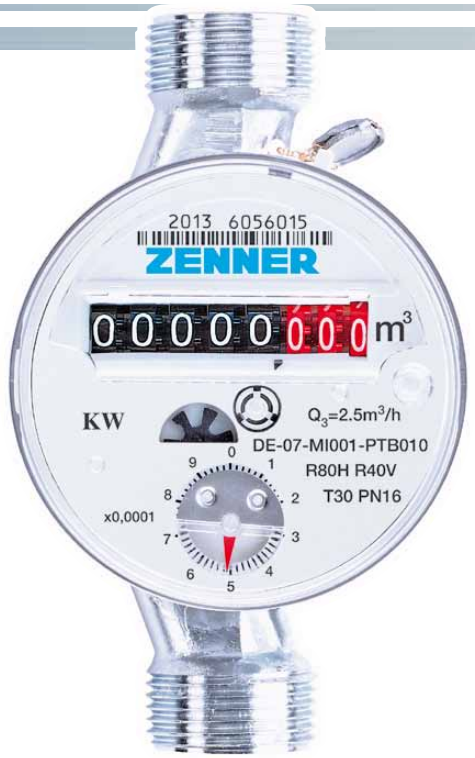
EnergyMetering

Apartment water meters

Single-jet meters

Measuring capsules

Accessories



ZENNER
All that counts.

Certified quality

ZENNER International GmbH & Co. KG is DIN EN ISO 9001:2008 and DIN EN ISO 14001:2004 certified.

All ZENNER meters correspond to the design and connection dimensions of DIN ISO 4064 and/or DIN ISO 19684 Part 3, DIN EN 1434, and other national and international standards and guidelines.

MID compliant

Before we ship our water and heat meters, we calibrate them in our state-approved testing site for measurement instruments according to 75/33/EWG or declare them compliant with MID European Measurement Instruments Directive 2004/22/EG.

We have successfully implemented approvals and procedures as per the guidelines of the MID since 2006.

Managementsystem ISO 9001:2008 ISO 14001

INTERSEROH

Technology of the highest standard

Quality and reliability for the best measurement results

Customers around the world have relied on our experience and the quality and reliability of our products for more than 100 years. We sell more than three million water meters each year, which places us among the leading providers of innovative measurement technology on all five continents.

We have the right products and custom solutions for all technological requirements available, in particular for our customers in the housing industry. Along with single-jet and capsule meters, this includes valve meters for additional installation on individual taps.

Technology derived from experience

The technology in our products reflects our experience of over 100 years of development and production. We are constantly pushing the functionality of our meters forward in our on-going development process. This enables us to offer our customers products that will be functional for years to come.

All ZENNER single-jet and measuring capsule meters are dry dial. A magnetic coupling transfers the force between the wet area and the meter. This way the meter does not come into contact with water. This avoids disruptions or defects caused by impure water and guarantees precise measurement results and high measurement stability.

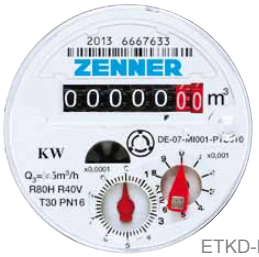
ETKD - precision and reliability for consumption billing

ETKD and ETWD

Single-jet dry-dial meter for cold and hot water

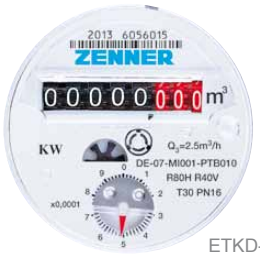
We have redesigned the counter in the new ETKD / ETWD and improved it technologically as well as optically in comparison to the previous models. Our main goal, apart from improved operation properties, better legibility and tampering detection, was a future-proof counter capable of remote reading.

The result: a counter with a secure magnetic coupling that offers optimal results in terms of precision and measurement stability as well as flexible counter options.



ETKD-N/ETWD-N

The ETKD-N or ETWD-N base models come standard-equipped with a magnet pointer and offer the option of transferring counter data via inexpensive and reliable pulsers. Model with 7- or 8-digit counter and magnetic pointer is retrofittable with pulser (10l/pulse or 1l/pulse).



ETKD-M/ETWD-M

We developed a model with an electronic and non-reactive scannable modulator disc (ETKD-M/ETWD-M) for future smart-metering applications that require counters to have remote readability. The option of electronic scanning for the modulator disc is the basis for the remote reading of counter data, either via wireless signals, M-Bus or a pulser.

Retrofitting a counter with our EDC module, available as a wireless (wireless M-Bus as per OMS), M-Bus or pulser module, transforms the single-jet meter into a future-proof smart water meter.

Performance characteristics in overview

- ETKD model available with R160 (Class C)
- ETKD model for cold water up to 30°C
- ETWD model for hot water up to 90°C
- Dry-dial counter with shielded magnetic coupling
- optionally: reaction-free pulse detection for radio (wM-Bus), M-Bus or pulse output
- Counter 360° rotatable
- Counter available as copper can version (IP 68)
- For horizontal and vertical installation
- Approved in accordance with MID

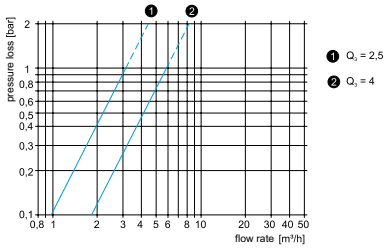
ETKD-L

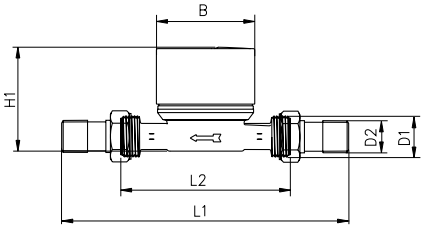
Single-jet dry-dial meter for cold water in a lead-free polymer plastic housing

Our developers succeeded in combining the highly-precise measuring ETKD-insert with a body of pressure-tight plastic, suitable for use with potable water. The result is the innovative ETKD-L.

The composite housings of the water meter consist of a polymer, as light as it is highly stable, which has been used in the automotive industry and in the manufacture of sports equipment and drinking water containers for many years. The result: extremely low weight with the highest stability and resilience. In addition, the plastic water meters are resistant to corrosion.

Plastic meters save a lot of energy during the production and transportation process and therefore CO_2 emissions can be reduced by 40%.





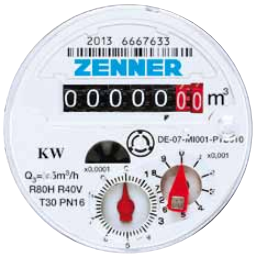
Technical data			ETKD/ETWD				ETKD R160	ETKD-L	
Permanent flow	Q_3	m³/h	2,5			4	2,5	2,5	4
Comparable to nominal flow (EWG)	Q_n	m³/h	1,5			2,5	1,5	1,5	2,5
Overall length without connectors	L2	mm	80	110	130	130	110	110	130
Overall length with connectors approx.	L1	mm	160	190	226	226	190	190	226
Thread meter G x B	D1	inch	¾	¾	1	1	¾	¾	1
Thread connector R x	D2	inch	½	½	¾	¾	½	½	¾
Nominal diameter	DN	mm	15	15	20	20	15	15	20
	DN	inch	½	½	¾	¾	½	½	¾
Standard measuring range	Q_3/Q_1	R	40H/40V	80H/40V			160H/80V	80H/40V	
Comparable to metrological class (EWG)	class		A*H/A*V	B*H/A*V			C*H/B*V	C*H/B*V	
Maximum flow	Q_4	m³/h	3,125			5	3,125	3,125	5
Minimum flow	Q_1	l/h	62,5	31		50	16	31	50
Start-up flow rate		l/h	10		14		7,5	10	14
Maximum temperature		°C	30/90				50	30	
Operating pressure	PN	bar	16				16	16	
Pressure loss at	Q_4	bar	<1				<1	<1	
Width	B	mm	66				81	75	
Height	H1	mm	77		80		88	79	82
Weight		kg	0,42	0,44	0,52	0,52	0,58	0,23	0,31

Options of the D-Counter at a glance

Counter and smart metering options

7- or 8-digit counter

The ETKD is available with a 7- or 8-digit counter. The version with 7-digit and a magnetic counter can be scanned by Reed pulser.



D-Counter with magnet pointer

Modulator disc

With the modulator disc, the counter of the ETKD is prepared for electronic and non-reactive scanning and has the optimum features for reliable and error-free data transfer via radio, M-Bus or pulse. Other features are the protection against tampering and water flow direction detection.

Pulser ring

"Copper Can" option (IP 68 protection rating)

In this version, the counter is enclosed in a robust copper jacket and, as a result, is optimally protected against condensation, dust and environmental influences.

Pulse output-ready

Both the model with 7- or 8-digit counter and magnet pointer and the 8-digit model with modulator disc provide the option of reading the counter data remotely.

Pulse counter IZM multipulse

M-Bus-ready

Using a special add-on M-Bus module, the ETKD 8-digit counter model with modulator disc can be integrated into an M-Bus system, in which all counters on a property are connected together and can be read centrally.

Radio-ready

With the addition of an add-on radio module, the ETKD model with modulator disc can be read via radio (wM-Bus as per OMS). A radio module transmits the counter data to a radio modem and these are relayed to a PC or hand-held computer via Bluetooth.

Remote readout with the D-Counter

D-Counter with modulator disc

EDC pulse module

EDC M-Bus module

EDC radio module

M-Bus converter

MinoConnectRadio

Handheld

Computer with GMM

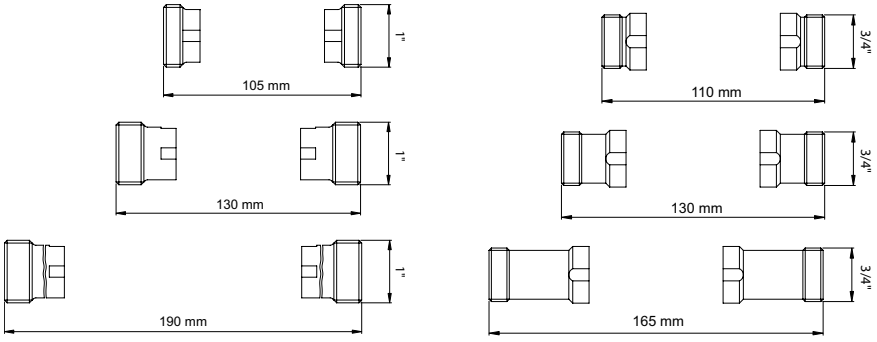
Universal meter M22

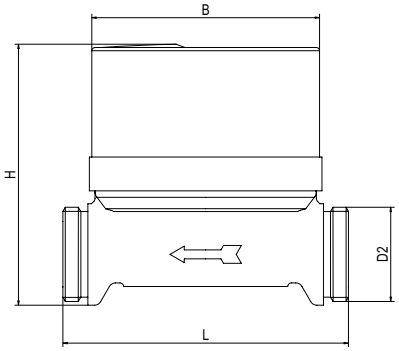
Surface-mounted meter suitable for all installation situations

The universal meter M22 is suitable for a variety of application situations due to its range of adapter pieces. With the different adapter pieces you can select the right configuration for the respective installation situation on the location.

The adapter fittings with integrated o-ring seals allow an individual installation length adjustment from 110 to 165 mm at 3/4"-threads and 105 to 190 mm at 1"-threads. The meter can be retrofitted with pulse module (1 l/Imp).

Flexible for installation lengths of 105 to 190 mm





Technical data M22						
Permanent flow	Q_3	m³/h	2,5	2,5	4	4
Comparable to nominal flow (EWG)	Q_n	m³/h	1,5	1,5	2,5	2,5
Overall length	L	mm	80	80	80	80
Installation length		mm	110/130/165	105/130/190	110/130/165	105/130/190
Thread meter G x B	D2		M22	M22	M22	M22
Connection thread	GxB	inch	¾	1	¾	1
Standard measuring range	Q_3/Q_1	R	40H/40V	40H/40V	40H/40V	40H/40V
Comparable to metrological class (EWG)	class		A*H/A*V	A*H/A*V	A*H/A*V	A*H/A*V
Maximum flow	Q_4	m³/h	3,125	3,125	5	5
Minimum flow	Q_1	l/h	62,5	62,5	100	100
Width	B	mm	65	65	65	65
Height	H	mm	71	71	71	71
Weight		kg	0,42	0,42	0,42	0,42

Measuring capsule Minolist

Measuring capsule for apartments and flats

Minolist is a coaxial measuring capsule water meter with 2” connection thread according to the multiple jet principle with modular counter for connection points according to DIN EN 14154-2 (Type ISTA).

Minolist ER1:

The Minolist ER1 measuring capsule is equipped with an 8-digit counter. It can be equipped optionally with a specified reading date or pulser module.

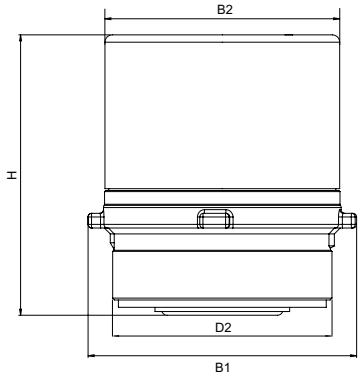
Minolist ER2:

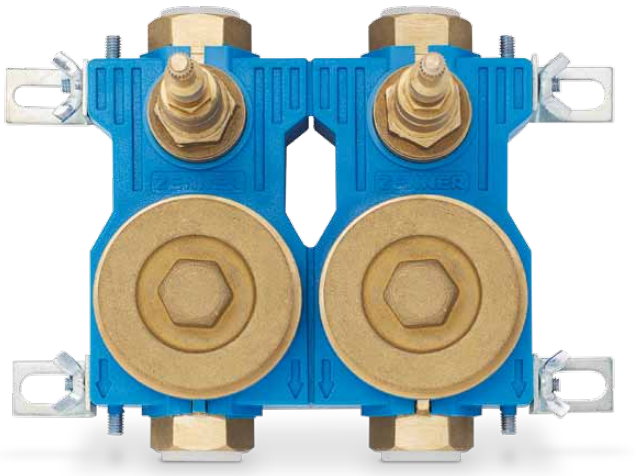
We developed an exceptionally compact 7-digit counter for the Minolist ER2 measuring capsule. This counter also has a module design and can be equipped with optional modules. The ER2 measuring capsule must be used for installation in the ZENNER Block 2” mounting block.

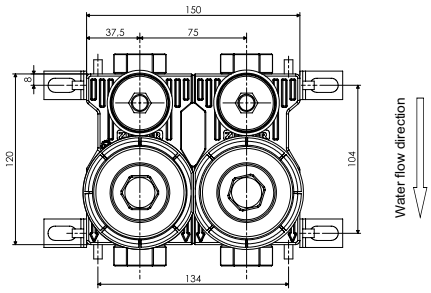
Performance characteristics in overview

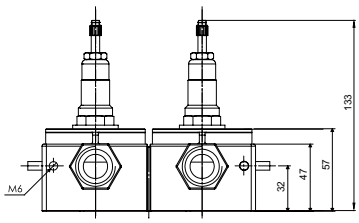
- Easy installation and quick exchange
- Can be installed in the narrowest of spaces
- Compatibility with existing systems
- High level of measurement stability due to high-quality sapphire bearing for the impeller
- thanks to the rotary counter can be read in any position
- Approved in accordance with MID

Technical data Minolist ER2			
Permanent flow	Q_3	m³/h	2,5
Comparable to nominal flow (EWG)	Q_n	m³/h	1,5
Thread meter G x B	D2	inch	2
Standard measuring range	Q_3/Q_1	R	40V
Comparable to metrological class (EWG)	class		A*V
Maximum flow	Q_4	m³/h	3,125
Minimum flow	Q_1	l/h	62,5
Width:	B1	mm	75
	B2	mm	64
Height	H	mm	82
Weight		kg	0,44









Technical data		
Dimensions:	Width:	150 mm
	Height:	120 mm
	Depth:	47 mm
Connection thread:	Rp	3/4"
Installation:	in vertical and horizontal pipes	

ZENNER Flush mounting block 2"

Mounting block for measuring capsule Minolist ER2

The new ZENNER Block 2" with its small dimensions is currently the smallest mounting block for water meters in the world.

Two one-piece manifold bodies with integrated sliding pistons are embedded in the heat and sound-insulating casing. Meter and valves can be assembled simply in a single process without prior alignment. The mounting block is available in all standard connection variations and dimensions and is thus suitable for assembly in masonry, rear walls and sides as well as for wall-mounted installation.

The ZENNER Block 2" is especially suited to confined installation situations. A one-piece rosette encloses both water meters and the water shut-off valves. The mounting block can be quickly separated from a duo-block to a mono-block by means of a saw groove.

Performance characteristics in overview

- Water meter block for flush-mounted installation
- Smallest installation dimensions
- One-piece brass flush-mounting units with integrated sliding pistons
- No sealing point within the block
- Installation possible in vertical and horizontal pipes
- Suitable for all installation types
- One rosette for both meters and piston valves
- For the inclusion of Minolist ER2 flush-mounted measuring capsules

Surface-mounted set for ZENNER Block 2"

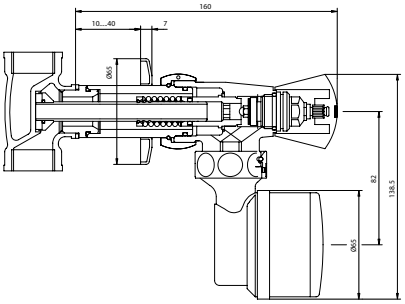
Available in white or chrome

The surface-mounted set includes:

- One-piece rosette to cover the ZENNER-Block 2”
- Spindle extensions and centring discs
- Sleeve to be screwed onto the upper valve parts
- Crown grip for attachment to the upper part of the valve, for valve activation
- Two crown grip inserts to attach the crown grip and coloured identification of cold/hot water
- Option: surface-mounted set for mono-block in white or chrome

Actual size

Easy to use! ZENNER fitting meters

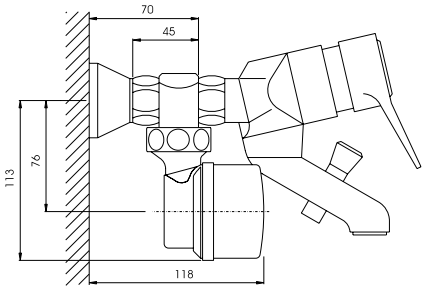


Valve meter type MC

Retrofittable meter for valve connection (cold and hot water)

The MC valve meter is ideally suitable for installation into existing flush-mounted ½ inch, ¾ inch, 1 inch and 1¼ inch cut-off valves. Hence, it is guaranteed that only the water usage of each user can be allocated to him.

Technical data valve meter type MC			
Permanent flow	Q_3	m³/h	2,5
Comparable to nominal flow (EWG)	Q_n	m³/h	1,5
Rosette diameter		mm	80
Valve size	DN	inch	½; ¾; 1; 1¼
Standard measuring range	Q_3/Q_1	R	40H/40V
Comparable to metrological class (EWG)	class		A*H/A*V
Maximum flow	Q_4	m³/h	3,125
Minimum flow	Q_1	l/h	31
Weight		kg	0,44



Bathtub meter type MC

Retrofittable meter for bathtub connections (cold and hot water)

The MC bathtub water meter with modular counter can be easily installed between the S-connector on the bathtub and the mixer tap.

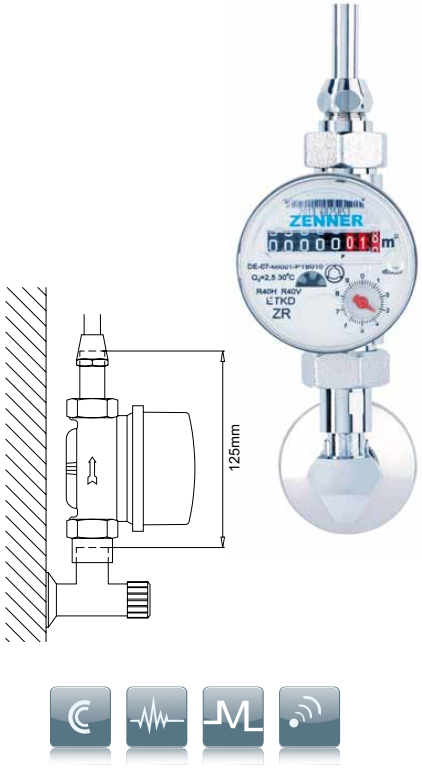
Technical data bathtub meter type MC			
Permanent flow	Q_3	m³/h	2,5
Comparable to nominal flow (EWG)	Q_n	m³/h	1,5
Overall length		mm	90
Installation length		mm	45
Connection thread	GxB	inch	¾
Standard measuring range	Q_3/Q_1	R	40H/40V
Comparable to metrological class (EWG)	class		A*H/A*V
Maximum flow	Q_4	m³/h	3,125
Minimum flow	Q_1	l/h	62,5
Height		mm	68
Weight		kg	0,44

Washbasin meter

Retrofittable meter for washbasin connections (cold and hot water)

The ZENNER washbasin meter is a retrofittable meter for the installation on the existing angle valve under the washbasin.

Technical data washbasin meter			
Permanent flow	Q_3	m³/h	2,5
Comparable to nominal flow (EWG)	Q_n	m³/h	1,5
Overall length		mm	80
Installation length		mm	125
Connection thread	GxB	inch	¾
Standard measuring range	Q_3/Q_1	R	40H/40V
Comparable to metrological class (EWG)	class		A*H/A*V
Maximum flow	Q_4	m³/h	3,125
Minimum flow	Q_1	l/h	62,5
Height		mm	75
Weight		kg	0,42

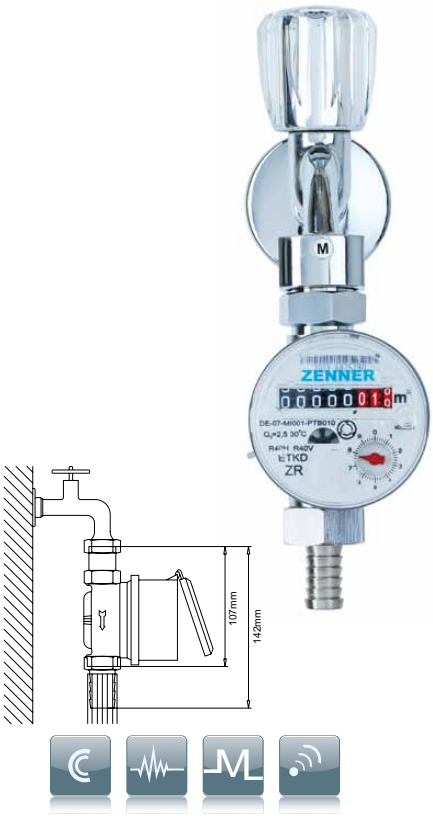


Tap meter

Retrofittable meter for tap connections (cold and hot water)

The ZENNER tap meter, with its special connection, can be installed on all common taps. With its seal, the water meter connector protects the unit from tampering.

Technical data tap meter			
Permanent flow	Q_3	m³/h	2,5
Comparable to nominal flow (EWG)	Q_n	m³/h	1,5
Overall length		mm	80
Installation length		mm	142
Connection thread	GxB	inch	¾
Standard measuring range	Q_3/Q_1	R	40H/40V
Comparable to metrological class (EWG)	class		A*H/A*V
Maximum flow	Q_4	m³/h	3,125
Minimum flow	Q_1	l/h	62,5
Height		mm	75
Weight		kg	0,44



Measuring capsule replacement program

For flush-mounted valves in place on site

Measuring capsule replacement program for cold water up to 30° C and hot water up to 90° C.

ZENNER's comprehensive replacement program offers customized solutions for nearly all measuring capsules and adapter fittings on the market. According to DIN EN 14154-2, capsule meters and their associated connection points (formerly known as manifold bodies or flush-mounted components) must have a compliant manufacturer label.

It is necessary to verify the conformity of these labels before installation. If capsule meters need to be replaced in an existing building and the connection point does not have a DIN-conforming label, ZENNER product support will help you select the right measuring capsule.

Measuring capsule replacement program for cold water up to 30° C and hot water up to 90° C.	
ZENNER measuring capsule for product:	
Minolist	Koax 2", type ISTA
Minolas	Allmess UP 6000-MK
Minotec	Techem MK90/vario S, M62x2
Minomet	Metrona HT3, M64 x 2
Minomet + mountig set Metrona HT2 / 307/1	Metrona HT2 M66 x 1 including adapter on HT3
Minol MB3	Measuring capsule meter MB3
Minol MB2	Measuring capsule meter MB2
measuring cartridge micro	Measuring capsule meter micro
measuring capsule ZENNER Neptun	Neptun, M78x1,5 type Wehrle, SPX U193, Rossweiner
measuring capsule ZENNER PolluMUK	SPX PolluMuK, G2 1/4"
measuring capsule ZENNER Modulmeter 2"	Elster MO-C / MO-E, M65x2
measuring capsule Deltamess	Deltamess TK
measuring capsule WG	Wasser-Geräte

The ZENNER product range

Residential water meters








Bulk water meters




Heat- and cooling meters

ZENNER International GmbH & Co. KG
Römerstadt 6
D-66121 Saarbrücken

Telefon +49 681 99 676-30
Telefax +49 681 99 676-3100
E-Mail info@zenner.com
Internet www.zenner.com