

Irrigation Bulk Meters.

Requirements

The meter performance must comply with ISO4064 Class A performance 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 Speciation

The Water Meter must be of the paddle wheel inferential velocity type with the following capabilities:

METER SIZE (mm)	50	80	100	150	200	250	300
Max. Flowrate $q_s \pm 2\%$ (m ³ /h)	30	80	120	300	500	800	1200
Permanent Flowrate $q_p \pm 2\%$ (m ³ /h)	15	40	60	150	250	400	600
Transitional Flowrate $q_t \pm 2\%$ (m ³ /h)	4.5	12	18	45	75	120	180
Minimum Flowrate $q_{min} \pm 5\%$ (m ³ /h)	1.2	3.2	4.8	12	20	32	48
Starting Flow (m ³ /h)							
Maximum Working Pressure (kPa)	1600	1600	1600	1600	1600	1600	1600
Body Length (mm)	200	225	250	300	350	450	500

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

- Epoxy coated cast iron body.
- Meter must have pre-calibrated internal mechanisms available to facilitate on site replacement without having to remove the meter body from the pipeline.
- Meter to be flanged Table 16.
- Meter should be suitable for use with an operating temperature up to 40°C.
- Meter to have a maximum working pressure of 1600 kPa.
- The meter must perform within Class A accuracy specifications with a straight length of pipe 10 times 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 for a period of ten years after the purchase of the water meter.