



# Water meter<sup>®</sup>

## Single-jet dry-rotor version meters

- For cold and warm water
- Nominal flow 2.5 - 4 m<sup>3</sup>/h
- Horizontal and vertical fitting
- Optionally, with Modularis totalizer or contact maker

## HERE ARE MANY GOOD REASONS FOR USING THE UNIVERSAL SINGLE-JET METERS FROM SANO

Thanks to their clever construction principle, single-jet dryrotor version meters from SANO guarantee precise measuring results and exceptional reliability. The resolute separation of wet and dry areas protects the number wheel totalizer from deposits and corrosion. Without exception, the materials used are of top quality. Depending on the model, the meters are produced with 5- or 8-digit totalizers and are available for temperatures up to 30°C (ETK, single-jet dry-rotor version meter for cold water) or up to 90 °C (ETW, single-jet dry-rotor version meter for warm water). The maximum pressure load is 1,6 MPa . The dial faces, stick-on labels and protective covers can be labelled individually as the customer desires.

The totalizers are pivoted which makes them easy to read regardless of whether they are inserted horizontally or vertically.

Single-jet dry-rotor version meters meet all demands of the PTB (Federal Physicotechnical Institution) as well as EU regulations. Numerous international approvals have been granted.

Best equipped for modern meter communication are the single-jet dry-rotor version meters with Modularis totalizers and the meters with contact makers. Using these intelligent solutions, integration into any remote reading system is not only simple but they can also be retrofitted at any time. Naturally, our meters are also available as washstand meters and hose meters.



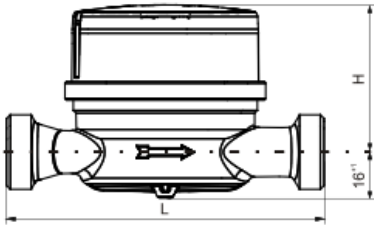
Exploded view of a single-jet dry-rotor version meter

- ① Cover
- ② Totalizer
- ③ Ring nut
- ④ Pressure plate
- ⑤ Impeller wheel
- ⑥ Housing

## Installation

Pipeline:	horizontal	—
	vertical	
Meter head:	upwards	↑
	sideways	↔

## Dimension diagram

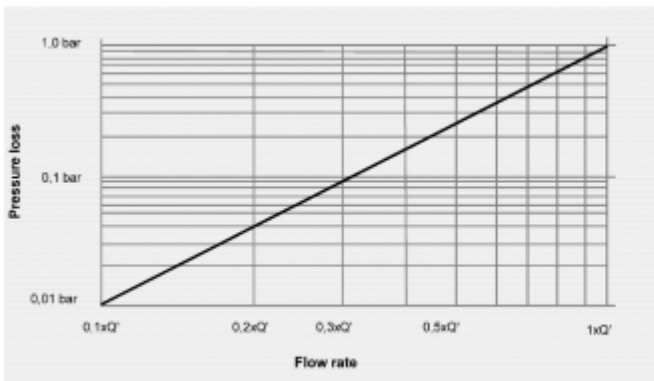


## SINGLE-JET METER MODULARIS

The innovative solution for modern water meter communication:

- Ready for connection with remote reading systems
- 8-digit roller totalizer with modulation indicator
- Resolution 1 litre

## Pressure loss graph



Pressure loss graph

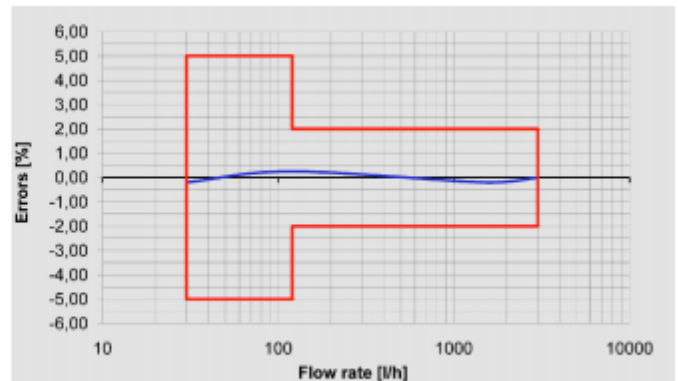
## Technical data

			15	20
Nominal diameter	DN	mm	15	20
Nominal pressure	PN	bar	16	16
Connection thread on meter	G...B	Inch	3/4	1
Connection thread on coupling	R...	Inch	1/2	3/4
Nominal flow rate	Q3	m³/h	2,5	4
Maximal flow rate	Q4	m³/h	3,125	5
Partial limit horizontal ±3% (90°C)	Q2h	l/h	40	64
Partial limit vertical ±3% (90°C)	Q2v	l/h	80	128
Partial limit horizontal ±2% (30°C)	Q2h	l/h	40	64
Partial limit vertical ±2% (30°C)	Q2v	l/h	80	128
Minimum flow rate horizontal ±5%	Q1h	l/h	25	40
Minimum flow rate vertical ±5%	Q1v	l/h	50	80
KVS value		m³/h	3,2	5,05
Temperature (30°C)		max. °C	30	30
Temperature (90°C)		max. °C	90	90
Measuring range horizontal			R100	R100
Measuring range vertical			R50	R50

Dimensions and weight				
Length without couplings	A	mm	110	130
Length with couplings		mm	190	225
Height	B	mm	69	69
Weight without couplings		app. g	0,4	0,64
Weight with couplings		app. g	0,414	0,902

Modularis pulse generator	S0 DIN 43864 or reed-compatible
Modularis radio-controlled, frequency	868 MHz or 433 MHz
Modularis M-Bus- according to	EN 13757-3

## Measurement accuracy curve



Typical accuracy curve Qn1,5 class B