



Main characteristics

The main meter and the by-pass meter are arranged one behind the other in the direction of flow.

There is no longer any need for the differentiation between the "by-pass meter on the right" and "by-pass meter on the left".

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

A multirange measuring element (compatible for DN 50, 80 or 100) allows an easy economical replacement after the calibrated validity period has expired.

Main meter with hydrodynamic balanced rotor

Spring-loaded change-over valve with low headloss

By-pass meter specified as a velocity or piston meter cartridge with plug-in non-return valve

Minimum flowrate (Q_{min}): 6 l/hour for piston type by-pass meter

Available in body lengths specified as per DIN 19625 and ISO 7858

Applications

Measurement of high flow rates with extremely wide spread flow profile

Measurement of smallest flow rates for leakage detection

Ideal for fire service pipes

Available Options

Main and by-pass meters fitted with pulsers (reed, optical)

Main and by-pass meters equipped with electronic registers (Encoder, Hybrid)

Spool piece for extension of meter casing as per DIN 19625

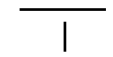

Preparation for quarter inch pressure sensor

Change-over valve with non-return valve function up to PN 10 as per DIN 3269

Pattern Approval

6.152	Metrological Class B 30 °C
01.16	

Installation

Pipe	horizontal vertical	
Meter Head	upwards sideways	

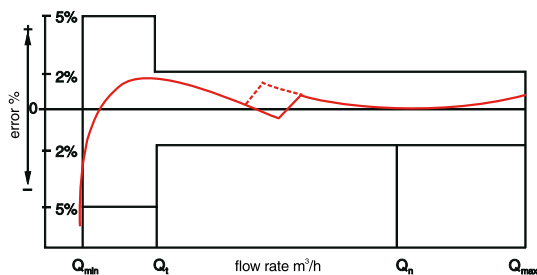
Technical Data

Nominal Diameter	DN mm	50	65	80	100
Size of meter (EEC)	Q_n	15	25	40	60
Working pressure	PN bar				
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
By-pass meter	Q_n m ³ /h	2.5			
Transitional flow $\pm 2\%*$	Q_t m ³ /h	0.0375			
Change over with increasing flow	m ³ /h	2.3			
	m ³ /h	1.2			
	Q_{min} m ³ /h	type 612 = 0.006			

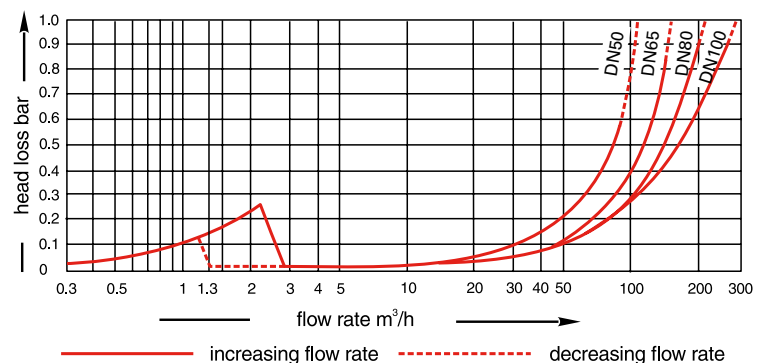
Pulse Values

Main meter	RD 01	0.1 m ³ and 1 m ³
	OD 01	0.001 m ³
		0.01 m ³
By-pass meter (type 612)	HRI	0.001 m ³ , 0.01 m ³ , 0.1 m ³ or 1 m ³
By-pass meter	OD 01	0.1 Ltr.
	OD 03	1 Ltr.
RPD	RD 01	0.01 m ³ and 0.1 m ³

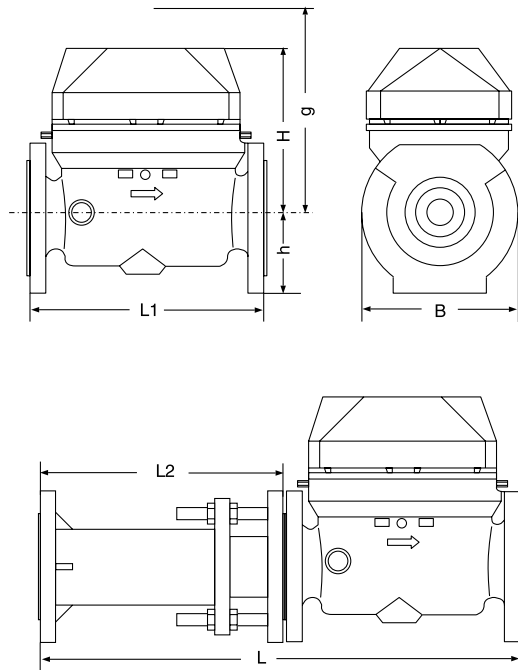
Typical Accuracy Curve



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



Dimension Picture



Dimensions and Weights

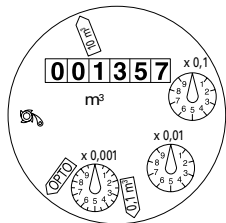
Nominal Diameter	mm	50	65	80	100
Size of meter (EEC) Qn		15	25	40	60
Overall length					
L1	mm	270		300	360
L1	mm	300	300	350	350
Height H	mm	220			
h	mm	80	92.5	100	100
g	mm	475			
Length L2	mm	330±40		400±60	440±60
L *	mm	600±40		700±60	800±60
Width	mm	185	185	210	220
Weight meter	kg	23.0	24.6	26.1	31.0
measuring unit	kg	7			
spool piece	kg	10.5		16.5	20.5

* for MeiTwin with body length according DIN 19625

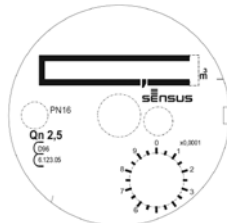
Materials

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

Dials



Main meter



By-pass meter cartridge
(Type 612)

By-pass Meters

Standard By-pass meter

Piston meter cartridge dry dial

type 612 QN 2,5

Options:

Piston meter cartridge dry dial
with Standard register
with Encoder register
with Hybrid register

type RPD QN 2,5 Standard
type RPD QN 2,5 Encoder
type RPD QN 2,5 Hybrid

other by-pass meters on request



By-pass meter cartridge
(type 612)



By-pass meter cartridge
(type RPD QN 2,5)

Available design

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

* Multi-range measuring unit, compatible for DN 50, 80 & 100 in DIN and ISO lengths

** Essential to mention DN 65 in your order

Spool pieces for extension of meter casing as per DIN 19625					
Size	DN	50	65	80	100
Overall length	mm	330±40		400±60	440±60
Order n°		82 83 31		82 83 33	82 83 36

Order example

MeiTwin, DN 50, 50/16	Type
Drilled to EN 1092 PN 16	Size
Type 612 by-pass meter QN 2,5 with 100-litre remote counting pulse	Temperature
Overall length 270 mm	Pressure
Change-over valve with/without reverse flow preventer	Flange drilling
82 92 99	By-pass meter
With sliding compensator	Overall length
DN 50	Type of measurement element ***
82 83 31	Order n°
	Fittings
	Nominal width
	Order n°

*** Please state as appropriate.

If the MeiTwin is ordered with a RPD type by-pass meter, it is supplied with a head assembly covering both, main and by-pass meter register.



Certified according to ISO 9001
Quality Management System OQS Reg.no. 3496/0



UK & Ireland Enquiries

Sensus Metering Systems 11 The Quadrangle, Abbey Park, Romsey, Hampshire SO51 9DL UK
T: +44 (0) 1794 526100 F: +44 (0) 1794 526101 Email: info.gb@sensus.com www.sensus.com

International Enquiries

Sensus GmbH Hannover Meineckestraße 10, D-30880 Laatzen Germany
T: +49 (0) 5102 74-0 F: +49 (0) 5102 74-3341 Email: info.int@sensus.com www.sensus.com