



Australian Government

**National Measurement
Institute**

Bradfield Road, West Lindfield NSW 2070

Notification of Change Certificate of Approval No 14/3/8 Change No 2

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

The following changes are made to the approval documentation for the

Satobar Model LXE-25 Water Meter

submitted by WINSLOW SERVICES
 12 Winslow Crescent
 Deer Park VIC 3023.

1. In Certificate of Approval No 14/3/8 dated 16 March 2006:
 - (a) The Condition of Approval referring to the review of the approval should be amended to read:
 “This approval becomes subject to review on 1 December **2015**, and then every 5 years thereafter.”
 - (b) The FILING ADVICE should be amended by adding the following:
 “Notification of Change No 2 dated 4 March 2011”

2. In Technical Schedule No 14/3/8 dated 16 March 2006, the references to temperature and pressure limits given in clause **1.1 Field of Operation** should be amended to now read:
 - “• Maximum **admissible** temperature 30°C
 - **Limiting condition (water temperature)** 50°C
 - Maximum **admissible** pressure 1400 kPa”

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, appearing to be 'M. J. ...', written over a horizontal line.



Australian Government
**National Measurement
Institute**

12 Lyonpark Road, North Ryde NSW 2113

Certificate of Approval
No 14/3/8

Issued by the Secretary 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
Satobar Model LXE-25 Water Meter

submitted by **Satobar Pty Ltd**
12 Winslow Crescent
Deer Park VIC 3023.

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 December **2010**, and then every 5 years thereafter.

Instruments purporting to comply with this approval shall be marked with approval number 'NMI 14/3/8' and only by persons authorised by the submitter.

It is the submitter's responsibility to ensure that all instruments marked with this approval number are constructed as described in the documentation lodged with the National Measurement Institute (NMI) 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 document NMI P 106.

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

DESCRIPTIVE ADVICE

Pattern: approved 24 November 2005

- A Satobar model LXE-25 class 2 displacement meter **used** to measure water for domestic or small commercial supply for trade.

Variants: approved 24 November 2005

1. With alternative connections.
2. With dual check valves.

Technical Schedule No 14/3/8 describes the pattern and variants 1 and 2.

FILING ADVICE

The documentation for this approval comprises:

Certificate of Approval No 14/3/8 dated 16 March 2006
Technical Schedule No 14/3/8 dated 16 March 2006 (incl. Test Procedure)
Figures 1 and 2 dated 16 March 2006



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

A handwritten signature in black ink, consisting of a large, stylized 'S' followed by a horizontal line and a vertical line, resembling the initials 'SJT'.

TECHNICAL SCHEDULE No 14/3/8

Pattern: Satobar Model LXE-25 Water Meter

Submitter: Satobar Pty Ltd
12 Winslow Crescent
Deer Park VIC 3023

1. Description of Pattern

A Satobar model LXE-25 class 2 positive displacement meter (Figures 1 and 2) used to measure water for domestic or small commercial 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 6.3 m³/h
- Flow rate ratio, Q_3/Q_1 160
- 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 25 mm pipe and is approved for metering domestic or small commercial 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 five aligned digits and four dial-and-pointer type displays giving a maximum display of 99999.9999 kL in 0.0001 kL increments.
- Meter length of 178 mm.
- Single check valve.
- Suitable only for operation in a horizontal position with the meter upright (i.e. indicator visible from above).

1.3 Verification/Certification Provision

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

1.4 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 device(s) may incorporate the verification/certification mark.

1.5 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	Satobar Pty Ltd
Serial number	...
Pattern approval mark	14/3/8
Numerical value of maximum continuous flow rate, Q_3	...
Flow rate ratio, Q_3/Q_1	...
Unit of measurement	m^3
Direction of flow	→ or similar
Accuracy class	... (#)

(#) Optional for class 2 meters.

2. Description of Variants

2.1 Variant 1

With threaded end connections as normally used in NSW and ACT (ball seat).

2.2 Variant 2

With dual check valves.

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.

All meters shall be tested at flow rates of:

$$Q_2(-0, +0.1 Q_2), 0.1 Q_3(\pm 0.01 Q_3) \text{ and } Q_4(-0.1 Q_4, +0)$$

in the country of origin in a third party accredited facility which has reference standards traceable to primary national standards of the country of origin.

Each batch of meters and the results of the tests of these meters shall be supplied to the verifying authority. The verifying authority shall draw sample meters from the batch of meters supplied. The drawing of such sample meters shall be in accordance with the relevant National Measurement Institute (NMI) document.

All sample meters drawn shall be tested at flow rates of:

$$Q_2(-0, +0.1 Q_2) \text{ and } 0.1 Q_3(\pm 0.01 Q_3).$$

A sample of the sample meters shall be tested at flow rates of:

$$Q_1(-0, +0.1 Q_1) \text{ and } Q_3(\pm 0.1 Q_3).$$

The disposition of all meters from which the sample meters were drawn shall be determined in accordance with the relevant NMI document.

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



Australian Government
National Measurement
Institute

Bradfield Road, West Lindfield NSW 2070

Notification of Change
Certificate of Approval No 14/3/8
Change No 1

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

The following changes are made to the approval documentation for the
Satobar Model LXE-25 Water Meter

submitted by Satobar Pty Ltd
 12 Winslow Crescent
 Deer Park VIC 3023.

1. In Certificate of Approval No 14/3/8 and its Technical Schedule both dated 16 March 2006, all references to the name of the submittor should be amended to now read:

“WINSLOW SERVICES”

The address remains unchanged.

2. In Certificate of Approval No 14/3/8 dated 16 March 2006, the FILING ADVICE should be amended by adding the following:

“Notification of Change No 1 dated 13 January 2009”

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, appearing to be 'J. G. T.', is located in the bottom right corner of the page.

14/3/8
16 March 2006

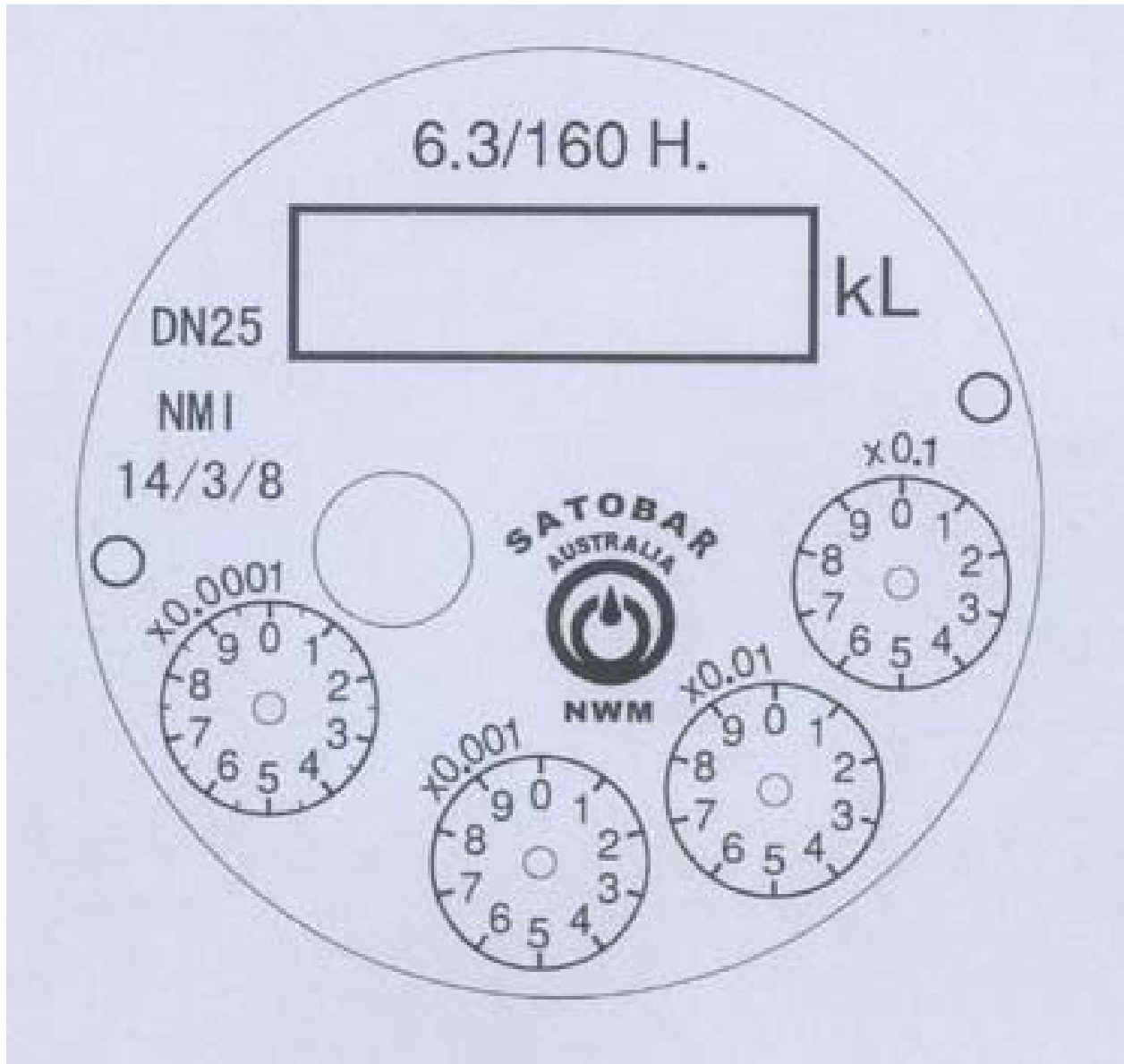
FIGURE 14/3/8 – 1



Satobar Model LXE-25 Water Meter

14/3/8
16 March 2006

FIGURE 14/3/8 – 2



Showing Typical Dial Face