



National Standards Commission
Cancellation
Supplementary Certificate of Approval No S190

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

Smith Model SS1 Flowmeter Flow Controller

submitted by Diamond Key International Pty Limited
110 Henderson Road
Rowville VIC 3178

has been cancelled in respect of new instruments as from 31 October 1999.

Instruments which were verified/certified before that date may, with the concurrence of the relevant verifying authority, be submitted for reverification.

Signed and sealed by a person authorised under Regulation 9 of the National Measurement (Patterns of Measuring Instruments) Regulations to exercise the powers and functions of the Commission under this Regulation.

A handwritten signature in black ink, appearing to read 'J. Burch'. The signature is written in a cursive style with a large initial 'J'.



NATIONAL STANDARDS COMMISSION

NATIONAL MEASUREMENT (PATTERNS OF INSTRUMENTS) REGULATIONS

REGULATION 9

SUPPLEMENTARY CERTIFICATE OF APPROVAL No S190

This is to certify that an approval for use for trade has been granted in respect of the pattern of the

Smith Model SS1 Flowmeter Flow Controller

submitted by Email Limited (formerly Kelvinator Australia Ltd)
Electronics and Petroleum Equipment Division
Liverpool Road
Kilsyth Vic 3137.

Conditions of Approval

General:

This approval is subject to review on or after 1/3/90.

Instruments purporting to comply with this approval shall be marked NSC No S190.

This approval may be withdrawn if instruments are constructed and used other than as described in the drawings and specifications lodged with the Commission.

Special:

Auxiliary devices used with this instrument shall comply with the requirements of General Supplementary Certificate No S1/0.

The flow rate range for which the controller is set must be within the approved flow rate range of the flowmeter.

The duration of the start and end of a delivery, when the flow rate may be below the approved minimum flow rate, shall be set to be minimal compared to the overall delivery so that the results do not exceed the maximum permissible errors applicable to the flowmeter.

Signed

Executive Director

Descriptive Advice

Pattern: approved 1/3/85

- . A Smith model SS1 flow controller for use with a compatible digital flow control valve and a Commission-approved positive displacement bulk flowmeter.

Technical Schedule No S190 describes the pattern.

Filing Advice

The documentation of this approval comprises:

Supplementary Certificate of Approval No S190 dated 8/7/86
Technical Schedule No S190 dated 8/7/86
Test Procedure No S190 dated 8/7/86
Figures 1 and 2 dated 8/7/86



NATIONAL STANDARDS COMMISSION

TECHNICAL SCHEDULE No S190

Pattern: Smith Model SS1 Flowmeter Flow Controller

Submitter: Email Limited
Electronics and Petroleum Equipment Division
Liverpool Road
Kilsyth Vic 3137

1. Description of Pattern

The Smith model SS1 flow controller (Figure 1) consists of a low-torque photoelectric pulse generator and discrete component electronic signal processor, and compares the rotational speed of the Commission-approved bulk flowmeter with the preset flow rate characteristics.

1.1 Preset Flow Characteristics

The flow controller sends output signals to a compatible digital control valve (Figure 2) (which is not required to be pattern approved) causing the valve to open, remain steady, or close (either partially or fully) thereby producing the flow characteristics which are preset using inbuilt logic switches.

The flow rate during delivery at maximum preset flow rate shall be within the approved flow rate range of the flowmeter.

1.2 Installation

The flow controller is mounted directly to the flowmeter and is located between the indicator (which may include preset and/or ticket printer) and the flowmeter.

The connecting cables of auxiliary devices shall be routed to minimise stray pulse pickups.

1.3 Markings

The flow controller is marked with the following data, together in one location:

Manufacturer's name or mark
Model number
Serial number
NSC approval number S190

1.4 Verification Provision and Sealing

Provision is made for the application of a verification mark and for the calibration device to be sealed.

TEST PROCEDURE No S190

The instrument should be tested in conjunction with any tests specified in the approval documentation for the flowmeter to which this instrument is connected.



National Standards Commission
Notification of Change
Supplementary Certificate of Approval No S190
Change No 1

The following change is made to the approval documentation for the

Smith Model SS1 Flowmeter Flow Controller

submitted by Email Limited
Electronics and Petroleum Equipment Division
Liverpool Road
Kilsyth VIC 3137.

In Supplementary Certificate of Approval No S190 and its Technical Schedule, both dated 8 July 1986, all references to the submitter should be amended to read;

Diamond Key International Pty Limited
110 Henderson Road
Rowville VIC 3178.

Signed and sealed by a person authorised under Regulation 9 of the National Measurement (Patterns of Measuring Instruments) Regulations to exercise the powers and functions of the Commission under this Regulation.

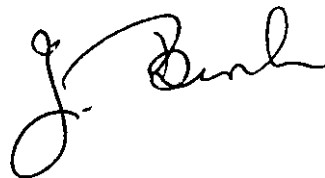
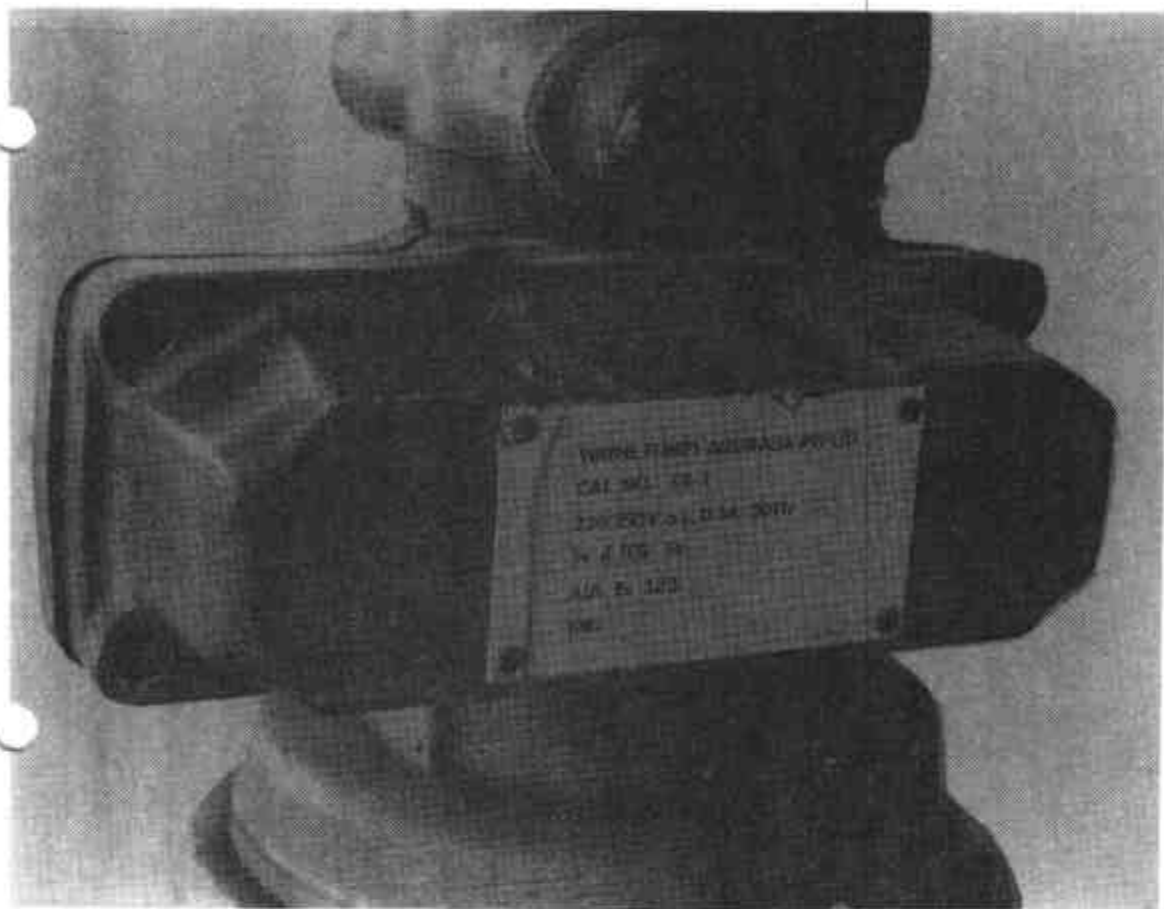
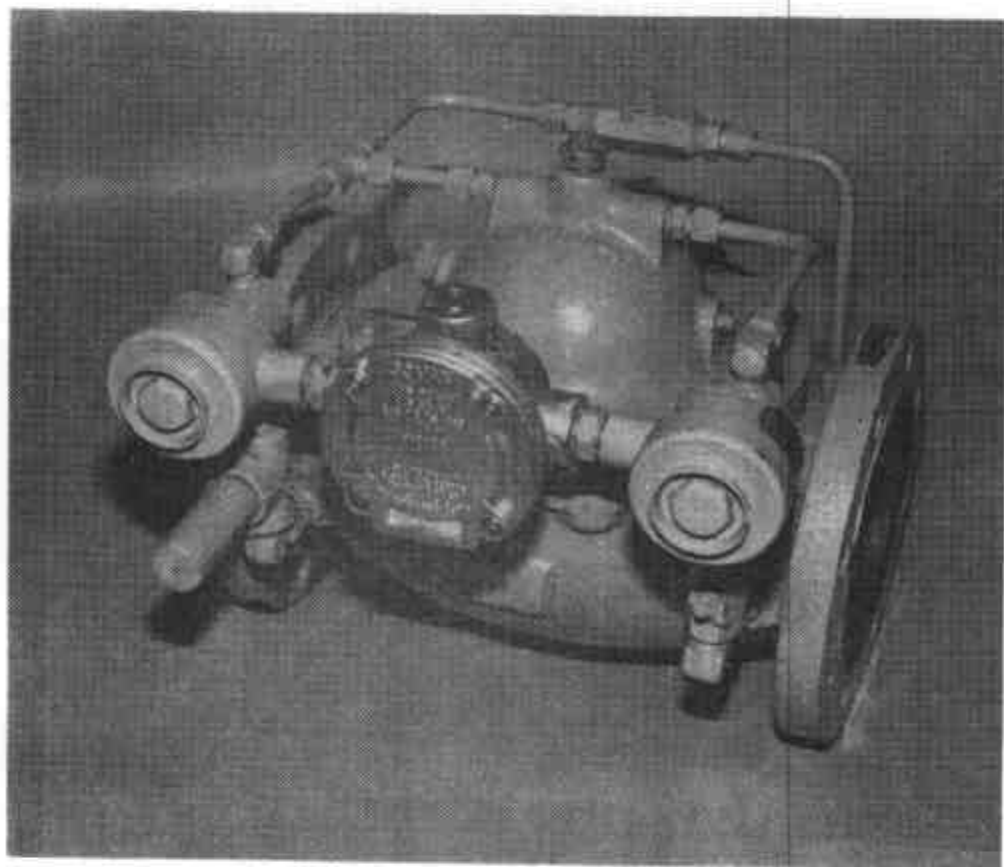


FIGURE S190 - 1



Smith SS1 Flow Controller

FIGURE S190 - 2



Digital Control Valve