UtilityPal

Volumetric Rotary Piston Water Meter

UtilityPal

Application

- Measuring the volume of cold potable water passing through the pipeline

Working Conditions

- Water temperature: 2° C - 40° C
- Water pressure: 1600 kPa

Features

- Ensures high sensitivity and accurate registration throughout a wide flow range
- Mechanical transmission movement equates to maximum reliability
- Corrosion resistant body
- Liquid-sealed register
- Easy reading and long-term clear reading
- Low starting flow rate
- Internal non return valve
- Internal strainer

Compliance with Standard

Technical data conforms to :

- SANS 1529-1: 2019
- SANS 1529-9 : 2019
- ISO 4064 Class C Standard

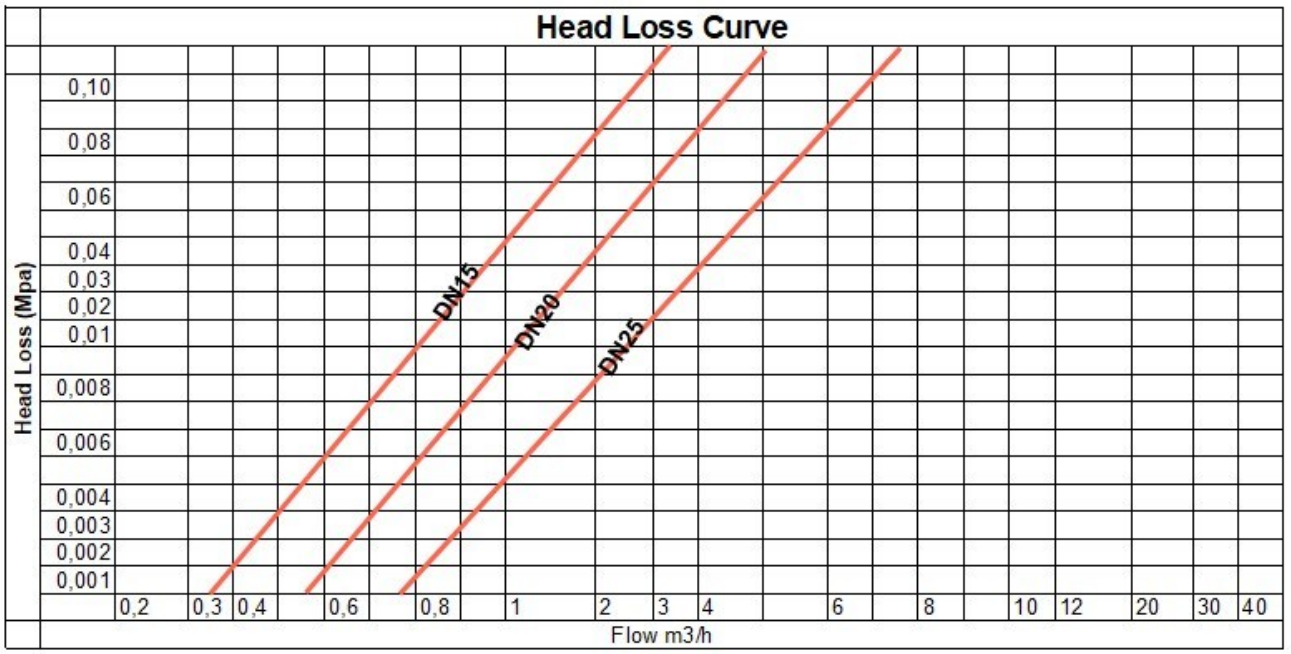
Options

- Plastic body is available
- Can be equipped with reed switch option
- Sizes available DN15, DN20 and DN25
- Tamper Detection

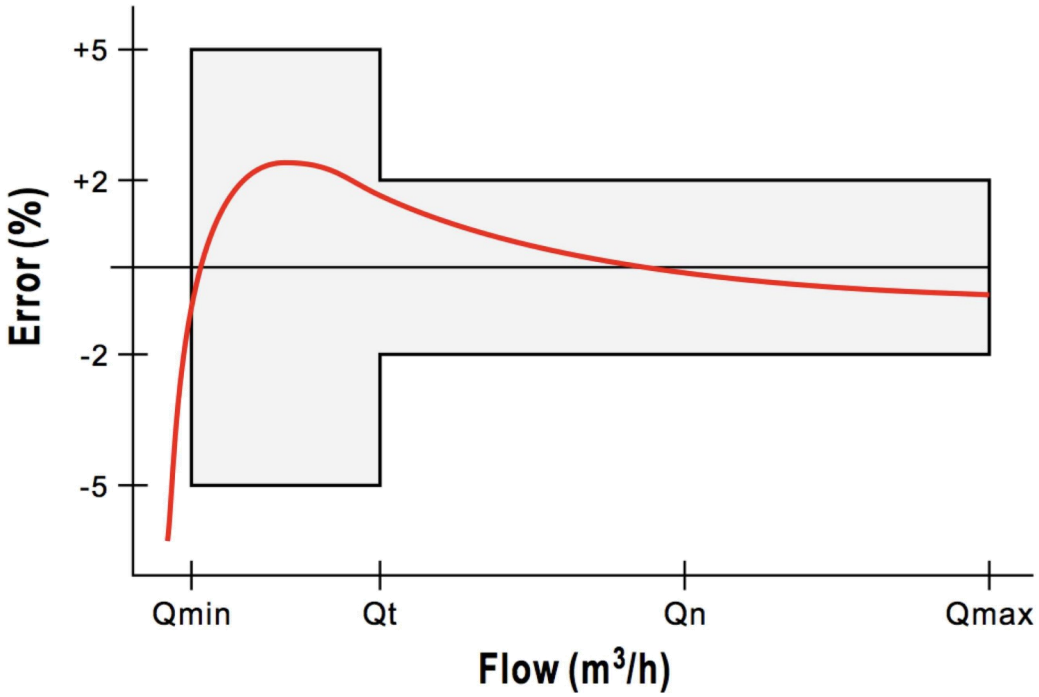
Installation Requirements

- The meter can be installed in horizontal, vertical or in an inclined position
- Pipeline must be flushed of all debris before installation
- The meter should be constantly full of water during operation

Head Loss Curve



Accuracy Curve

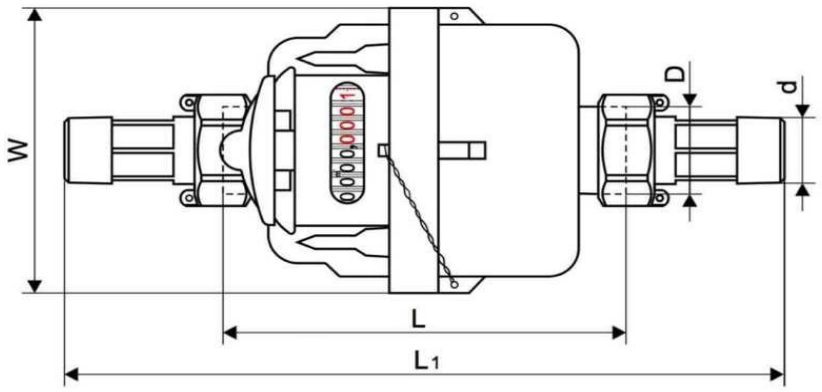


Main Technical Data

Nominal diameter		DN	15	20	25
Maximum flow rate	m³/h	Qmax	3.0	5.0	7.0
Nominal flow rate	m³/h	Qp	1.5	2.5	3.5
Transitional flow rate	l/h	Qt	22.5	37.5	52.5
Minimum flow rate	l/h	Qmin	15	25	35
Maximum reading	m³	9999.99998			
Minimum reading	m³	0.00002			

- Maximum Permissible Error:
  In the lower zone from Qmin inclusive up to but excluding Qt is ±5%.
  In the upper zone from Qt inclusive up to and including Qmax is ±2%.

Dimension Picture



Dimension and Weights

Nominal diameter		DN	15	20	25
Body thread	(inches)	D	G 3/4	G 1	G 1 1/4
Connector thread	(inches)	d	R1/2	R 3/4	R1
Body length	mm	L	114 / 165	114 / 165	198
Overall length	mm	L 1	209 / 264	234 / 294	290
Width	mm	W	97	97	124
Weight without Connectors	Kg		0.44 / 0.56	0.46/0.47	0.89
Weight with connectors	kg		0.62 / 0.91	0.63/ 0.75	1.41

- Technical data conforms to SANS 1529-1: 2019 and ISO 4064 Class C Standard

Compliance

- Every model Plastic Water Meter manufactured is subjected to a full range of verification tests before dispatch.
- All testing is conducted in an approved SANAS Accredited Facility LAB. Performance Results are approved by the and conforms to the Trade Metrology Act, of SANS 1529-1: 2019.

Counter

- The counter is a wet dial type, liquid filled then sealed. Wet dial meter counter to prevent condensation under the lens.
- The counter is a simple straight reading which has 8 figures. Which the last 4 figures in WHITE illustrates litres, and 1st 4 figures in BLACK illustrate cubic meters.
- The counter has direct mechanical drive to prevent magnetic interference and tampering.

Tamperproof

- The model is of a tamperproof design.
- A seal is installed after testing to prevent any form tampering. All manufactured units have a unique serial number.

Features

- Pulse Output. Approved and equipped to generate a high frequency pulse output (2 pulse per litres for HPRP model) and is available for all sizes. Equipped with a built in non return valve.
- Built in Strainer - to trap solid particles.
- Inlet and Outlet threads compatible with I.S.O metric sizes.
- All models will be supplied to have plastic protecting covers on inlets and outlets of the meter for protection.
- Suitable for operation in water at temperatures between 2 °C and 40 °C.

Construction Material

- All material produced are of virgin grade for maximum resistance to wear and tear, for longer lifespan.
- All materials are of corrosion resistance.
- Plastic Body Water Meters are produced from carefully selected material for Potable Drinking Water and with a UV stabilizer.
- Other Material: Brass DZR Material, Stainless Steel Grade 316 Material

Municipalities

- The following municipalities make use of piston water meters: City of Cape Town, Stellenbosch Municipality, City of Tshwane, Johannesburg Water, and Ekurhuleni Metropolitan Municipality.

CITY OF CAPE TOWN
ISIXEKO SASEKAPA
STAD KAAPSTAD

STELLENBOSCH
STELLENBOSCH • PNIEL • FRANSCHHOEK
MUNISIPALITEIT • UMASIPALA • MUNICIPALITY

CITY OF
TSHWANE

Johannesburg Water

City of
Ekurhuleni

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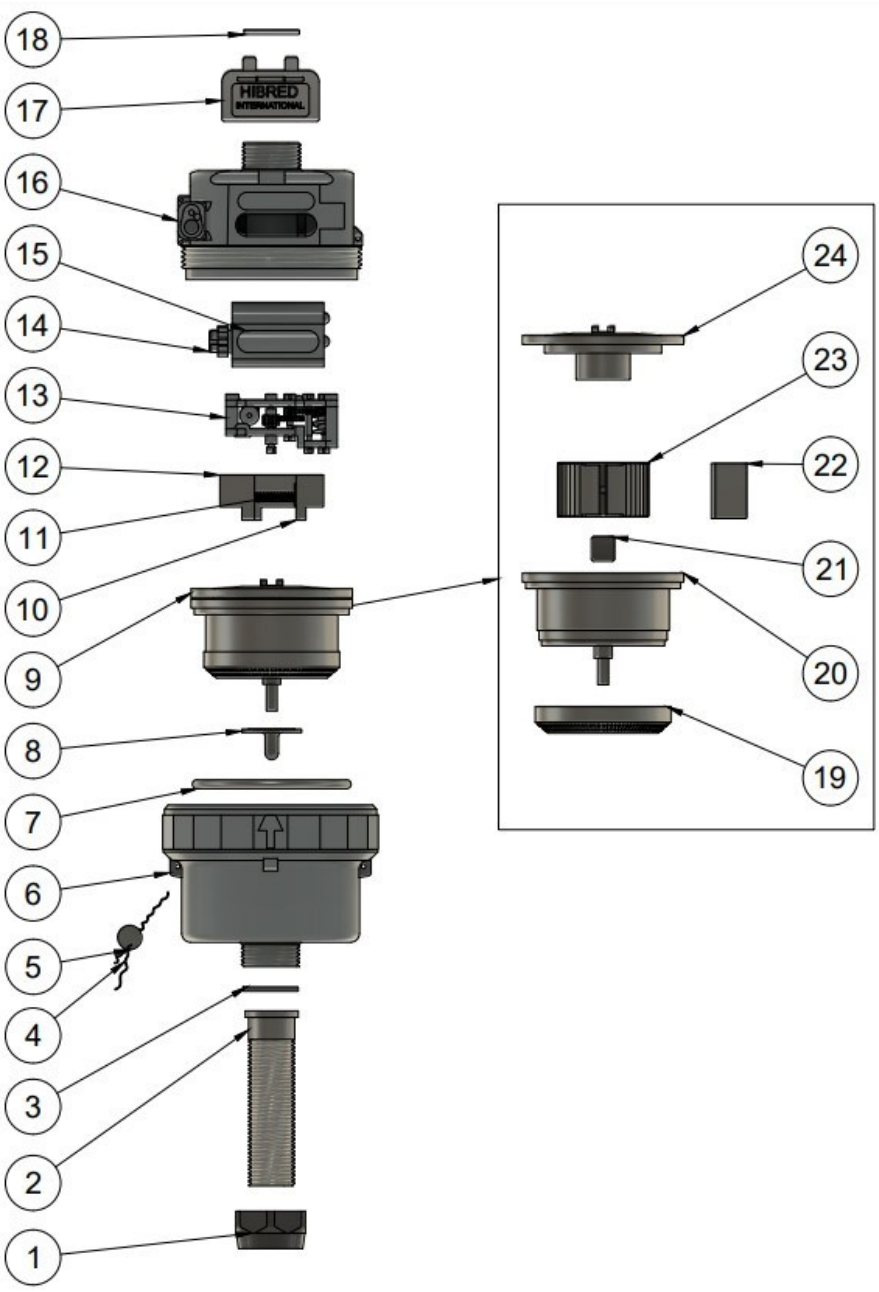
Material of Construction

1. Meter Lock Nut
2. Plastic Running Nipple
3. Flat Rubber Washer
4. Sealing Wire
5. Verification Seal
6. Plastic Female Meter Housing
7. Meter Rubber ‘O” Ring
8. Non-Return Valve
9. Chamber
10. Plastic Wedge
11. Wedge Spring
12. Plastic Wedge
13. Counter Gearbox
14. Crown Magnet Wheel
15. Counter Register
16. Plastic Male Housing
17. Meter Lid
18. Meter Lid Pin
19. Strainer
20. Chamber Housing
21. Bearing
22. Piston Plate
23. Piston
24. Top Chamber Plate



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