

Combination Meter Specification.

Legal Requirements

Meters sizes 40mm, 50mm, 80mm and 100mm must be verified within the borders of South Africa in accordance with the requirements of section 7 of the Legal Metrology Act 2014 (Act 9 of 2014) All verification to be performed by registered Verification Officers in an S.A.N.A.S Accredited Verification Laboratory in terms of S.A.N.S. 10378 : 2012

Performance Specification.

METER SIZE (mm)	50 X 20	80 X 20	100 X 20	150 X 40
Max. Flowrate $q_s \pm 2\%$ (m ³ /h)	30	80	120	300
Permanent Flowrate $q_p \pm 2\%$ (m ³ /h)	15	40	60	150
Transitional Flowrate $q_t \pm 2\%$ (m ³ /h)	0.12	0.2	0.2	0.8
Minimum Flowrate $q_{min} \pm 5\%$ (m ³ /h)	0.03	0.5	0.5	0.2
Starting Flow (m ³ /h)				
Maximum Working Pressure (kPa)	1600	1600	1600	1600
Body Length (mm)	280	370	370	500

In addition, the meters offered must comply with the following: -

- Epoxy coated cast iron body. By-pass meter must have a DZR brass body.
- The main meter must be of the Woltmann WP helical vane inferential velocity type.
- Meter must have the following features to facilitate convenience of on-site replacement:
 - (a) Pre-calibrated replaceable internal mechanisms.
 - (b) In Meter sizes 50 mm to 150 mm, the Helical vane to be fitted in a fully shrouded cartridge designed to direct the entire volume of water through the measuring element to ensure the body impact is negligible on the meters accuracy.
- Meter should be suitable for use with water temperatures up to 50°C and maximum working pressure of 1 600 kPa.
- All internal plastic components to be constructed of virgin materials.
- The meter must perform within the legal Class B accuracy specification with a straight length of pipe 10 X the diameter of the meter fitted upstream of the meter and 5 X the diameter fitted downstream of the meter.

General

The meter must be backed with a 1-year warranty against faulty workmanship and/or materials. Spare parts for all Water Meters offered must be available in South Africa and still be available for a period of ten years after the purchase of the water meter.

