plate:	Plastic
Gears and drives:	Plastic
Cowl:	Plastic
Bearing jewels:	Sapphire

Typical measurement error curve

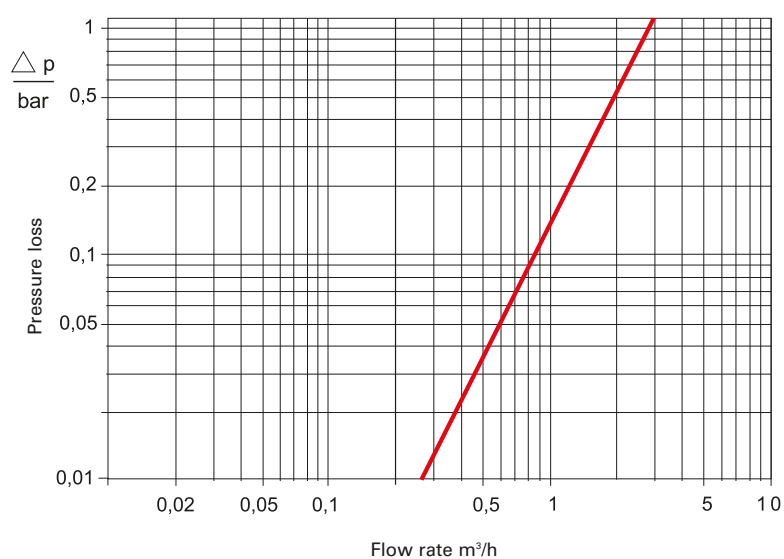


Dimensions and weights

Installed length	mm	110*
Meter fitting thread	inches	G ¾
Pipe connection thread	inches	R ½
Dimension	a mm	70.5
	b mm	110*
	c mm	189
	d mm	60
	e mm	23
Weight	kg	0.27

* variable ± 2,5 mm

Typical pressure loss curve



Ordering instructions

The meter is defined by a variant configurator. The Order Ref. No. (Order Ref. Code) is formed by inserting the particular feature codes at the relevant place.

The following table names all selectable features and their codes.

Boxes 5, 10 and 11 must be filled in.

The standard variants with Order Ref. No. are listed following the summary below.

			Boxes / positions in the Order Ref. No										
Feature	Feature value	Code	1	2	3	4	5	6	7	8	9	10	11
	Coding / Order Ref. No.>		R	S	B	E		B	C	E	U		
Meter type	Single jet meter	RS											
Nominal size	Qn 1,5	B											
Approval	EU	E											
Medium-Temperature	Cold water 30 °C	K											
	Hot water 90 °C	W											
Installed length / Connection	110 mm R ½" (G ¾")	B											
Housing	Composite	C											
Logo/Labelling	Europe Standard	EU											
Metrol. Class/Calibration	EAH	1											
	EBH	2											
Communication module	No module	X											
	Radio module Base-R	R											

Example:

Single jet meter; Qn 1.5; Europe version; for cold water
Installed length 110 mm R ½"; composite housing;
Europe-Labeling; Class B; no module

Order Ref. No.

R	S	B	E	K	B	C	E	U	2	X
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Order Ref. Numbers for standard variants

Model designation	Temperature stage	Installed length / Connection	Order Ref. No.
ResidiaJet-C Qn 1,5	30 °C	110 mm R ½" (G ¾")	88125321
ResidiaJet-C Qn 1,5	90 °C	110 mm R ½" (G ¾")	88125331