Australian Government
National Measurement Institute

Bradfield Road, West Lindfield NSW 2070

Cancellation

Supplementary Certificate of Approval

No S184B

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

Veeder-Root Model 789000-074 Calculator/Indicator for Liquid-measuring Systems

submitted by Gilbarco Australia Limited
20 Highgate Street
Auburn NSW 2144

has been cancelled in respect of new instruments as from 1 December 2012.

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

National Standards Commission

12 Lyonpark Road, North Ryde NSW

Supplementary Certificate of Approval

No S184B

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

Veeder-Root Model 789000-074 Calculator/Indicator for Liquid-measuring Systems

now submitted by Gilbarco Australia Limited
20 Highgate Street
Auburn NSW 2144.

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 Certificate is issued upon completion of a review of NSC approval No S184A.

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CONDITIONS OF APPROVAL

This approval becomes subject to review on 1 August 2007, and then every 5 years thereafter.

Instruments purporting to comply with this approval shall be marked NSC No S184B and only by persons authorised by the submittor.

Instruments incorporating a digital indicator purporting to comply with this approval shall be marked NSC No S184B in addition to the approval number of the instrument.

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 values of the performance criteria (maximum number of scale intervals etc.) applicable to an instrument incorporating the pattern approved herein shall be within the limits specified herein and in any approval documentation for the other components.

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

DESCRIPTIVE ADVICE

Pattern: approved 30 July 2002

- A Veeder-Root model 789000-074 mechanical calculator/indicator with integral printer for use in a compatible Commission-approved liquid-measuring system.

Variants: approved 30 July 2002

1. A Veeder-Root model 788700-091 mechanical calculator/indicator.
2. A Veeder-Root model 789000-073 mechanical calculator/indicator with integral printer.
3. A Veeder-Root model 788700-090 mechanical calculator/indicator.

Technical Schedule No S184B describes the pattern and variants 1 to 3.

FILING ADVICE

The documentation for this approval comprises:

Supplementary Certificate of Approval No S184B dated 8 April 2003
Technical Schedule No S184B dated 8 April 2003 (incl. Test Procedure)
Figures 1 to 3 dated 8 April 2003

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.

TECHNICAL SCHEDULE No S184B

Pattern: Veeder-Root Model 789000-074 Calculator/Indicator for Liquid-measuring Systems

Submittor: Gilbarco Australia Limited
20 Highgate Street
Auburn NSW 2144

1. Description of Pattern

A Veeder-Root model 789000-074 mechanical zero-start calculator/indicator with integral printer for use in compatible Commission-approved liquid-measuring systems.

1.1 Field of operation

The field of operation of the calculator/indicator is determined by the following characteristics:

- The maximum speed of rotation of the right-hand element of the calculator/ indicator shall not exceed 200 rpm.
- Environmental class C (environment temperature range –25°C to 55°C).
- For use with flowmeters approved for minimum measured quantities (V_{min}) of not less than 20 litres.

1.2 Indicator Display

The indicator has five elements indicating volume in 1 litre increments with each element marked and numbered 0 to 9 (Figure 1). To reset the indicator to zero, the handle is rotated in the clockwise direction; a shutter covers the indicator elements until resetting is complete.

The indicator incorporates an eight digit non-resettable mechanical totaliser.

Volume	Up to 99999 L in 1 L increments
Totaliser	Up to 99999999 L in 1 L increments

1.3 Markings and Notices

(a) Instruments are marked with the following data, together in one location (Figure 2):

Pattern approval sign	NSC No S184B
Manufacturer's identification mark or trade mark	.....
Manufacturer's designation (model number)	.....
Serial number and year of manufacture	.....
Environmental class	class C

(b) The minimum measured quantity specified for the flowmeter shall in all cases be clearly visibly on the dial of the indicating device visible to the user during the measurement, e.g. " Minimum Delivery 100 L".

Also, the indicator face is marked with the notice DO NOT RESET WHILE COUNTING.

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1.4 Sealing and Verification/Certification Provision

Provision is made for the calibration adjustments to be sealed as shown in Figure 1.

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

2. Description of Variants

2.1 Variant 1

The pattern (model 789000-074 calculator/indicator) without a printer and then known as a model 788700-091.

2.2 Variant 2

A Veeder-Root model 789000-073 calculator/indicator with integral printer. The indicator has five elements with the first four elements marked and numbered 0 to 9 and the right-hand element marked and numbered in 0.1 litre increments (Figure 3).

For use with flowmeters approved for minimum measured quantity *(V_{min})* of not less than 2 litres.

Volume	Up to 9999.9 L in 0.1 L increments
Totaliser	Up to 9999999.9 L in 0.1 L increments

2.3 Variant 3

Variant 2 (model 789000-073 calculator/indicator) without a printer and then known as a model 788700-090.

TEST PROCEDURE

Instruments should be tested in conjunction with any tests specified in the approval documentation for the system to which the instrument approved herein is fitted, as appropriate, and in accordance with any relevant tests.

Maximum Permissible Errors at Verification/Certification

The maximum permissible errors applicable are those applicable to the system to which the instrument approved herein is fitted, as stated in the approval documentation for the system.

Australian Government
National Measurement Institute

Bradfield Road, West Lindfield NSW 2070

Notification of Change
Supplementary Certificate of Approval No S184B
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

Veeder-Root Model 789000-074 Calculator/Indicator for Liquid-measuring Systems

submitted by Gilbarco Australia Limited
20 Highgate Street
Auburn NSW 2144.

In Supplementary Certificate of Approval No S184B dated 8 April 2003;

1. The Condition of Approval referring to the review of the approval should be amended to read:

   "This approval becomes subject to review on 1 August **2012**, and then every 5 years thereafter."

2. The FILING ADVICE should be amended by adding the following:

   "Notification of Change No 1 dated 16 October 2007"

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

FIGURE S184B – 1

Veeder-Root Model 789000-074 Calculator/Indicator With Printer

FIGURE S184B – 2

Showing Markings

FIGURE S184B – 3

Veeder-Root Model 789000-073 Calculator/Indicator With Printer