

WPV-MS 150

Compound water meter for cold water up to 50 °C DN 150



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

Options

- Main and by-pass meters fitted with pulse and data interface HRI-Mei and/or pulsers type OD (with by-pass meter RK-MS HRI)
- Overall length acc. to DIN with spool piece
- Main meter and By-pass meter can be equipped with Encoder ER56 register

Main features

- Meter with pattern approval acc. to 2014/32/EU (MID) annex MI001
- No straight upstream or downstream pipe due to integrated flow straightener (U0D0)
- Spring-loaded change-over valve with low headloss and extended lifetime
- By-pass meter specified as a piston meter RK-MS HRI, register copper/glass, protection class IP68
- Powder coating ensures maximum corrosion protection
- Meter can be submerged, protection class IP68
- Installation position horizontal
- Register prepared for HRI-Mei and Opto OD pick-up
- Used materials resistant up to 50 °C medium temperature

Pattern approval

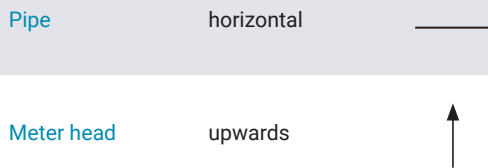
Marking CE M-XX* 0102

DE-14-MI001-PTB002

* year of production

Temperature class T30

Installation



Installation requirements

The meter does not require any upstream or downstream straight length.

The common rules of good engineering practice must be followed.

Performance table acc. to manufacturers data

Nominal diameter	DN	150
Working pressure	PN bar	16
Maximum peak flow	Q_s m ³ /h	600
Continuous flow	$Q_{3'}$ m ³ /h	400
By-pass meter	DN mm	40
Transitional flow	Q_2 m ³ /h	0.15
Minimum flow	Q_1 m ³ /h	0.035

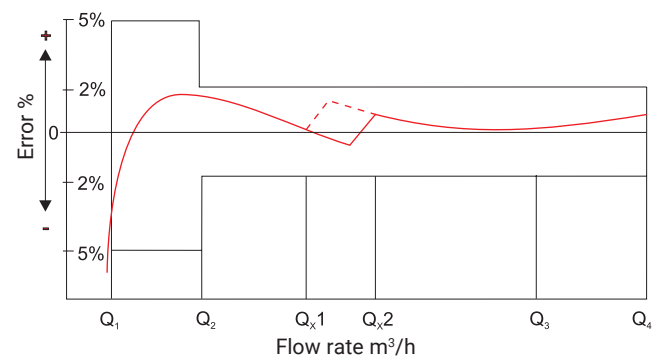
Performance table acc. to MID pattern approval

Nominal diameter	DN	150
Maximum peak flow	Q_4 m ³ /h	315
Continuous flow	Q_3 m ³ /h	250
Change-over flow (increasing)	Q_{x2} m ³ /h	8.3
Change-over flow (decreasing)	Q_{x1} m ³ /h	4.7
Transitional flow	Q_2 m ³ /h	0.16
Minimum flow	Q_1 m ³ /h	0.1

Pulse values

Main meter (standard register)	HRI-Mei	0.1 m ³ , 1 m ³ or 10 m ³
	OD 01	0.01 m ³
	OD 03	0.1 m ³
Main meter (Encoder register)	HRI	1 m ³ or 10 m ³
By-pass meter (standard register)	HRI-Mei	0.01 m ³ ; 0.1 m ³ or 1 m ³
	OD 01	0.001 m ³
	OD 03	0.01 m ³
By-pass meter (Encoder register)	HRI	0.1 m ³ or 1 m ³

Typical accuracy curve



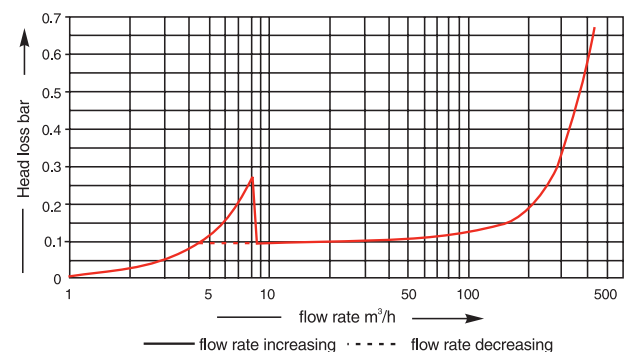
Q_4 = maximum peak flow $\pm 2\%$

Q_3 = continuous flow $\pm 2\%$

Q_2 = transitional flow $\pm 2\%$

Q_1 = minimum flow $\pm 5\%$

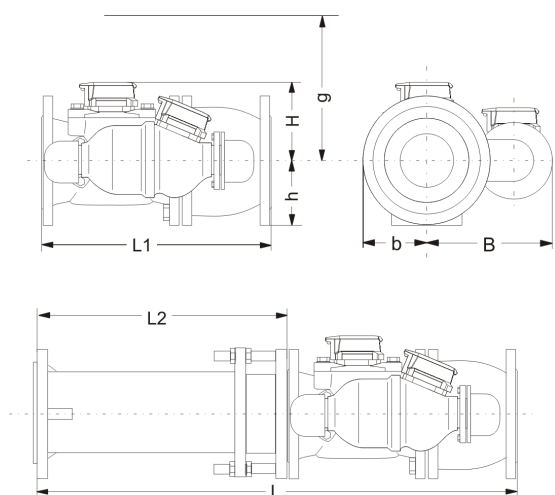
Typical accuracy curve



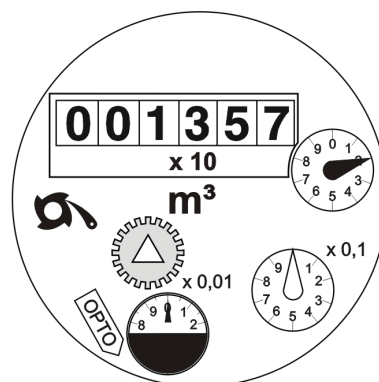
Dimensions and weight

Nominal diameter	DN	150
Overall length	L1	mm 500
By-pass meter	Q ₃	16
Height	H	mm 177
Height	h	mm 135
Dismantling height	g	mm 356
Length	L2	mm 500±40
Length	L	mm 1000±40
Width	B	ca. mm 275
Width	b	ca. mm 145
Weight meter	kg	60
Weight spool piece	kg	32

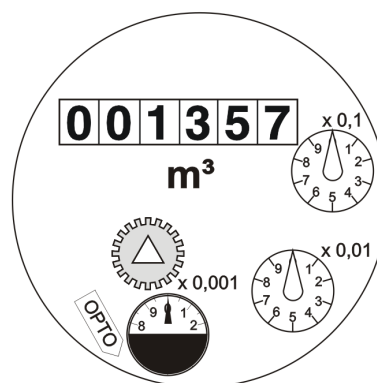
Dimensional diagram



Dial



Main meter



By-pass meter

Materials

Body, main meter	Cast iron
Body, by-pass meter	Brass
Measuring element (both meters)	Plastic
Rotor (both meters)	Plastic
Spring loaded valve	Plastic and stainless steel

By-pass meters

Standard By-pass meter

Rotary piston meter with mechanical register

Type: RK-MS HRI Q₃ 16

Options

Rotary piston meter with Encoder register

Type: RK-MS ER56 Q₃ 16



Rotary piston meter RK-MS Q₃ 16

Application example for automatic meter reading



Order example

WPV-MS DN 150 T30 16
according to EN 1092 PN 16
with spool piece
DN 150

Type
Diameter nominal
Working temperature
Working pressure
Flange drilling
Accessories
Size