



Australian Government  
Department of Industry,  
Innovation and Science

## National Measurement Institute

### Certificate of Approval NMI 14/3/36

Issued by the Chief Metrologist under Regulation 60  
of the  
National Measurement Regulations 1999

This is to certify that an approval for use for trade has been granted in respect of the instruments herein described.

Euromag Model MUT 2200 EL Water Meter

submitted by            Bermad Water Technologies  
                                 7 Inglewood Drive  
                                 Thomastown    VIC    3074

**NOTE:** This Certificate relates to the suitability of the pattern of the instrument for use for trade only in respect of its metrological characteristics. This Certificate does not constitute or imply any guarantee of compliance by the manufacturer or any other person with any requirements regarding safety.

This approval has been granted with reference to document NMI 10-1 Meters Intended for the Metering of Water in Full Flowing Pipes, *Part 1 Metrological and Technical Requirements*, dated July 2010.

This approval becomes subject to review on 1/12/21, and then every 5 years thereafter.

#### DOCUMENT HISTORY

Rev	Reason/Details	Date
0	Pattern & variants 1 to 3 approved – certificate issued	07/11/16

**2. Description of Variant 1**

**approved on 07/11/16**

A Euromag model MUT 2200 EL water meter, except with the dimensions and specifications as listed in Tables 2a to 2c below. The pattern is repeated in **bold** for completeness.

**Table 2a Meter sizes, flowrates and related information**

<b>Meter size</b>	<b>DN40</b>	<b>DN50</b>	<b>DN65</b>	<b>DN80</b>	<b>DN100</b>
Minimum flowrate Q1 (m <sup>3</sup> /h)	<b>0.79</b>	0.96	1.6	2.88	4.48
Maximum continuous flowrate Q3 (m <sup>3</sup> /h)	<b>25</b>	48	80	144	224
Overload flowrate Q4 (m <sup>3</sup> /h)	<b>31.25</b>	60	100	180	280
Ratio Q3/Q1	<b>31.5</b>	50	50	50	50
Nominal diameter (mm)	<b>40</b>	50	65	80	100
Meter Length	<b>200</b>	200	200	200	250
Verification scale interval (m <sup>3</sup> )	<b>0.0001</b>	0.0001	0.0001	0.0001	0.0001

**Table 2b Meter sizes, flowrates and related information**

<b>Meter size</b>	<b>DN125</b>	<b>DN150</b>	<b>DN200</b>	<b>DN250</b>	<b>DN300</b>
Minimum flowrate Q1 (m <sup>3</sup> /h)	5.6	6.4	12.8	19.2	20
Maximum continuous flowrate Q3 (m <sup>3</sup> /h)	280	320	640	960	1260
Overload flowrate Q4 (m <sup>3</sup> /h)	350	400	800	1200	1575
Ratio Q <sub>3</sub> /Q1	50	50	50	50	63
Nominal diameter (mm)	125	150	200	250	300
Meter Length	250	300	350	450	500
Verification scale interval (m <sup>3</sup> )	0.001	0.001	0.001	0.001	0.001

**Table 2c Meter sizes, flowrates and related information**

<b>Meter size</b>	<b>DN350</b>	<b>DN400</b>
Minimum flowrate Q <sub>1</sub> (m <sup>3</sup> /h)	48	64
Maximum continuous flowrate Q3 (m <sup>3</sup> /h)	2400	3200
Overload flowrate Q4 (m <sup>3</sup> /h)	3000	4000
Ratio Q3/Q1	50	50
Nominal diameter (mm)	350	400
Meter Length	550	600
Verification scale interval (m <sup>3</sup> )	0.001	0.001

**3. Description of Variant 2**

**approved on 07/11/16**

A Euromag MUT 2500 EL, with the same technical characteristics as the pattern except with specifications as listed in Table 3a below.

**Table 3a Meter sizes, flowrates and related information**

<b>Meter size</b>	<b>DN450</b>	<b>DN500</b>	<b>DN550</b>	<b>DN600</b>
Minimum flowrate Q <sub>1</sub> (m <sup>3</sup> /h)	72	72	72	72
Maximum continuous flowrate Q3 (m <sup>3</sup> /h)	3600	3600	3600	3600
Overload flowrate Q4 (m <sup>3</sup> /h)	4500	4500	4500	4500
Ratio Q3/Q1	50	50	50	50
Nominal diameter (mm)	450	500	550	600
Meter Length	450	500	550	600
Verification scale interval (m <sup>3</sup> )	0.001	0.001	0.001	0.001

**4. Description of Variant 3**

**approved on 07/11/16**

The pattern may incorporate an alternative MC608R model indicating flow converter. This flow converter includes rechargeable batteries. Batteries are recharged via connection to a solar panel.

## TEST PROCEDURE No 14/3/36

Water meters tested for initial verification shall comply with the Certificate of Approval, Technical Schedule, and the maximum permissible errors for initial and subsequent verifications at the operating conditions in effect at the time of verification. Maximum permissible errors for the initial and subsequent verification of water meters are given in the *National Trade Measurement Regulations 2009* (Cth).

Water meters shall be verified in accordance with NITP 14 *National Instrument Test Procedures for Utility Meters*.

NOTE: NMI reserves the right to vary this procedure. Any such variation shall be notified in writing by NMI.