

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.

MC 8 (11.20)

