



Heat meter VoluMess V reliable recording, needs-based customizing, comfortable reading

- Compact or comfort: you may install the electronic unit acc. to your needs fixed or variable in the property
- Connection thread or measuring capsule: depending on the circumstances you can decide upon the installation within the existing heating system
- Input or output: an open system architecture with standardized interfaces and options for retrofitting for external modules
- normal or mobile: reading whenever and wherever you want - optical, radio based, wired or by remote data transmission

OPTO

Optical close-range interface for a quick reading in the apartment

WALK-BY

Mobile data collection by radio without entering the apartment

M-BUS

Wired consumption recording to a central building

AMR

Preparing the data for remote reading





Heat meter VoluMess V - Comfort according to your specifications

The newest system solution for the required data recording of the heat consumption in heating systems with central heat supply - as an ideal partner for the consumption management, this intelligent meter VoluMess V always meets you at eyelevel.

Wasser-Geräte is a leading supplier for consumption data recording with accurate instruments. Within over 65 years we have substantially influenced the development of edge technology regarding water meters, water meter test rigs, accessories and special tools for the exchange of water meters and kept setting milestones. Our specialty: the large system selection which helps you meet all possible requirements.

One of our most new development joins modern communication technologies with sustainable lifestyle. The Volumess V is an intelligent allround solution in the field of smart metering: it connects the modern standards of the consumers regarding transparency and sustainability with needs-based comfort during reading and data processing. The exact measuring, the reliable verification and the secure storing in particular make him one of the top choices among the high-quality precision meters.

The VoluMess V has got all you need for the needs-based equipment of properties. We can supply devices in different sizes, as a screw-type or measuring capsule meter. We deliver it from our production facility in the German south-west-situated town Spaichingen as a standard with IrDA-interface and the option for later retrofitting with external modules. On demand we can also deliver your specific communication module ex-works: conventional with optical infrared interface or most comfortable in three different executions for the mobile data recording - with radio technique*, with wired Feldbus (M-Bus) or with a wholesome AMR-solution.

Many additional services decide for the superiority of the VoluMess V. Your advantages:

- Automatic display and function control**
 The most important values can be displayed automatically - without any operation! The display enables automatically every 36 seconds and shows the actual count as well as the count at due date, where applicable also procedural or error messages. All further values can be retrieved using the keypad.
- Comfortable change of the due date**
 You can edit all significant parameters using the keypad, without any further tools like PC or PDA: change of due date, change of measuring unit from kWh to MWh or MJ to GJ, modification of the main address for meters with integrated M-Bus module.
- Unlimited modularity**
 The VoluMess V is open for any requirement. It can be also used as a combined heat/cooling meter or for special applications such as processing of warm water using the flow method with fast measuring cycles or for different water and glycol mixtures. Feel free to use the open system structure also to integrate devices of third-party producers or use the continuous functionality for flexible reactions to changes of the consumption point, system changes or upgrades.
- Comforting safety**
 A new developed seal with serial number replaces the previous "selflock"-clip seal

* Our radio systems are totally harmless from electro-magnetic point of view: the optimum transmission power and the minimal transmission period of the Wasser-Geräte measuring devices fall below all limits of the Federal Immission Control Act



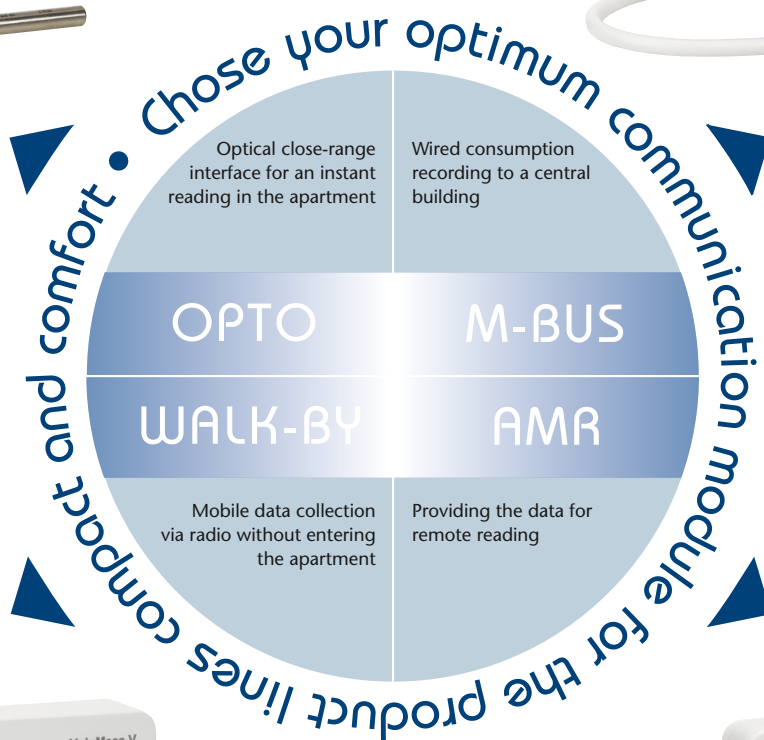
VoluMess V QDS-OPTO
as a screw-type meter with
fixed counter unit



**VoluMess V QDS-OPTO
COMPACT VERSION**

Everything in one place:
rigidly mounted counter unit

VoluMess V IST-OPTO
as a coax measuring capsule
meter with fixed measuring unit



VoluMess V QDS-OPTO
as a screw-type meter with
removable counter unit

**VoluMess V IST-OPTO
COMFORT VERSION**

exactly where you want to do the
reading: removable counter unit



VoluMess V IST-OPTO
as a coax measuring capsule me-
ter with removable counter unit





Norms and standards

CE-conformity	see declaration of conformity
---------------	-------------------------------

Electro-magnetical compatibility

interference immunity	EN 61000-6-2
emitted interference	EN 61000-6-3

Protection class

IP Protection class	IP65 acc. to EN 60529
---------------------	-----------------------

Heat meter

European Measurement Directive (MID)	2004/22/EG
CE type examination certificate	DE-12-MI004-PTB009
heat meter	EN1434
heating medium quality	VDI directive 2035

Influencing variables

electro-magnetical class	E1
mechanical class	M1
environment class	A
measuring accuracy class	3

Counter unit

Temperature range

as a heat meter	10 ... 90 °C
as a heat/cooling meter	5 ... 90 °C
admitted temperature balance	3-70 K
temperature balance at counting start	Heat: 1.0 K / Cold: 0,2 K (to choose by article no.)
ambient temperature	5 ... 55 °C

Energy supply

Lithium battery	Nominal voltage 3.0 V
Duration	> 6 (opt. 10) years + 6 month reserve

Display levels

standard	Min. 2, up to 10 (depending on execution / options)
display	8-digits LCD + pictograms
energy display	kWh (optional MWh, MJ, GJ)

Temperature sensor

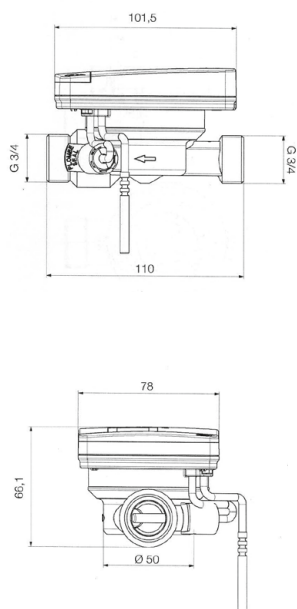
measuring element	PT 1000 nach EN 60751
execution	Typ DS
diameter	5,0 mm - 5,2 mm - 6,0 mm - AGFW
type of installation	5,0 mm - direct (ball valve) / indirect (immersion sleeve)* 5,2 mm - direct (ball valve) / indirect (immersion sleeve)* 6,0 mm - indirect (immersion sleeve) AGFW - direct (ball valve)
Cable length	standard 1.5 m / optional 3.0 m

* pls. note the national and country-specific regulations for the use of immersion sleeves



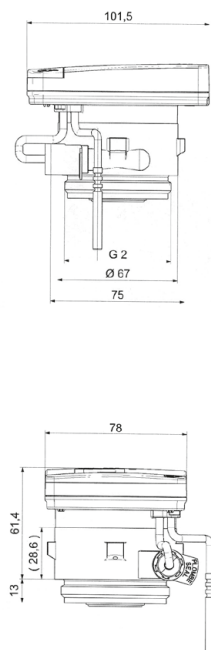


Flow rate sensor screw-in meter (QDS)



Connecting sizes and dimensions		0,6 m³/h	1,5 m³/h	1,5 m³/h	2,5 m³/h
Length		110 mm	110 mm	130 mm	130 mm
Connection		G 3/4 B	G 3/4 B	G 1 B	G 1 B
Dimension		668 g	650 g	852 g	743 g
Installation position		horizontal/vertical			
Nominal flow rate qp		0,6 m³/h	1,5 m³/h	1,5 m³/h	2,5 m³/h
min. flow rate qi	horizontal	12 l/h	30 l/h	30 l/h	50 l/h
	vertical	24 l/h	30 l/h	30 l/h	50 l/h
ratio qp/qi	horizontal	50:1	50:1	50:1*	50:1
	vertical	25:1	50:1	50:1	50:1
ratio qs/qp		2:1			
start-point		3-4 l/h	4-5 l/h	4-5 l/h	6-7 l/h
max. admitted work pressure		16 bar			
min. system pressure to avoid cavitation		1 bar			
temperature range		10 ... 90 °C			

Flow rate sensor 2" measuring capsule meter (IST)



Connection sizes and dimensions		0,6 m³/h	1,5 m³/h	2,5 m³/h
Overall length of the EAT		110 mm	110 mm	130 mm
pipe connection		G 3/4 soldered 15 mm/18 mm		G 1"/soldered 22 mm
dimensions		605 g	605 g	607 g
installation position		horizontal/vertical		
meter thread EAT		G 2 B	G 2 B	G 2 B
Nominal flow rate qp		0,6 m³/h	1,5 m³/h	2,5 m³/h
min. flow rate qi	horizontal	12 l/h	30 l/h	50 l/h
	vertical	24 l/h	30 l/h	50 l/h
ratio qp/qi	horizontal	50:1	50:1*	50:1*
	vertical	25:1	50:1	50:1
ratio qs/qp		2:1		
start point		3-4 l/h	4-5 l/h	6-7 l/h
max. admitted work pressure		16 bar		
min. system pressure to avoid cavitation		1 bar		
temperature range		10 ... 90 °C		

* Optionally we can also supply executions with a higher dynamic range

