



Product Authorisation Certificate

For use in City West Water's Infrastructure Systems

Issued to

Bermad Water Technologies

Authorisation	13/322	Licence No:	-
Australian Standard:	-	WSAA Product Specification	-
Other Standards:	EN61000-6-1:2001; EN 55011; 73/23, 93/68 (LVD); 89/336, 92/31 (EMC); CE and ACCREDIA certified	Production Authorisation Expiry Date:	20 October 2018

Description of Product

Euromag Double Flanged Electromagnetic Flowmeters for water supply (potable/recycled) and pressure sewer applications

- Configurations: Integral and Remote versions using the below two flow sensors.
 - Flow sensor MUT 2200EL with PTFE and Ebonite (hard rubber) liner: DN 40, 50, 65, 80, 100, 125, 150, 200, 250, 300, 350 & 400 (PTFE liner for DN 40 & 50, all other sizes > DN 50 are with Ebonite liner).
 - Flow sensor MUT 2500EL with Ebonite liner: DN 450, 500 & 600.

The flow tube of the sensor is made of AISI 304 Stainless Steel. The flanges are made of carbon steel with acrylic painted. Flanges can be supplied in AISI 304SS or AISI 316SS as well. Flanged to AS 4087 Figure B5 PN16 or equivalent.
- The signal converter case is an Aluminium epoxy painted IP 67/68 with front window in toughened glass. Three types of power supply:
 - Converter MC608A: AC/DC Powered 12/24 Vac-dc or 90-264 Vac
 - Converter MC608B: Battery powered with a useful life of 6 years (Internal battery pack 3-6 years; internal and external battery pack 6-10 years)
 - Converter MC608R: Battery mode with solar panel

Converter MC406 suitable for integral or remote version including for Panel mounting installation.
- Electrodes: Hastelloy C is the standard; Options are: Hastelloy B, Titanium, Tantalum and Platinum
- The transmitter can be installed a maximum of:
 - 100m from the sensor for converter MC608A with conductivity 5 μ S/cm minimum
 - 30m from the sensor for converter MC608B/R with conductivity 20 μ S/cm minimum
- If flow sensors are inserted in a non-metallic (PVC or PE) or lined pipeline, they require the use of two grounding rings, which are inserted between the flange and the counter flange or the installation of the grounding electrode.
- Meter Accuracy: $\pm 0.2\%$ for MC608A (ac powered) and $\pm 0.4\%$ for MC608B/R (battery or solar/battery powered)
- For remote version, the flow sensor and converter are connected with two cables that comprise a electrical wire to provide power supply to the sensor and a signal wire for transmitting data from sensor to converter.



Sensor MUT2200EL with MC608A/B/R converter (compact version)



Sensor MUT2200EL with converter MC 608 A/B/R (remote version)



Sensor MUT2500EL

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8. The sensor is IP68 and the converter is IP67 protected. Euromag supplies all remote version sensors with the junction box pre-potted as standard so they do not need to be potted on-site.
9. For the integral or remote versions, the Converter can be installed in locations where it may be exposed to direct sun light. The Converter's glass cover is tough and its display screen is resistant to sunlight.
10. If flow sensors are inserted in a non-metallic (PVC or PE) or lined pipeline, they require the use of two grounding rings, which are inserted between the flange and the counter flange or the installation of the grounding electrode.
11. Flow sensor installed underground should be wrapped to provide additional corrosion protection.



Converter MC608R (battery/solar) and Converter MC406 (panel mounted – integral and remote version)

Conditions

1. Where a range of items or sizes are involved, this Authorisation applies only to those items or sizes listed in the MRWA Products Web Portal <http://www.mrwa.com.au/Pages/Products.aspx>.
2. This Authorisation does not refer to the effectiveness of the product and no claim shall be made through advertising, promotion or in any other way that the above products have been authorised or tested by CWW in other than the terms of this authorisation.
3. The items described above are authorised for use in CWW Infrastructure systems, in accordance with the design and installation practices as detailed or referenced in the:
 - § Melbourne Retail Water Agency (MRWA) Edition of the Water Services Association of Australia (WSAA) Water Supply Code of Australia WSA 03:2011 Version 3.1;
 - § WSAA's Pressure Sewerage Code of Australia WSA 07-2007 Version 1.1;
 - § WSAA's Sewage Pumping Station Code of Australia WSA 04-2005 Version 2.1;
 - § CWW's supplement to the code;
 - § Water Metering & Servicing Guidelines, Ver. 2, 2012; and
 - § Other installation recommendations of the Manufacturer.
4. This approval is valid for five years from the issue date of this certificate. Renewals of approval should be sought three months prior to approval expiry.
5. Bermad Water Technologies shall be responsible for assuring the quality of approved products that are supplied by Bermad Water Technologies to the market. Where the approved products or parts thereof are manufactured or assembled by a third party, Bermad Water Technologies shall employ systematic procedures to verify product conformance.
6. The product shall be manufactured under a third party certified Quality Assurance System. All products shall be identified with the manufacturers name or trade mark.
7. The products shall demonstrate ongoing satisfactory performance when installed in CWW Infrastructure system.
8. CWW shall be notified in writing if:
 - § The third party certification is withdrawn, suspended or changed;
 - § Any change of the certification agency occurs;
 - § There are any changes to product design, materials, model numbers etc.; or
 - § The products are to be withdrawn from sale.
9. The products may be subjected to random quality control checks for which a charge may apply. Compliance with new Standards as they are replaced will need to be demonstrated.
10. CWW reserves the right to request additional information and / or evidence of product suitability add or vary to the conditions set out above, or if necessary, modify or withdraw the authorisation at any time.

Signed: 

Date: 21 October 2013

Steve Dober
 Manager Connections and
 Metering Services

This Certificate is issued without alteration or erasure.