



Special Features

The main meter and the bypass meter are arranged one behind the other in the direction of flow.

There is no longer any need for the previous differentiation between the "bypass meter on the right" and "bypass meter on the left".

Removable measurement element consisting of the main meter, the change-over valve and the bypass meter ("3 in 1" concept)

A multirange measurement element (compatible for DN 50, 80 or 100) can be obtained for straightforward, economical replacement after the calibrated validity period has expired.

Main meter with hydrodynamic balance impeller

Spring-loaded change-over valve with low pressure drop

Bypass meter specified as an impeller or piston measurement cartridge with plug-in non-return valve

Minimum flowrate (Qmin): 6 l/hour for piston type bypass meter

Obtainable in body lengths specified as per DIN 19625 and ISO 4064

Application

Measurement of high flow rates with extremely wide spread flow profile

Measurement of smallest flow rates for leakage detection

Ideal for fire service pipes

Options

Main and bypass meters fitted with volume pulse transmitters (reed, optical)

Main and bypass meters equipped with electronic counters (encoder, hybrid or fully electronic)

Sliding compensator for extension of meter casing as per DIN 19625

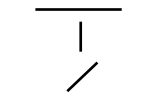
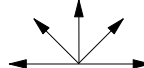
Preparation for one quarter inch pressure sensor

Change-over valve with non-return valve function up to PN 10 in conjunction with DIN 3269

Pattern Approval

6.152	Metrological Class B 30 °C
01.16	

Installation

Pipe	horizontal vertical * inclined *	
Meter Head	upwards sideways *	

* Only with piston bypass meter R-XTP and R-PD
Unrestricted straight pipe in front of the meter 3 x DN.
No requirements behind the meter.

Technical Data

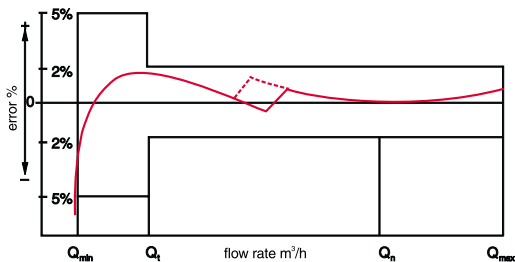
Nominal Diameter	DN mm	50	65	80	100
Size of meter (EEC)	Q _n	15	25	40	60
Working pressure	PN bar	16			
Maximum peak flow (1 x 24 hours)	Q _{max} m ³ /h	90	120	200	280
Continuous flow	Q _n m ³ /h	50	70	120	180
Bypass meter	Q _n m ³ /h	2.5			
Transitional flow ±2%*	Q _t m ³ /h	0.0375			
Change over with increasing flow	m ³ /h	2.3			
	m ³ /h	1.2			
Lower measuring limit ±5%	Q _{min} m ³ /h	R-XTP = 0.006 XNP = 0.02			

* values valid for multijet meter cartridge XNP

Pulse Values

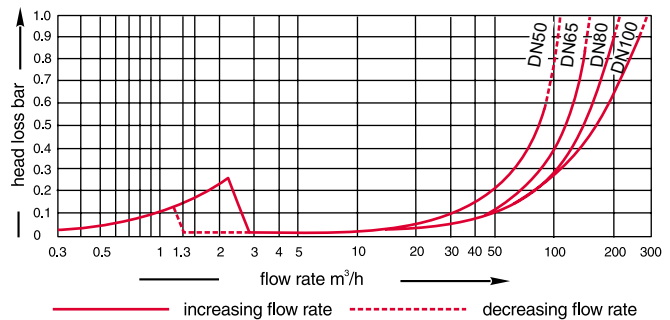
Main meter	RD 01	0.1 m ³ and 1 m ³
	OD 01	0.001 m ³
	OD 03	0.01 m ³
Bypass meter (RXTP)	Reed	0.01 m ³ ; 0.1 m ³ or 1 m ³
Bypass meter	OD 01	0.1 Ltr.
	OD 03	1 Ltr.
RPD	RD 01	0.01 m ³ and 0.1 m ³

Typical Accuracy Curve

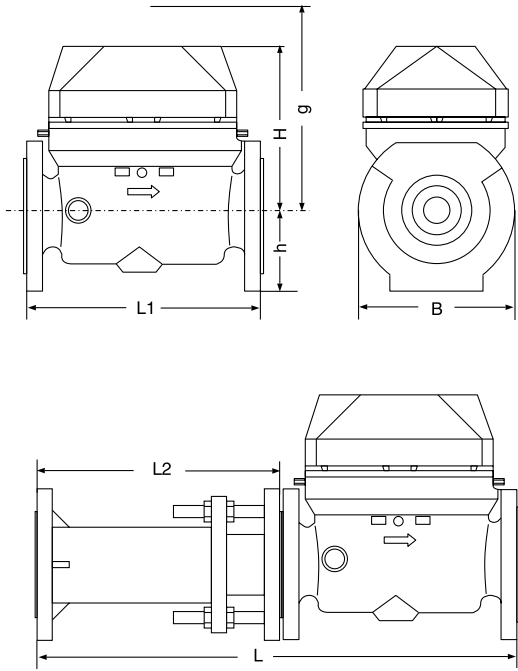


- Q_{max} = maximum peak flow
- Q_n = continuous flow
- Q_t = transitional flow ±2%
- Q_{min} = minimum flow ±5%

Typical Head Loss Curve



Dimension Picture



Dimensions and Weights

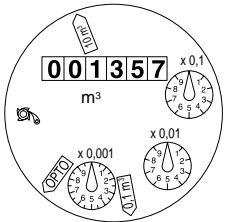
Nominal Diameter	mm	50	65	80	100	
Size of meter (EEC) Qn		15	25	40	60	
Overall length	L1	mm	270		300	360
	L1	mm	300	300	350	350
Height	H	mm	220			
	h	mm	80	92.5	100	100
	g	mm	475			
Length	L2	mm	330±40		400±60	440±60
	L*	mm	600±40		700±60	800±60
Width	ca. mm	185	185	210	220	28.5
Weight	meter	kg	21	23.6	23.5	28.5
	measuring unit	kg	7			
	spool piece	kg	10.5		16.5	20.5

* for Meitwin with body length according to DIN 19625

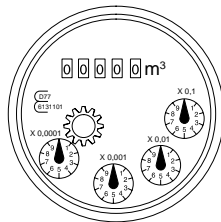
Materials

Body	Main meter	cast iron
	Bypass meter	brass
Measuring element both meters		plastic
Rotor	both meters	plastic
Spring loaded valve		plastic and stainless steel

Dials



Main meter



Bypass meter cartridge
(Type M-N Q_N 2,5 XNP)

Bypass Meters

Standard Bypass meter

Multijet meter cartridge wet dial

type M-N QN 2,5 XNP

Options:

Piston meter cartridge dry dial

type R-XTP QN 2,5

Piston meter cartridge dry dial
with pulser

type R-XTP QN 2,5 K =...

with Standard register

type RPD QN 2,5 Standard

with Encoder register

type RPD QN 2,5 Encoder

with Hybrid register

type RPD QN 2,5 Hybrid

with Electronic register

type RPD QN 2,5 Electronic



Bypass meter cartridge
(type M-N QN 2,5 XNP)



Bypass meter cartridge
(type RPD QN 2,5)

Available types

Nominal width	DN	50	65	80	100
Nominal size	Qn	15	25	40	60
Design length as per DIN 19625					
Design length	(mm)	270		300	360
Order n°		82 92 99		82 93 00	82 93 01
Design length as per ISO 4064					
Design length	(mm)	300	300	350	350
Order n°		82 93 74	82 93 75	82 93 76	82 93 77
Measurement element		82 93 18 *	82 93 02 **	82 93 18 *	82 93 18 *

* Multi-range measurement element, compatible for DN 50, 80 & 100 in DIN and ISO design lengths

** Essential to quote DN 65 nominal meter width on order

Fittings

Sliding compensator for extension of meter casing as per DIN 19625					
Nominal width	DN	50	65	80	100
Design length	mm	330±40		400±60	440+60
Order n°		82 83 31		82 83 33	82 83 36

Specimen order

Meitwin, DN 50, 50/16	Design type
Drilled to DIN 2501 PN 16	Nominal width
R-XTP bypass meter QN 2.5 with 100-litre remote counting pulse	Temperature level
Design length 270 mm	pressure level
Change-over valve with/without reflux prevention function	Flange drilling type
82 92 99	By-pass meter
With sliding compensator	Casing design length
DN 50	Type of measurement element ***
82 83 31	Order n°
	Fittings
	Nominal width
	Order n°

*** Please state as appropriate. If desired, the non-return valve function can be retrofitted at any time by replacing the measurement element.

If the RPD type of bypass meter is ordered, then the Meitwin is supplied with a type of cover which is common to both the main meter and the by-pass meter.