

Residia MUK

Multi jet universal coaxial cartridge apartment water meter with modular register and communications module



Main characteristics

Measuring cartridge meter for all applications in the apartment and office

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

Option: Factory fitted with communications 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)

Multi jet completely dry meter with magnetic coupling

Suitable up to 30 °C as a cold water meter

Suitable up to 90 °C as a hot water meter

Installation position optional: Meter head can be aligned for the best readout position

Complete range of accessories for surface and in-wall installation, on in-wall valves and mixer taps

Compatible with many competitors' housings, using an adapter

NEW: Directly compatible without adapter

The ResidiaMUK is also available in a form directly compatible with the following makes:

ResidiaMUK-RA with

ALLMESS UP 6000/MK

ResidiaMUK-RE with

ELSTER Modulmeter MO-E / MO-C

ResidiaMUK-RI with

ISTA Istameter

and SIEMENS cartridge meter 2"

The directly compatible Residia-MUK fits directly into the particular original housing without an adapter.

- Saves time
- Saves costs
- Avoids additional sealing points
- Does not change the basic geometry of the measuring point
- With PTB Approval of course

The safe, clean, rational solution

The ResidiaMUK concept

The ResidiaMUK is a water metering system with a universally usable measuring cartridge as the metrological base unit. In conjunction with the appropriate housings and connectors it is thus able to cover all normal applications in the domestic sphere.

Directly compatible versions of the measuring cartridge or suitable adapters also allow wide ranging use of the ResidiaMUK with existing connections of other makes with complete metrological safety due to the appropriate PTB approvals.

Accessories

Assembly spanner for all necessary fitting work.

Flow direction converter for wrong installed meter housings. *

40 mm extension for level adjustment with in-wall housings installed too deep. *

Blanking cover and rosette for pre-assembly of the in-wall housing without fitting the measuring cartridge.*

Rosette kit for complete in-wall fitting of the ResidiaMUK measuring cartridge

VTG valve housing and valve connection for fitting the ResidiaMUK in a shut-off valve.*

Mixer tap connection for fitting the ResidiaMUK measuring cartridge in a mixer tap. *

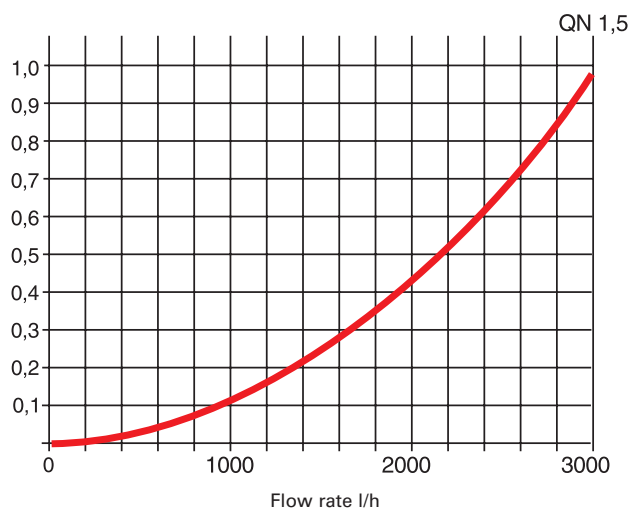
Rosette Z1222 for valve meter for in-wall valve installed too flat *

* Only for original SENSUS ResidiaMUK

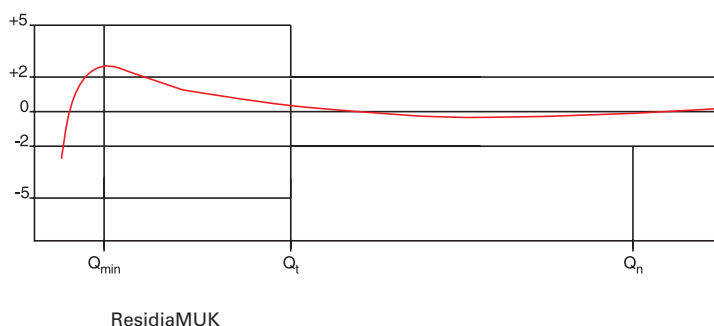
Materials

Measuring cartridge – top section	Polymer
Roll register and cowl	Polymer
Drive shaft for number rolls and actuation	Chrome nickel steel
Seals	Rubber
Housing (hydraulics)	Brass
All materials used comply with the current statutory requirements	

Typical pressure loss curve



Typical measurement error curve



Technical Data

		ResidiaMUK original	ResidiaMUK RA	ResidiaMUK RE	ResidiaMUK RI
Rated flow rate Q_n	m ³ /h	1.5	1.5	1.5	1.5
Maximum flow rate	m ³ /h	3	3	3	3
Minimum flow rate:		Q_{min}			
horizontal installation (Class B)	l/h	30	30	30	30
other installation positions (Class A)	l/h	60	60	60	60
Transitional flow rate:		Q_t			
horizontal installation (Class B)	l/h	120	120	120	120
other installation positions (Class A)	l/h	150	150	150	150
Flow rate at 1 bar pressure loss	m ³ /h	3	3	3	3
Pressure loss at Q_n	bar	0.23	0.23	0.23	0.23
Rated pressure PN	bar	16	16	16	16
Maximum water temperature:					
Cold water	°C	30	30	30	30
Hot water	°C	90	90	90	90
Display range	m ³	100000	100000	100000	100000
Minimum reading (can only be read off if no module is fitted on)	l	1	1	1	1
Enclosure class		IP 65	IP 65	IP 65	IP 65
Weight	kg	0.36	0.80	0.58	0.36
Metrological class					
horizontal installation		B	B	B	B
other installation positions		A	A	A	A

Optional communication modules

Option of factory installed or delivered separately for retrofitting to installed meters

Type	Function	Material No.	Data Sheet
Base-R	Radio module, fully compatible with the SensusBase system	04410508	LS 2100
Residia-M	M-Bus module for installations to EN 13757-3 (IEC 870 / EN 1434-3)	86115848	MS 8300
Residia-P	Pulse module for digital pulses (e.g. for remote counting)		
	1 litre / pulse	68115849	MS 8200
	10 litres / pulse	68115850	
	100 litres / pulse	68115852	

Order Ref. Numbers for standard variants

ResidiaMUK original

Model designation	Temperature of medium	Description	Order Ref. No.
ResidiaMUK QN 1,5	30 °C	In-wall version with rosette kit	88 12 53 41
		ditto with Base R radio module	88 12 53 94
ResidiaMUK QN 1,5	90 °C	In-wall version with rosette kit	88 12 53 51
		ditto with Base R radio module	88 12 53 95

Residia-MUK compatible (original chrome parts can continue to be used)

Model designation	Compatible with	Temperature of medium	Description	Order Ref. No.
Residia-MUK RA	Allmess UP 6000 MK	30 °C	Conversion cartridge	88 12 53 33
			ditto with Base R radio module	88 12 53 35
		90 °C	Conversion cartridge	88 12 53 80
			ditto with Base R radio module	88 12 53 85
ResidiaMUK RE	Elster MO-C / MO-E	30 °C	Conversion cartridge	88 12 53 37
			ditto with Base R radio module	88 12 53 39
		90 °C	Conversion cartridge	88 12 53 87
			ditto with Base R radio module	88 12 53 89
ResidiaMUK RI	Istameter / Siemens 2"	30 °C	Conversion cartridge	88 12 53 47
			ditto with Base R radio module	88 12 53 42
		90 °C	Conversion cartridge	88 12 53 57
			ditto with Base R radio module	88 12 53 52

In-wall installation fitting kit	
ResidiaMUK UPG 1	68 11 01 36
ResidiaMUK UPG 2	68 11 01 37
ResidiaMUK UPG 3	68 11 01 38
ResidiaMUK UPG 4	68 11 01 40
ResidiaMUK UPG 5	68 11 01 41

Surface mounting fitting kit	
ResidiaMUK APG 1	68 11 04 02
ResidiaMUK APG 2	68 11 04 06
ResidiaMUK APG 3	68 11 04 10

Accessories	
Model description	Order Ref. No.
ResidiaMUK Assembly spanner	78 11 03 11
ResidiaMUK Flow direction converter *	68 11 09 57
ResidiaMUK 40 mm extension *	68 11 09 56
ResidiaMUK Blanking cover *	68 11 07 74
ResidiaMUK Rosette kit	68 11 09 20
ResidiaMUK Distance ring kit	68 11 13 19

Accessories for Residia-MUK UV	
Valve with in-wall connection 1/2"	68 10 30 57
Valve with in-wall connection 3/4"	68 10 30 58
Valve with in-wall connection 1"	68 10 30 59
Extension kit 1/2"	68 10 30 72
Extension kit 3/4"	68 10 30 73
Extension kit 1"	68 10 30 74
Mixer tap connection 3/4"	68 10 24 16
Compensator	68 10 30 5
Rosette Z 1222	78 10 32 54

Adapters for Residia-MUK Original *	
SPX –predecessor model UP 193	68 11 36 66
Brunata „M 307/1“	68 11 17 35
Techem aquatech/vario S	68 11 18 50
Wassergeräte Spaichingen	68 11 17 36
Zenner, Wehrle, Extern	68 11 02 01

* There will be different overall heights depending on the adapter

* Only for original ResidiaMUK

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