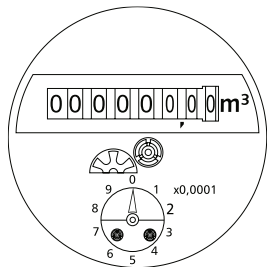


RTKD-N



RTKD-M

RTKD-M and RTKD-N

Positive displacement dry dial meter for cold water

RTKD positive displacement meter is a meter for all who place the highest demands on reliability and measuring accuracy. The RTKD records the flow rate using the volumetric measuring principle and guarantees extremely precise consumption recording and accounting. The RTKD positive displacement meter also has a high measuring range and a very good measurement stability.

The RTKD is equipped with the ZENNER D-register and is available in two versions:

RTKD-M with 8-digit-rollers register and modulator disc for non-reactive scanning for radio (wireless M-bus, LPWAN), M-bus or pulse.

RTKD-N with 7- or 8-digit rollers for different pulse values and retrofittable with mechanic pulser.

Performance characteristics

- Dry dial piston type register with shielded magnetic coupling
- Register can be turned through 355°
- High-quality UV-resistant plastic inspection window
- Operating pressure MAP 16
- Available with flood-proof (IP68) hermetically sealed glass/copper register
- Approved in accordance with MID



Applications

- For the consumption measuring of cold potable water up to 50° C
- Water meter for any installation position (not overhead!)

AMR options

- RTKD-N with pulse output (reed) for remote readout
- Standard pulse value 10 l/pulse, optional 1 l/pulse available
- RTKD-M serially equipped with communication interface for:
 - Electronic pulser
 - Wired M-bus
 - Radio via wireless M-bus
 - Radio via LPWAN (LoRaWAN™, SIGFOX)

RTKD-L-M and RTKD-L-N

Positive displacement dry dial meter in a plastic housing

Equipped with the newly developed dry dial D-register by ZENNER, the new RTKD-L positive displacement meter is a meter for all who place the highest demands on reliability and measuring accuracy.

The RTKD-L records the flow rate using the volumetric measuring principle and guarantees extremely precise consumption recording (max. Ratio $Q_3/Q_1 = 400$) and accounting.

The RTKD-L is equipped with the ZENNER D-register and is available in two versions:

RTKD-L-M with 8-digit-rollers register and modulator disc for non-reactive scanning for radio (wireless M-bus, LPWAN), M-bus or pulse.

RTKD-L-N with 7- or 8-digit rollers for different pulse values and retrofittable with mechanic pulser.

Performance characteristics

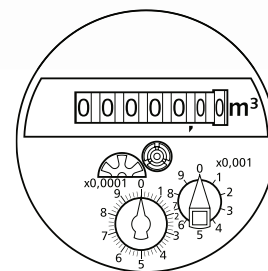
- Dry dial piston type register with shielded magnetic coupling
- Almost 50% lighter than a meter with a brass housing
- Register can be turned through 355°
- High-quality UV-resistant plastic inspection window
- Operating pressure MAP 16
- Available with flood-proof (IP68) hermetically sealed glass/copper register
- Approved in accordance with MID

Applications

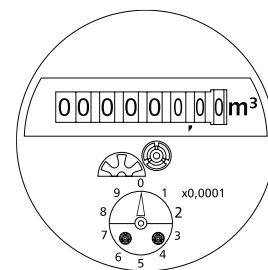
- For the consumption measuring of cold potable water up to 30° C
- Water meter for any installation position (not overhead!)

AMR options

- RTKD-L-N with pulse output (reed) for remote readout
- Standard pulse value 10 l/pulse, optional 1 l/pulse available
- RTKD-L-M serially equipped with communication interface for:
 - Electronic pulser
 - Wired M-bus
 - Radio via wireless M-bus
 - Radio via LPWAN (LoRaWAN™, SIGFOX)



RTKD-L-N



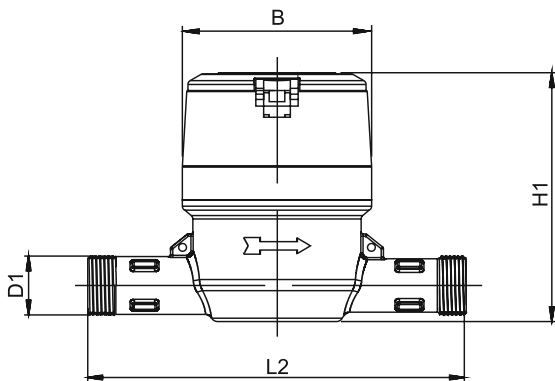
RTKD-L-M



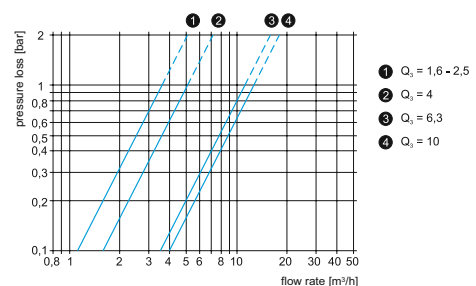
Technical data RTKD												
Permanent flow	Q ₃	m ³ /h	1,6	1,6	2,5	2,5	2,5	4	4	6,3	10	10
Comparable to nominal flow (EWG)	Q _n	m ³ /h	1	1	1,5	1,5	1,5	2,5	2,5	3,5	6	6
Attainable measuring range	Q ₃ /Q ₁	R	250	250	400	400	400	400	400	200	315	315
Standard measuring range (*)	Q ₃ /Q ₁	R	160	160	160	160	160	160	160	160	160	160
Comparable to metrological class (EWG)	class		C-H/V	C-H/V	C-H/V	C-H/V	C-H/V	C-H/V	C-H/V	C-H/V	C-H/V	C-H/V
Overload flow (**)	Q ₄	m ³ /h	2	2	3,13	3,13	3,13	5	5	7,87	12,5	12,5
Minimum flow (**)	Q ₁	l/h	10	10	16	16	16	25	25	39	63	63
Start-up flow rate	-	l/h	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 8	< 8	< 8
Display range	min	l	0,02	0,02	0,02	0,02	0,02	0,02	0,02	0,02	0,02	0,02
	max	m ³	R8 99.999,999 R7 99.999,99	R8 99.999,999 R7 99.999,99	R8 99.999,999 R7 99.999,99	R8 99.999,999 R7 99.999,99	R8 99.999,999 R7 99.999,99	R8 99.999,999 R7 99.999,99	R8 99.999,999 R7 99.999,99	R8 99.999,999 R7 99.999,99	R8 99.999,999 R7 99.999,99	R8 99.999,999 R7 99.999,99
Maximum temperature	-	°C	50	50	50	50	50	50	50	50	50	50
Operating pressure, max.	MAP	bar	16	16	16	16	16	16	16	16	16	16
Pressure loss at	Q ₃	bar	0,3	0,3	0,75	0,75	0,75	0,55	0,6	0,33	0,33	0,62
Dimensions (*)												
Nominal diameter	DN	mm	15	15	15	15	20	20	20	25	25	32
		Zoll	½"	½"	½"	½"	¾"	¾"	¾"	1"	1"	1 ¼"
Overall length without connectors	L2	mm	110/115	165/170	110/115	165/170	165/190	105	165/190	260	260	260
Overall length with connectors approx.	L1	mm	190/195	245/250	190/195	245/250	261/286	201	261/286	~374	~374	~384
Thread meter G x B	D1	inch	¾"	¾"	¾"	¾"	1"	1"	1"	1 ¼"	1 ¼"	1 ½"
Width	B	mm	89,5	89,5	89,5	89,5	90	90	90	137	137	137
Height	H1	mm	114,5	114,5	114,5	114,5	128	128	128	152,5	152,5	152,5
Weight	-	kg	0,86	0,98	0,86	0,98	1,28/1,35	1,15	1,28/1,35	3,7	3,7	3,77

(*) Other measuring ranges (R) on request.

(**) The data refer to the standard measuring range



Dimensions RTKD



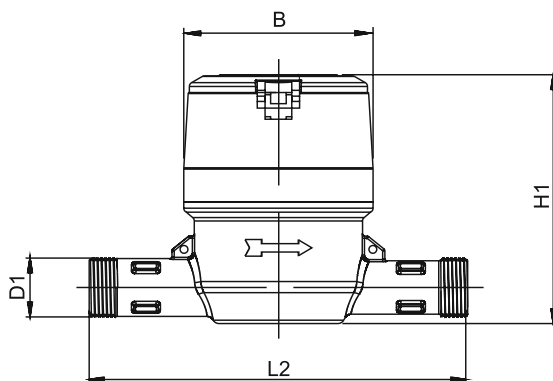
Typical pressure loss curve

Technical data RTKD-L

Permanent flow	Q ₃	m ³ /h	1,6	2,5	1,6	2,5	4	4
Comparable to nominal flow (EWG)	Q _n	m ³ /h	1	1,5	1	1,5	2,5	2,5
Attainable measuring range	Q ₃ /Q ₁	R	250	400	250	400	400	400
Standard measuring range (*)	Q ₃ /Q ₁	R	160	160	160	160	160	160
Comparable to metrological class (EWG)	class		C-H/V	C-H/V	C-H/V	C-H/V	C-H/V	C-H/V
Overload flow (**)	Q ₄	m ³ /h	2	3,13	2	3,13	5	5
Minimum flow (**)	Q ₁	l/h	10	16	10	16	25	25
Start-up flow rate	-	l/h	1	1	1	1	1	1
Display range	min	l	0,02	0,02	0,02	0,02	0,02	0,02
	max	m ³	R8 99.999,999 R7 99.999,99	R8 99.999,999 R7 99.999,99	R8 99.999,999 R7 99.999,99	R8 99.999,999 R7 99.999,99	R8 99.999,999 R7 99.999,99	R8 99.999,999 R7 99.999,99
Maximum temperature	-	°C	30	30	30	30	30	30
Operating pressure, max.	MAP	bar	16	16	16	16	16	16
Dimensions:								
Nominal diameter	DN	mm	15	15	15	15	20	20
		Zoll	½"	½"	½"	½"	¾"	¾"
Overall length without connectors	L2	mm	110	110	165/170	165/170	165	190
Overall length with connectors approx.	L1	mm	~195	~195	~250	~250	~261	~285
Thread meter G x B	D1	Zoll	¾"	¾"	¾"	¾"	1"	1"
Width	B	mm	85	85	89,5	89,5	95	95
Height	H1	mm	115	115	119	119	137	135
Weight ca.	-	kg	0,5	0,5	0,58	0,58	0,73	0,74

(*) Other measuring ranges (R) on request.

(**) The data refer to the standard measuring range



Dimensions RTKD-L



RNK-RP-N

RNK-RP-N

Volumetric rotary-piston meter for cold potable water with protected dial and brass body

Our series of RNK-RP volumetric piston meters with protected dial are an improvement of the classical RTK. The millionfold proved and high-precise measuring insert in combination with the rugged casing performs perfectly the measurement of potable water. A very low starting flow and reliable performance are its main features.

The protected roller register is reliably readable even under demanding climatic conditions. Filter is including. The construction principle of the RNK-RP-N with direct transmission from the measuring chamber to the register ensures by standard protection against magnetic or other manipulation attempts or interference. The check valve ensures additional protection and backflow prevention.

Performance characteristics

- Rugged and intelligently conceived
- Register with protected encapsulated digit rollers
- Housing made from high-quality brass
- Operating temperature up to 50° C
- Operating pressure PN16
- Display range 0,02 l to 9999 m³
- Proven accuracy in any installation position
- Optional with integrated tamperproof check valve
- Retrofittable with pulser 0,5 l/pulse (DN 40 5l/pulse)
- Other sizes of volumetric meters up to DN 40 available on request
- Approved in accordance with MID

RNK-L-RP-N

Volumetric rotary-piston meter for cold potable water with protected dial and plastic body

The new series of our volumetric rotary-piston meters with protected dial are an improvement of the classical RTK. Our developers succeeded in combining the millionfold proved and high-precise measuring insert with a body of pressure-tight plastics, suitable for use with potable water. The result is the innovative RNK-L-RP-N.

A very low starting flow and reliable performance even with aggressive or dezincification water qualities are its main features. The protected roller register is reliably readable even under demanding climatic conditions. The construction principle of the RNK-L-RP-N with direct transmission from the measuring chamber to the register ensures by standard protection against magnetic or other manipulation attempts or interference. The check valve ensures additional protection and backflow prevention.

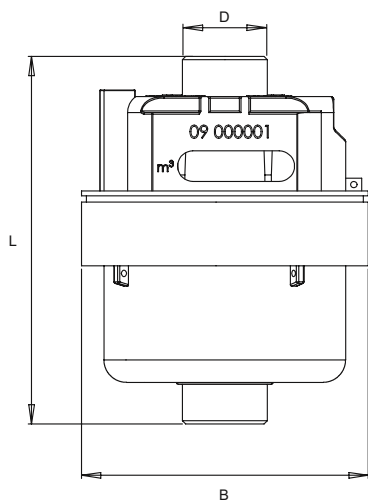
Performance characteristics

- Rugged, light and intelligently conceived
- Register with protected encapsulated rollers
- Approx. 50% lighter than meters with brass body
- Housing made from high-quality UV-resistant polymer composite
- Operating temperature up to 30° C
- Operating pressure PN 16
- Display range 0,02 l to 9999 m³
- Proven accuracy in any installation position
- Optional with integrated tamperproof check valve
- Retrofittable with pulser 0,5 l/pulse
- Approved in accordance with MID

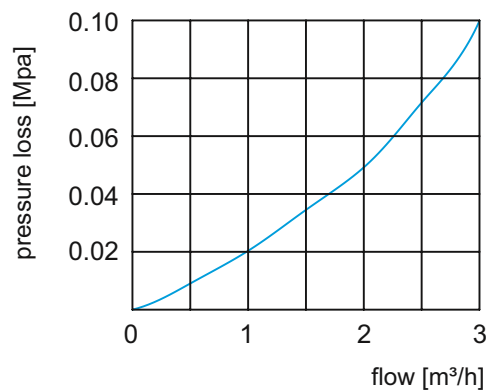


RNK-L-RP-N

Technical data RNK-RP-N, RNK-RPI-N								
Permanent flow	Q ₃	m ³ /h	1,6	1,6	2,5	2,5	4	6,3
Comparable to nominal flow (EWG)	Q _n	m ³ /h	1	1	1,5	1,5	2,5	3,5
Attainable measuring range	Q ₃ /Q ₁	R	160	160	160	160	200	200
Standard measuring range	Q ₃ /Q ₁	R	160	160	160	160	160	160
Comparable to metrological class (EWG)	Class		C	C	C	C	C	C
Overload flow	Q ₄	m ³ /h	2	2	3,125	3,125	5	7,875
Minimum flow	Q ₁	l/h	10	10	16	16	25	32
Start-up flow rate	-	l/h	< 3,5	< 3,5	< 3,5	< 3,5	< 4	< 7
Display range	min	l	0,02	0,02	0,02	0,02	0,02	0,02
	max	m ³	9999	9999	9999	9999	9999	9999
Maximum temperature	-	°C	50	50	50	50	50	50
Operating pressure, max.	MAP	bar	16	16	16	16	16	16
Pulse value		l/pulse	0,5	0,5	0,5	0,5	0,5	0,5
Pressure loss at	Q ₃	bar	< 0,6	< 0,6	< 0,6	< 0,6	< 0,6	< 0,6
Dimensions:								
Nominal diameter	DN	mm	15	15	15	15	20	25
		inch	½"	½"	½"	½"	¾"	1"
Overall length without connectors	L	mm	110/115	165/170	110/115	165/170	165/190	260
Overall length with connectors approx.		mm	190/195	245/250	190/195	245/250	26½/86	378
Thread meter G x B	D	inch	¾"	¾"	¾"	¾"	1"	1 ¼"
Width	B	mm	88	88	88	88	100	117
Weight	-	kg	0,79/0,80	0,95/1,00	0,79/0,80	0,95/1,00	1,1/1,2	2,5



Dimensions RNK-RP-N



Typical pressure loss curve