



**Australian Government**  
**National Measurement  
Institute**

Bradfield Road, West Lindfield NSW 2070

**Cancellation**  
**Certificate of Approval**  
**No 14/3/5**

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

This is to certify that the approval for use for trade granted in respect of the

Alpe Model Gamma-Rp-Sdc-Aus Water Meter

submitted by      Meter Company Australia Pty Ltd  
                                 17 Moller Street  
                                 Oakleigh    VIC    3166

has been cancelled in respect of new instruments as from 1 April 2011.

Signed by a person authorised by the Chief Metrologist  
to exercise his powers under Regulation 60 of the  
*National Measurement Regulations 1999*.

A handwritten signature in black ink, consisting of a series of loops and a long horizontal stroke at the bottom.



# Australian Government

---

## National Standards Commission

12 Lyonpark Road, North Ryde NSW 2113 Australia

### Certificate of Approval

**No 14/3/5**

Issued 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

Alpe Model Gamma-Rp-Sdc-Aus Water Meter

submitted by Meter Company Australia Pty Ltd  
17 Moller Street  
Oakleigh VIC 3166.

**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.

### CONDITIONS OF APPROVAL

This approval becomes subject to review on 1 March 2009, and then every 5 years thereafter.

Instruments purporting to comply with this approval shall be marked NSC No 14/3/5 and only by persons authorised by the submittor.

It is the submittor's responsibility to ensure that all instruments marked with this approval number are constructed as described in the documentation lodged with the Commission and with the relevant Certificate of Approval and Technical Schedule. Failure to comply with this Condition may attract penalties under Section 19B of the National Measurement Act and may result in cancellation or withdrawal of the approval, in accordance with the Commission's Document NSC P 106.

The Commission reserves the right to examine any instrument or component of an instrument purporting to comply with this approval.

### DESCRIPTIVE ADVICE

**Pattern:** approved 6 February 2004

- An Alpe model Gamma-Rp-Sdc-Aus class 2 positive displacement meter used to measure water for domestic supply for trade.

**Variants:** approved 6 February 2004

1. With certain other features/functions.

Technical Schedule No 14/3/5 describes the pattern and variant 1.

### FILING ADVICE

The documentation for this approval comprises:

Certificate of Approval No 14/3/5 dated 27 April 2004  
Technical Schedule No 14/3/5 dated 27 April 2004 (incl. Test Procedure)  
Figure 1 dated 27 April 2004

Signed by a person authorised under Regulation 60 of the National Measurement Regulations 1999 to exercise the powers and functions of the Commission under this Regulation.

A handwritten signature in black ink, appearing to be 'J. G. T.', located in the bottom right corner of the page.

## TECHNICAL SCHEDULE No 14/3/5

**Pattern:** Alpe Model Gamma-Rp-Sdc-Aus Water Meter

**Submittor:** Meter Company Australia Pty Ltd  
17 Moller Street  
Oakleigh VIC 3166

### 1. Description of Pattern

An Alpe model Gamma-Rp-Sdc-Aus class 2 positive displacement meter (Figure 1) used to measure water for domestic supply for trade.

#### 1.1 Field of Operation

The following characteristics determine the field of operation of the measuring system:

- |                                       |                     |
|---------------------------------------|---------------------|
| • Maximum continuous flow rate, $Q_3$ | 4 m <sup>3</sup> /h |
| • Flow rate ratio, $Q_3/Q_1$          | 200                 |
| • Maximum working temperature         | 30°C                |
| • Maximum admissible temperature      | 50°C                |
| • Maximum working pressure            | 1400 kPa            |
| • Accuracy class                      | 2                   |

#### 1.2 Features/Functions

A positive displacement piston-type class 2 water meter of a size which is normally connected to a 20 mm pipe and is approved for metering domestic supplies and has features/functions as listed below:

- Threaded end connections as normally used in QLD, VIC, TAS, WA and NT.
- A mechanical digital indicator having a series of eight aligned digits and one dial and pointer type display giving a maximum display of 99999.9999 kL in 0.1 L increments.
- Provision for a pulse output of 100 litres per pulse.
- Meter length of 154 mm.

#### 1.3 Markings

Instruments are marked with the following data, either grouped or distributed on the casing, the indicating device dial, an identification plate or the cover if it is not detachable:

Manufacturer's name or mark	...
Serial number	...
Pattern approval mark	NSC No 14/3/5
Numerical value of maximum continuous flow rate, $Q_3$	...
Flow rate ratio, $Q_3/Q_1$	...
Unit of measurement	m <sup>3</sup> /h
Direction of flow	→ or similar
Accuracy class	... (#)

(#) Optional for class 2 meters.

#### **1.4 Verification/Certification Provision**

Provision is made for the application of a verification/certification mark.

#### **1.5 Sealing Provision**

Instruments shall include one or more devices which can be sealed so as to prevent dismantling or modification of the instrument without damaging the device(s).

The pattern has a plastic ring cover which is machine-pressed onto the meter body and over the indicator. The cover allows the indicator and cover to rotate however the cover cannot be removed without it being destroyed.

### **2. Description of Variant 1**

With certain different features/functions to the pattern, as listed below:

- Threaded end connections as normally used in NSW and ACT (ball seat).
- A mechanical indicator with digital display having a series of five aligned digits and four dial and pointer type displays giving a maximum display of 99999.9999 kL in 0.1 L increments. This version is sealed by means of a wire and lead type seal, with the wire passing through sealing holes in the meter body and in the brass ring cover over the indicator. The seal may incorporate the verification/certification mark.
- Provision for a pulse output of 1 and 10 litres per pulse.
- Meter length of 140 mm and threaded end connections as normally used in SA (1 1/4" BSP).

#### **TEST PROCEDURE**

Instruments tested for initial verification shall comply with the certificate of approval and technical schedule, and the maximum permissible errors for initial and subsequent verifications/certifications at the operating conditions in effect at the time of verification.

#### **TESTS**

All meters shall be tested at a flow rate of 32 L/h (-0 +3 L/h). Sample meters shall be drawn from all meters which are within the maximum permissible errors at the above flow rate. The drawing of such sample meters shall be in accordance with the relevant Commission Document.

All sample meters drawn shall be tested at flow rates of 20 L/h (-0 +2 L/h) and 4000 L/h (-400 +0 L/h). The disposition of all meters from which the sample meters were drawn shall be determined in accordance with the relevant Commission Document.

FIGURE 14/3/5 – 1



Alpe Model Gamma-Rp-Sdc-Aus Water Meter