

RNK-L-RP-N

Rotary piston semi-dry-dial meter for cold water

The RNK-L-RP-N positive displacement meter records the flow rate according to the volumetric measuring principle. It offers a very high measuring range, excellent measuring stability and therefore guarantees extremely precise consumption recording.

The RNK-L-RP-N features a very low starting flow and is permitted for all installation positions.

The meter is equipped with an 8-roller semi-dry dial register (RP = Roller Protected).

The meter is equipped with a reed switch interface as standard. The interface enables remote reading of the meter data via PDC radio module with LoRaWAN® or wM-Bus.

The housing of the RNK-L-RP-N is made of glass-fibre reinforced polymer plastic, drinking water Approved and able for an operating pressure up to 16 bar.



Performance characteristics at a glance

- Rotary piston semi-dry-dial meter
- Highest precision and reliability even in case of low flow rates
- Housing made of glass-fibre reinforced polymer plastic
- With integrated Backflow preventer, optional: Plug in backflow preventer (on request)
- Around 50% lighter than a comparable meter with brass housing
- Operating pressure MAP 16
- Approved in accordance with MID

Applications

- For the consumption measurement of cold and clean drinking water or service water up to 50 °C

AMR options

- Serially equipped with communication interface for PDC-module (PulseDataCapture):
 - PDC-wireless M-Bus radio module according to DIN EN 13757-4
 - PDC- LPWAN-Radio module for LoRaWAN®
- Retrofittable with pulser
 - Standard resolution 0,5 l/pulse (5 l/pulse at $Q_3=16$)

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Technical data					
Permanent Flowrate	Q_3	m^3/h	1.6	2.5	4
Comparable to permanent flowrate (EEC)	Q_n	m^3/h	1	1.5	2.5
Attainable measuring range	Q_3/Q_1	R	160	250	200
Standard measuring range ¹	Q_3/Q_1	R	160	160	160
Comparable to metrological class (EEC)	class		C	C	C
Overload Flowrate	Q_4	m^3/h	2	3.215	5
Transitional flowrate ²	Q_2	l/h	16	26	40
Minimum flowrate ²	Q_1	l/h	10	16	25
Start-up flow rate	-	l/h	< 3.5	< 3.5	< 4
Display range	min.	l	0.02	0.02	0.02
	max.	m^3	9999	9999	9999
Temperature range	-	$^{\circ}C$	0.1 - 50	0.1 - 50	0.1 - 50
Operating pressure. max.	PN	bar	16	16	16
Pulse value		l/pulse	0.5	0.5	0.5
Pressure loss at Q_3	Δp	bar	$\Delta 0.63$	$\Delta 0.63$	$\Delta 0.63$
Mechanical environmental condition	-	-	M2	M2	M2
Climatic condition ³	-	$^{\circ}C$	5 - 55	5 - 55	5 - 55
Flow profile sensitivity	-	-	U0/D0	U0/D0	U0/D0

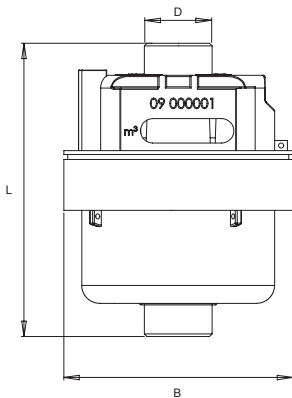
Dimensions and weights:					
Nominal diameter	DN	mm	15	15	20
		inch	1/2"	1/2"	3/4"
Overall length without connectors	L	mm	115/130/165	115/130/165	165/190
Overall length with connectors approx.	-	mm	195/210/245	195/210/245	261/286
Thread meter G x B	D	inch	3/4" (7/8") ⁴	3/4" (7/8") ⁴	1" (1 1/8") ⁴
Width approx.	B	mm	103	103	103
Weight approx.	-	kg	0.43/0.44/0.45	0.43/0.44/0.45	0.49/0.50

¹ Other measuring ranges (R) on request

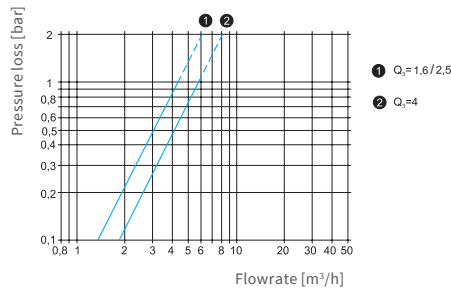
² The data refer to the standard measuring range

³ Condensation possible

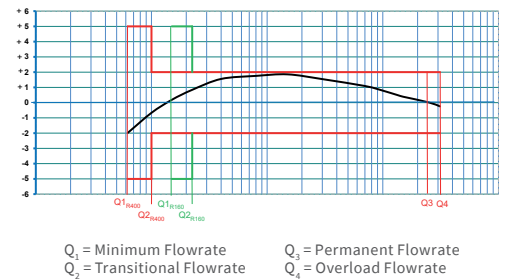
⁴ Body DN15 165mm with 7/8" and body DN20 190mm with 1 1/8" thread possible



Dimensions



Typical pressure loss curve



Typical error curve

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