



Water

GWF



M140 UPZ KOAX

Measuring capsule meter



Your benefits

- Compact design:
Requires little installation space on site
- Easy installation and replacement:
Cost savings per measuring point
- Prepared for communication module:
Retrofitting guaranteed
- Completely lead-free design

Applications

- Water consumption measurement in building services engineering
- Available for nominal flow rate Q_3 2.5 m³/h
- Water meter for local or remote reading
- Flush mounting
- Also suitable for KOAX 2" shut-off sections

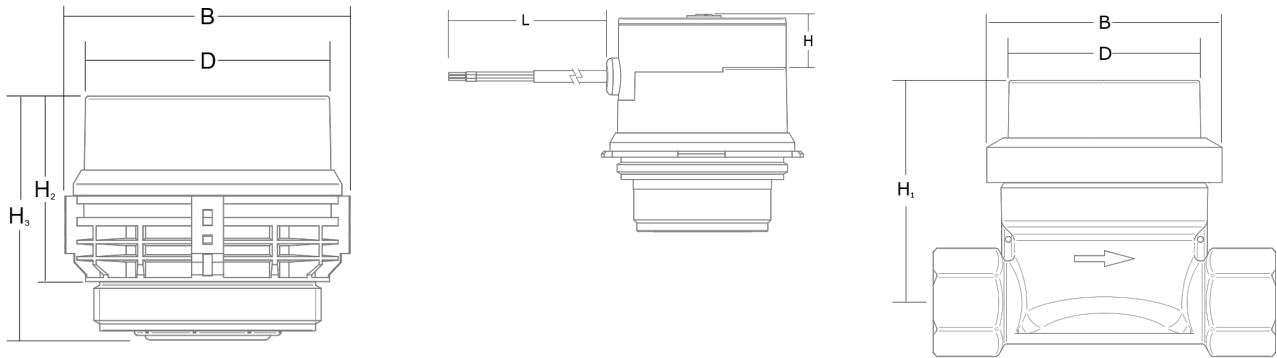
Properties

- Multi-jet capsule meter, dry runner MOF
- IST interface, flush-mounted housing
- Q3 2.5 with 2" connection thread
- No inlet or outlet section required
- Universal installation position
- The counter can be rotated to the desired display position at the installation site
- Maximum operating pressure PN 10 bar
- Temperature 30 °C or 90 °C
- Optimal integration into the sanitary fittings range in modern residential construction
- Easy flushing of the pipe before installing the measuring capsule with the aid of a blind flange
- Round, chrome-plated rosettes
- Completely lead-free design
- Can be used over several calibration periods
- Counter with inductive communication interface
- M-Bus according to EN 13757, OMS compliant
- **CE** Konformität nach Europäischer Messmitteldirective (MID)

Options

- Kommunikationsmodul (TMP-F M-Bus) mit Speisung und 1 m Kabellänge
 - Impuls, SO konform
 - M-Bus nach EN 13757-2/-3, OMS konform
- Wasserzähler-/Ventil-Block UP-Fix KOAX:
 Dokumentation: UP-Fix KOAX 20-1 und 20-2 - EPe20601

Dimension Diagram



Technical Data

Meter type MOF-IST

Nominal diameter	DN	mm	15
Nominal pressure	PN	bar	10
Continuous flow rate	Q3	m ³ /h	2,5
Overload flow rate	Q4	m ³ /h	3,125
Transitional flow rate $\pm 3\%$ ¹⁾	Q2	l/h	100
Minimum flow rate $\pm 5\%$	Q1	l/h	62,5
Pressure loss at Q3		bar	0,45
Flow capacity at 1 bar pressure loss		m ³ /h	3,3
Start-up		l/h	8
Max. temperature		max. °C	30/90
Measuring range			R40
Protection class			IP54
Magnetic protection			EN14154-3

¹⁾ Cold water range $\pm 2\%$

Dimensions

Meter type			MOF-IST
Width of measuring capsule	B	mm	75
Diameter of counter cover	D	mm	64
Height including UPT to pipe center	H1	mm	76
Measuring capsule without thread	H2	mm	50
Measuring capsule	H3	mm	65
Weight		kg	0,16

Communication module			TMP-F M-Bus
Protruding height	H	mm	20
Cable length including ferrules	L	m	1,0

Installation note

UPZ KOAX capsule meters are splash-proof. Caution: These meters should not be used in areas with constantly high levels of condensation (e.g., directly in shower areas or earth shafts), as moisture can diffuse through the plastic meter cover over time and impair readability. Install in a frost-proof location!

Installation positions

Pipe:	horizontal	—
	vertical	
Meter head:	upwards	↑
	to the side	↔

TMP-F Communication Module M-Bus

Module features

Type	Combined M-Bus and pulse module
Protection class	IP 56
Cable type	LiYY 4 x 0,25
Battery	3 V Lithium
Power supply	Via M-Bus for bus operation, via battery for pulse operat
Load M-Bus	1 Load
Battery life	Typically 12 years at 25 °C
Data lines	Galvanically isolated
Sensing	Inductive with three coils
Color	Transparent
Ambient temperature	0 to 55°C
Humidity (non-condensing)	10% to 70%

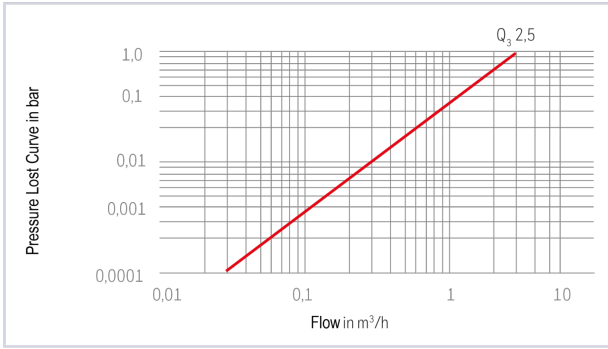
M-Bus

Protocol	M-Bus according to EN13757, OMS compliant
Transmission rate	2400 baud, 300 and 9600 baud programmable
Secondary address	Programmed at the factory, corresponds to device number
Primary address	Programmable
Manufacturer identification	ELS
Wire color	white/brown; reverse polarity protected
Data for M-Bus readout:	<ul style="list-style-type: none">■ Current meter reading■ Water meter serial number (if programmed)■ M-Bus module serial number■ 15 monthly values with date■ 15 monthly average values with date■ Key date value with date

Pulse

Pulse values	1, 5, 10, 25, 50, 100, 250, 500, or 1,000 l/pulse programmable
Pulse width	min. 62,5 ms
Load capacity	30 V DC, max. 30 mA
Pulse type	Direct or balanced (programmable)
Wire	green/yellow; reverse polarity protected





Pressure lost curve



Measuring insert

- Measuring capsule with 8-digit roller counter, rotatable through 360°, integrated dirt filter
- Flat gasket
- Plastic cylinder (chrome-plated)
- Plastic rosette (chrome-plated)
- Wire seal
- Installation instructions

Accessories

	Blind rosette Diameter 137 mm and cylinder with blind plate. If initially only the EAT is to be installed, the blind rosette neatly covers the wall opening from the outside.
	Rosette Diameter 137 mm, chrome-plated
	Cylinder Diameter 90 mm, length 53 mm, chrome-plated
	Installation wrench