



PODIXcoder-RCM MP[®]

Domestic water meter
for cold water up to 30°C
DN 15, 20, 25, 32, 40

GWF
swiss.smart.simple.

Our strength: Your benefit

- Mechanical roller register with 1-litre-resolution:
Efficient consumption monitoring in smart metering applications
- Revolutionary Multiprotocol interface:
Investment security due to the interoperability of the meter
- Transfer of the effective meter reading:
No data loss and guaranteed security of the billing data
- Batteryless register:
No service life restriction
- No programming required when commissioning the meter in a readout system (Plug&Play):
Easy and fast on-site installation
- Standardised interface:
No service life restriction
- Long service life, robust domestic water meter:
Excellent measuring stability and reliability
- Measurement of low flow rates:
Increased cost effectiveness

Features

- Rotary piston flow meter, super dry-dial, magnetic coupling
- Q₃ 2,5-16: Measuring range R400, Inline execution
- Q₃ 2,5: Measuring range R400, concentric execution
- 8 dial resolution with 3 comma place
- Register can be turned through 360°
- Maximum operation pressure PN 16 bar
- Maximum operating temperature 30°C
- High grade wear resistant and corrosion proof materials
- **CE** Conformity according to European Measuring Instruments Directive (MID)
- Standard register with Multiprotocol interface

Options

- Flood proof PODIXcoder[®] MP register (IP68) with Multiprotocol interface and meter lid / 5m cable
- Measuring range R250 for horizontal and concentric execution
- Radio module RCM[®] compact or RCM[®] split
 Documentation: RCM[®] - EPe40232

Application

- Automated mobile or fixed network readout of relevant billing data
- Wired or radio remote readout of hard to access metering installations, e.g. meter pits, reservoirs

Technical Data

Execution			PODIXcoder® MP (Inline)					PODIXcoder® MP (concentric)
Nominal diameter	DN	mm	15	20	25	32	40	15
Connection thread on meter	G...B	Inch	¾	1	1¼	1½	2	1½
Connection thread on coupling	R...	Inch	½	¾ ¹⁾	1	1¼	1½	-
Operating pressure	PN	bar	16	16	16	16	16	16
Nominal flow rate	Q ₃	m ³ /h	2,5	4	6,3	10	16	2,5
Overload flow rate ²⁾	Q ₄	m ³ /h	3,125	5	7,875	12,5	20	3,125
Transitional flow rate ±2%	Q ₂	m ³ /h	0,01	0,016	0,025	0,04	0,064	0,01
Minimum flow rate ±5%	Q ₁	m ³ /h	0,006	0,01	0,016	0,025	0,04	0,006
Starting flow		app. l/h	1,0	1,5	3,0	4,0	13,0	1,0
Smallest readable volume		l	0,05	0,05	0,05	0,05	0,02	0,05
Maximum register reading		m ³	100'000	100'000	100'000	100'000	1'000'000	100'000
Temperature		max. °C	30	30	30	30	30	30
Measuring range			R400	R400	R400	R400	R400	R400

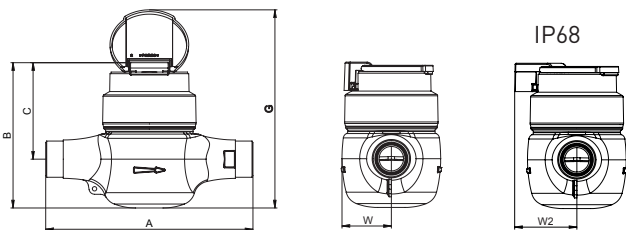
Dimensions and weights			PODIXcoder® MP (Inline)					PODIXcoder® MP (concentric)
Length without couplings	A	mm	165	190	260	260	300	95
Length with couplings		mm	239	282	352	372	432	-
Meter height with lid	B	mm	123	133	149	178	188	147
Meter height with radio module RCM® compact	B2	mm	199	209	225	254	264	223
Meter height with lid from pipe centre line	C	mm	85	88	86	104	102	129
Meter height with radio module RCM® compact from pipe centre line	C2	mm	161	164	162	180	178	205
Installation depth with lid from pipe centre line	W	mm	41	45	64	75	86	48
Installation depth with radio module RCM® compact from pipe centre line ³⁾	W1	mm	54	54	64	75	86	54
Installation depth IP68 from pipe centre line ³⁾	W2	mm	57	57	64	75	86	57
Meter height with open lid	G	mm	171	181	197	226	236	195
Weight without couplings		app. kg	0,9	1,3	3,1	4,8	6,8	1,0
Weight with couplings		app. kg	1,1	1,5	3,5	5,4	7,8	-

¹⁾ Also supplied with couplings R½ ²⁾ Max. 1h per 24h, with max. total time of 100h

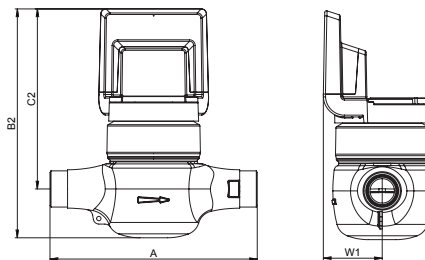
³⁾ By turning the register / assembly installation depth W can be realised

Dimension Diagram

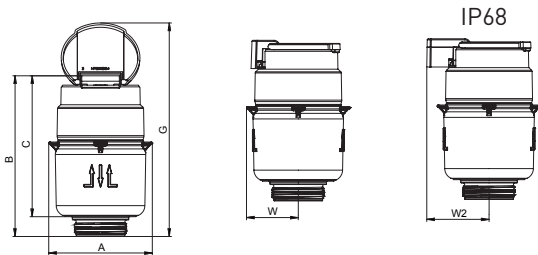
PODIXcoder® MP Inline with meter lid



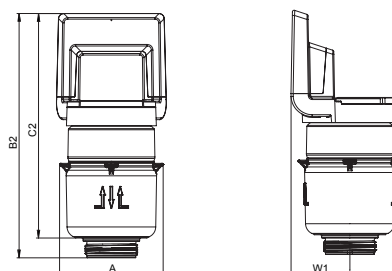
PODIXcoder® MP Inline with radio module RCM® compact



PODIXcoder® MP concentric with meter lid



PODIXcoder® MP concentric with radio module RCM® compact



Register options

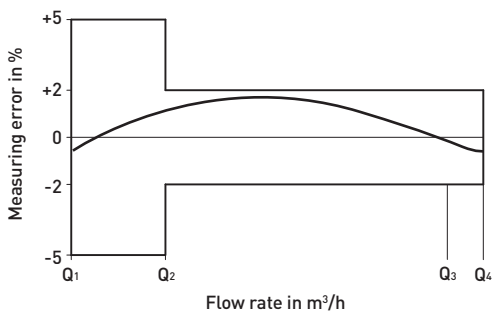
- without cable
- with 1,5m cable
- Floodproof IP68 with 5m cable



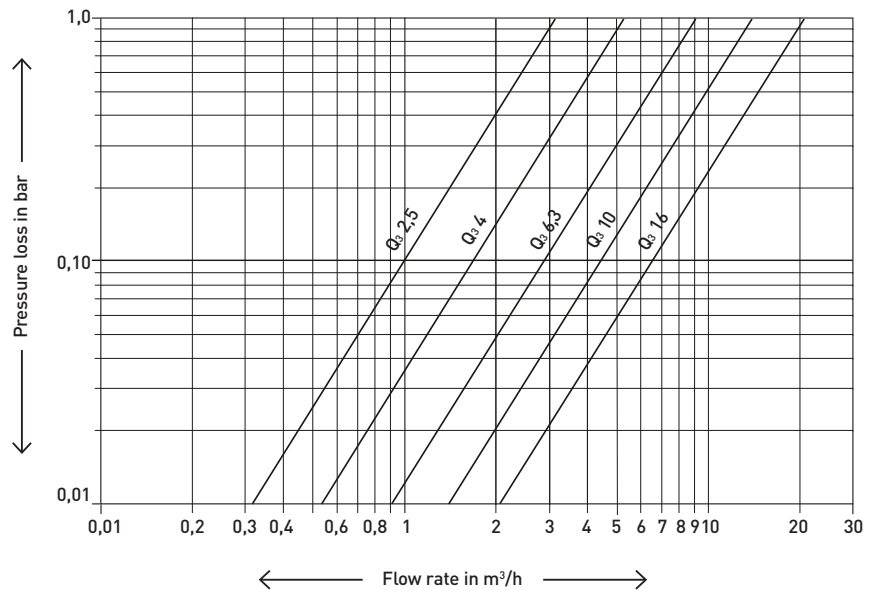
Materials

Housing with screwed connection:	Brass (DIN 50930-6) UBA conform
Sealing plate up to DN 20:	High grade synthetic materials
Sealing plate from DN 25:	Brass (DIN 50930-6) UBA conform
Measuring insert:	High grade synthetic materials
Bearings:	POM+PTFE
Seal material	NBR

Measuring error curve



Typical Head Loss Curve

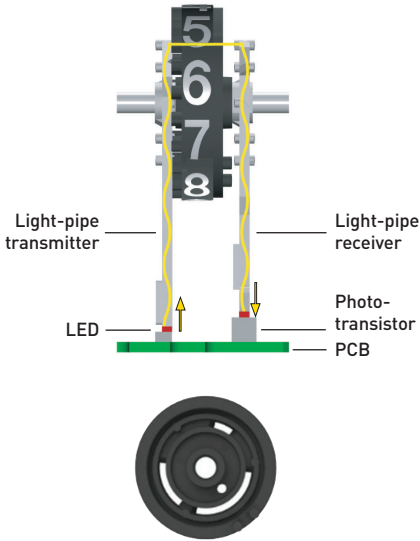


Installation

Pipeline:	horizontal	—
Meter head:	upwards	↑

Installation Requirements

The meter should be installed so that the type plate does not face downwards.
 Documentation: GWF water meters - BADefi10209



GWFcoder®-Technology

The 2nd generation – even more flexible

The well-established GWFcoder®-system reads the absolute mechanical register value precisely and reliably and provides the data through standardized interfaces. The number wheels with three various long, asymmetrically arranged slots are being scanned through light pipes which are connected to five light emitting diodes (LED). Thus, the exact position of each number wheel can be detected and the encoded absolute register read can be transmitted as part of the protocol by the GWFcoder®-interface. This GWF patented functional principle is being used in millions of installations worldwide since more than 15 years. The GWFcoder®-interface guarantees absolute correlation between the electronic readout and the register reading and provides an incomparably higher level of information compared to meters with pulse output. Meters with GWFcoder®-technology do not contain a battery which, in turn, does not compromise existing revision cycles. The readout device supplies the power for the readout.

GWFcoder®-Data package

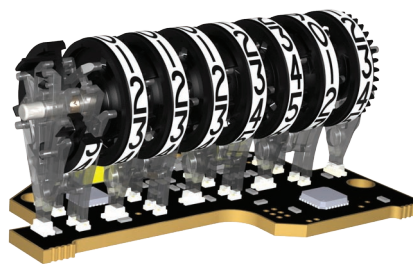
Medium:	Water
Absolute meter reading:	12365,678m ³
Serial number:	13215678
Meter size:	DN 20

GWF enhanced the reliable Smart Metering technology in its 2nd generation, so that 8 instead of 5 number wheels are being scanned and therefore a resolution of 1 liter is possible. Moreover, all products with multiprotocol functionality provide the flexibility to switch between SCRI(IEC) and M-Bus which leads to an easy and fast «Plug & Play» installation on site.

In combination with the GWF radio module RCM® the third interface can be used for wireless M-Bus.

M-Bus

EN 13757 acc. OMS®



Example of use

Wireless readout

Meter with GWFcoder® register is read out by radio using a mobile infrastructure.

