

- **Particularly low pressure loss**
- **Pulse generation at extremely low flow rates**
- **Accepts short duration loads at any pressure**
- **For horizontal installation**



Contact-type water meters serve for volumetric measurement of flow amounts, and to control proportional metering systems. They are intended for horizontal installation in piping systems, and are suitable for registering the slightest amounts of water drawn. The contact water meters detailed below are notable for their excellent measurement service life even under extreme stresses tending to Q_{max} and Q_{min} , as well as through a low pressure loss. Each contact-type water meter is designed for

a minimum permissible operation pressure of PN 10 according to German DIN 2401. On special request, the contact water meter can be supplied in hot-water or VE water versions. The max. permissible contact load is 24 V (protective low voltage) and 0.2 A. Contact water meters are generally fitted with a roller-type counting mechanism.

Technical Data:

Contact Water Meter DN 20 - 50

Nominal width	DN mm/inch	20/R ³ / ₄	25/R 1	40/R1 ¹ / ₂	50/flange
Rated flow new designation	Q _n m ³ /h	2.5	6	10	15
Flow with 1 bar pressure loss	m ³ /h	7	12	24	34
Maximum flow	Q _{max} m ³ /H	5	12	20	30
Separating limit	Q _t l/h	250	500	1000	1500
Lower measuring range limit	Q _{min} l/h	30	70	100	100

Pulse sequences available on special request:

0.25	0.5	1	2	2.5	3
4	5	10	20	25	30
40	50	100	200	250	300
400	500	1000 l/pulse			

At pulse sequences of 0.25 to 5 l/pulse the lower measuring range limit changes. Other versions available on request. Slight technical modifications may be introduced in the interests of technical development.

Contact Water Meter DN 80 – 150 (flange version)

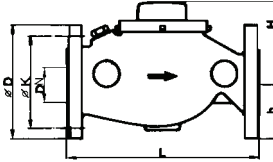
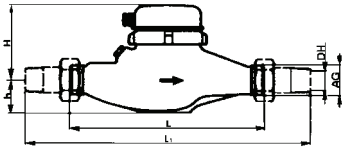
Nominal width	DN mm	80	100	150
Rated flow	Q _n m ³ /H	40	60	150
Flow with 0.1 bar pressure loss	m ³ /h	44	67	160
Maximum flow (short term)	Q _{max} m ³ /h	110	180	350
Separating limit	Q _t m ³ /h	6	9	22.5
Lower measuring range limit	Q _{min} m ³ /h	0.8	1.2	2

Pulse sequences available on special request:

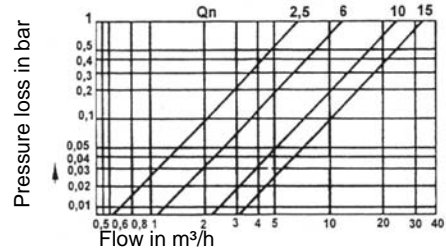
2.5	10	25	100	250	1000 l/pulse
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Dimensions:

DN 20-50



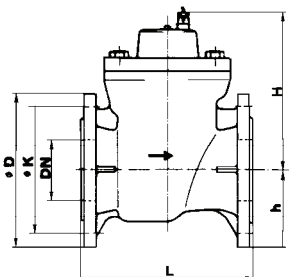
Pressure loss curve



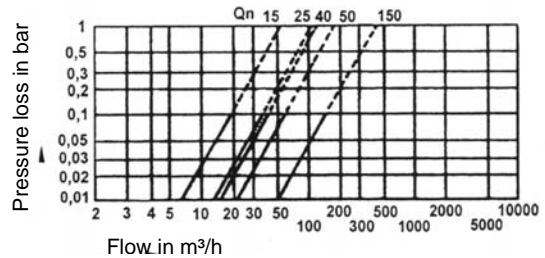
Nominal width

	DN mm	20	25	40	50
Connecting thread on meter	AG inch	G 1 B	G 1 ¹ / ₄ B	G 2 B	
Connecting thread on union	inch	R 3 ³ / ₄	R 1	R 1 ¹ / ₂	
Ext. Ø D mm flange connection					165
Hole circle Ø K mm					125
No. of screws each					4
Overall length	L mm	190	260	300	270
(with threaded union)	L ₁ mm	288	378	438	-----
Height	H mm	110	115	133	150
	h mm	41	44	46	83
Width	A mm				
	B mm	96	104	136	165
Weight without threaded union	kg	1.8	2.8	5.4	12.4
Weight with threaded union	kg	2.2	3.4	6.6	-----

DN 80 - 150



Pressure loss curve



Nominal width

	DN mm	80	100	150
Ext. Ø flange connection	D mm	200	220	285
Hole circle Ø	K mm	160	180	240
DIN 2501 / PN 16 no. of screws each.		8 (4)	8	
Height	H mm	221	226	400
	h mm	102	116	155
Length as per DIN 19625	L mm	300	360	500
Weight	kg	25.5	31.5	79.5

Ordering Data:

The thread sizes indicated below refer to the dimensions of the water meter's screw connections.

Article		Material No.
Contact water meter DN 20,	$Q_n = 2.5 \text{ m}^3/\text{h}$, 1 l / pulse, 130 mm face-to-face length	419901041
	$Q_n = 2.5 \text{ m}^3/\text{h}$, 1 l / pulse, 190 mm face-to-face length	419901236
	$Q_n = 2.5 \text{ m}^3/\text{h}$, 1 l / pulse, with injection hole	419901201
Contact water meter DN 25,	1 l / pulse	419901237
Contact water meter DN 40,	2 l / pulse	419901238
Contact water meter DN 50	2.5 l / pulse	419901233
Contact water meter DN 80	10 l / pulse	419901231
Contact water meter DN 100	10 l / pulse	419901220
Contact water meter DN 150	25 l / pulse	on request

Other pulse versions on request!

Special versions of contact water meters

Article		Material No.
Special impulse sequences:		
Contact water meter DN 20,	$Q_n = 0.50 \text{ m}^3/\text{h}, 0.06 \text{ l / pulse}$	233627
	$Q_n = 0.75 \text{ m}^3/\text{h}, 0.10 \text{ l / pulse}$	419901028
	$Q_n = 0.75 \text{ m}^3/\text{h}, 0.15 \text{ l / pulse}$	419901029
Hot water version:		
Hot water meter DN 20,	$Q_n = 2.5 \text{ m}^3/\text{h}, 0.5 \text{ l / pulse}, 130 \text{ mm face-to-face length up to max. } 90^\circ \text{ C, incl. of water meter screw connection one-sided with injection hole G } \frac{1}{4}$	419901235
	$Q_n = 2.5 \text{ m}^3/\text{h}, 1 \text{ l / pulse}, 130 \text{ mm face-to-face length, up to max. } 90^\circ \text{ C}$	419901239
	$Q_n = 2.5 \text{ m}^3/\text{h}, 1 \text{ l / pulse}, 190 \text{ mm face-to-face length, up to max. } 120^\circ \text{ C}$	419901044
Nickel electroplated version:		
Contact water meter nickel-plated DN 20,	$Q_n = 2.5 \text{ m}^3/\text{h}, 1 \text{ l / pulse}$	419901234
Contact water meter nickel-plated DN 25,	$Q_n = 6 \text{ m}^3/\text{h}, 1 \text{ l / pulse}$	419901240
Riser tube version:		
Riser tube meter DN 20,	$Q_n = 2.5 \text{ m}^3/\text{h}, 0.25 \text{ l / pulse}$	419901039

Accessories:



Article

Material No.

Water meter screw connection

Material: brass

for contact water meter	DN 20 (G 1 _i – R ¾ _a)	415506343
	DN 25 (G 1¼ _i – R 1 _a)	415506344
	DN 40 (G 2 _i – R 1½ _a)	415506349

2 pieces required in each case
or 1 piece in connection with:



Water meter screw connection

with G ¼ hole for metering valve

Material: brass

for contact water meter	DN 20 (G 1 _i – R ¾ _a)	415506331
	DN 25 (G 1¼ _i – R 1 _a)	415506332
	DN 40 (G 2 _i – R 1½ _a)	415506334

Water meter screw connection nickel electroplated

Material: brass with protective nickel layer (inside and outside)

for contact water meter	DN 20 (G 1 _i – R ¾ _a)	415506353
	DN 25 (G 1¼ _i – R 1 _a)	415506354
for contact water meter	DN 20 (G 1 _i – R ¾ _a)	415506336
	with G ¼ hole for metering valve	

Connection cable for electrical metering pumps

- PVC-lead (grey), protection class IP 67, completely premade for connection to ELADOS EMP II / III, 5 m length, with 4-pin pulse input plug 418439002
- Flexible control lead LIYY 2 x 0.5 mm² (grey) 418435301