

National Standards Commission



Supplementary Certificate of Approval

No S280

Issued under Regulation 9
of the
National Measurement (Patterns of Measuring Instruments) Regulations

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

Compac Industries Model C3000H Driveway Flowmeter Indicator

submitted by Compac Industries Limited
 52 Walls Road
 Penrose Auckland New Zealand.

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 is subject to review on or after 1/8/96.
This approval expires in respect of new instruments on 1/8/97.

Instruments purporting to comply with this approval shall be marked NSC No S280 and only by persons authorised by the submitter.

Instruments incorporating a component purporting to comply with this approval shall be marked NSC No S280 in addition to the approval number of the instrument.

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 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 106.

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

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

DESCRIPTIVE ADVICE

Pattern: approved 30/7/91

- A Compac Industries model C3000H electronic price-computing indicator for use in compatible Commission-approved driveway flowmeters.

Variant: approved 25/10/91

1. Displaying volume (litres) only.

Technical Schedule No S280 describes the pattern and variant 1.

Variant: approved 10/2/92

2. With an integral printer.

Technical Schedule No S280 Variation No 1 describes variant 2.

Variant: approved 14/3/93

3. For use with a Production Engineering model EFPEC driveway flowmeter control console.

Variant: approved 14/6/93

4. For use with a Production Engineering model Autoserve driveway flowmeter control system.

Technical Schedule No S280 Variation No 2 describes variants 3 and 4.

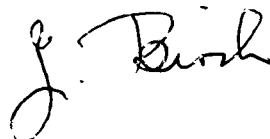
FILING ADVICE

Supplementary Certificate of Approval No S280 dated 20/3/92 is superseded by this Certificate and may be destroyed.

The documentation for this approval now comprises:

Supplementary Certificate of Approval No S280 dated 23/8/93
Technical Schedule No S280 dated 15/11/91 (incl. Test Procedure)
Technical Schedule No S280 Variation No 1 dated 20/3/92 (incl.
Notification of Change)
Technical Schedule No S280 Variation No 2 dated 23/8/93
Figures 1 and 2 dated 15/11/91

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. Birch', is written in a cursive style.



National Standards Commission

TECHNICAL SCHEDULE No S280

Pattern: Compac Industries Model C3000H Flowmeter Indicator.

Submitter: Compac Industries Limited
52 Walls Road
Penrose Auckland New Zealand.

1. Description of Pattern

A Compac Industries model C3000H electronic price-computing indicator (Figure 1) for use in compatible Commission-approved driveway flowmeters, in conjunction with a Compac Industries model CU C3000-3CH pulse generator (Figure 2).

1.1 Features

Instruments may be used in attendant-operated or locally-authorised applications, in the latter case when instruments are connected to a card reader and/or a keypad for entering a personal identification number (PIN), to activate the flowmeter.

The C3000H comprises a computing unit and separate display units. Each computing unit may be connected with up to 3 single or double-sided display units.

The indicator may be one of up to 16 connected to a Compac Industries model CC1200 or CC4800 central controller which may be used to centrally set the unit price and for other management functions.

The model C3000H is approved for use either with or without a preset facility.

1.2 Indicator Display

The display unit uses 3 separate liquid crystal displays which indicate the price, volume and unit price respectively.

Price	Up to \$999.99 or \$9999.99 in \$0.01 increments
Volume	Up to 999.99 L or 9999.99 L in 0.01 L increments
Unit price	Up to 9.999 \$/L in 0.1 c increments

1.3 Unit Price Setting

Unit price setting is by means of a switch located on the main circuit board in the indicator, or may be via the central controller, when this is connected.

1.4 Pulse Generator

A model CU C3000-3CH pulse generator (Figure 2) is used which produces pulses proportional to volume when connected to a Commission-approved positive displacement flowmeter interfaced with the model C3000-BM indicator.

The pulse generator specifications are:

Maximum pulser shaft speed:	600 revolutions/minute
Maximum pulses per shaft revolution:	150 pulses/revolution

1.5 Markings

Instruments are marked with the following data, together in one location:

Manufacturer's name or mark	
Model number	
Serial number	
Approval number	S280
Operating (air) temperature range	-10°C to 45°C

NOTE: Refer cl. 2. Description of Variant 1 for details of the notice required for variant 1.

1.6 Verification/Certification Provision

Provision is made for a verification/certification mark to be applied.

2. Description of Variant 1

Displaying volume (litres) only (Figure 1), provided the instrument carries a notice stating "NOT TO BE USED FOR TRADING DIRECT WITH THE PUBLIC" (or similar wording), in capital letters not less than 6 mm high, either on or adjacent to each reading face.

TEST PROCEDURE

Instruments shall be tested in conjunction with any tests specified in the approval documentation for the instrument to which the pattern is connected, as appropriate, and in accordance with any relevant tests specified in the Inspector's Handbook.

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.



National Standards Commission

TECHNICAL SCHEDULE No S280

VARIATION No 1

Pattern: Compac Industries Model C3000H Flowmeter Indicator.

Submitter: Compac Industries Limited
52 Walls Road
Penrose Auckland New Zealand.

1. Description of Variant 2

With an integral receipt printer for use only by authorised card holders.

NOTIFICATION OF CHANGE

The following changes are made to the descriptions given in Technical Schedule No S280 dated 15/11/91:

1. In clause **1.4 Pulse Generator**, the reference to the model of price-computing indicator should be amended by changing the suffix, so that it now reads "model C3000H".
2. A new clause, titled **1.7 Sealing**, should be added to read;

"The K-factor switch, which is located on the indicator electronics board, is sealed."



National Standards Commission

TECHNICAL SCHEDULE No S280

VARIATION No 2

Pattern: Compac Industries Model C3000H Flowmeter Indicator.

Submittor: Compac Industries Limited
52 Walls Road
Penrose Auckland New Zealand.

1. Description of Variants

1.1 Variant 3

Any Commission-approved driveway flowmeter fitted with a Compac Industries model C3000H indicator (as described elsewhere in the documentation of this approval) connected to a Production Engineering model EFPEC driveway flowmeter control console (as described in the documentation of NSC approval No S222A).

1.2 Variant 4

Any Commission-approved driveway flowmeter fitted with a Compac Industries model C3000H indicator (as described elsewhere in the documentation of this approval) connected to a Production Engineering model Autoserve driveway flowmeter control system (as described in the documentation of NSC approval No S197A).

Compac Industries Model C3000H Display and
Computing Units

FIGURE S280 - 1

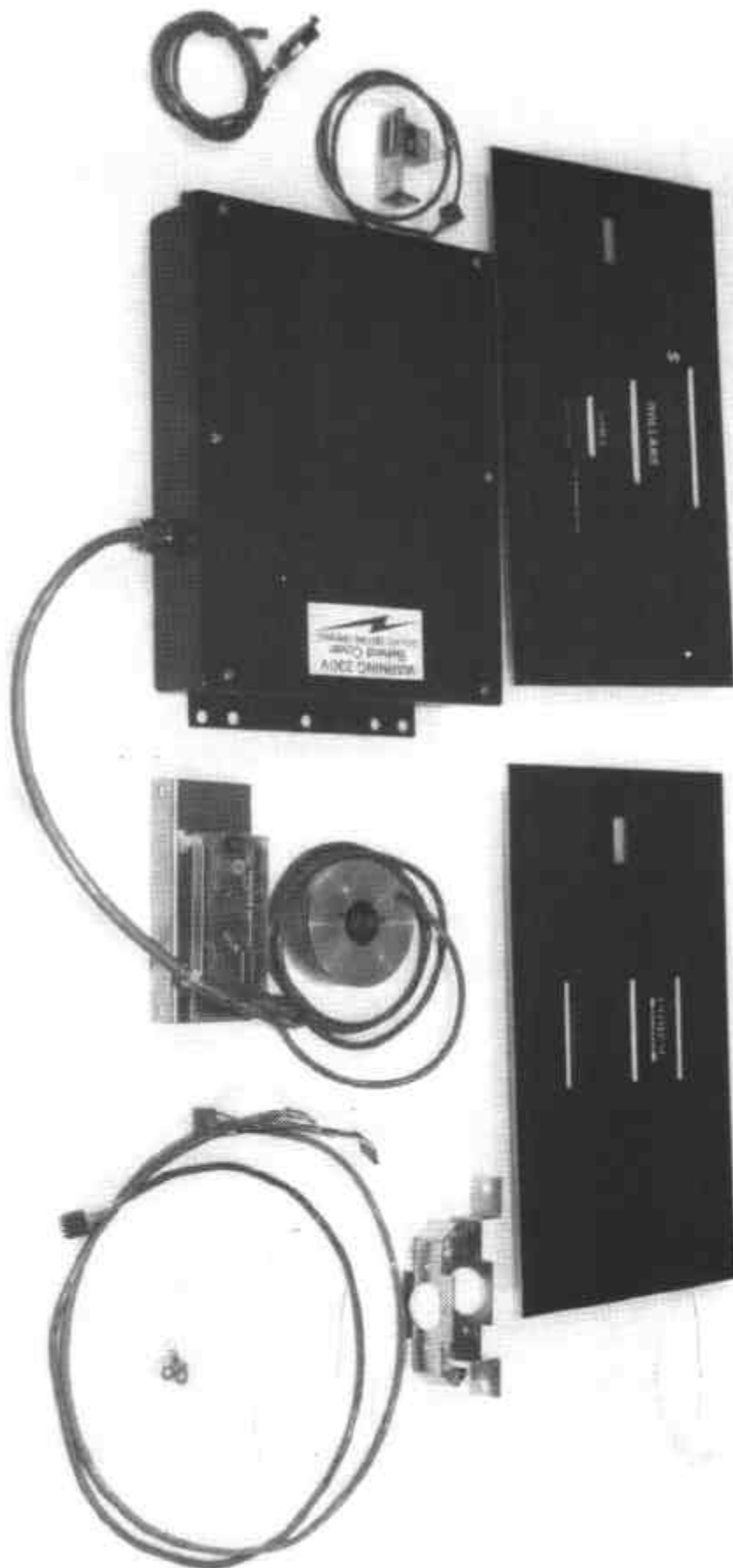
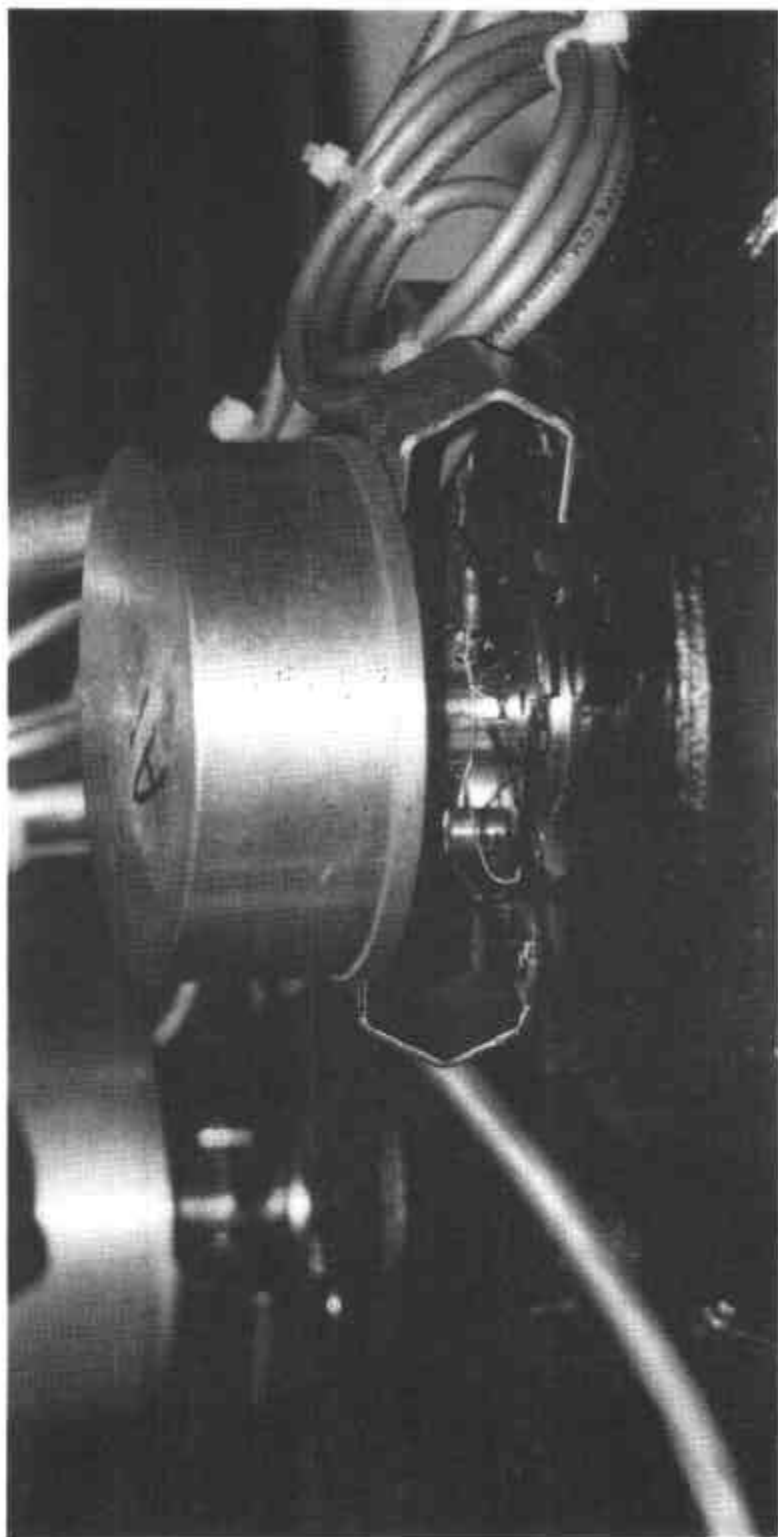


FIGURE S280 - 2



Typical Mounting of Model CU C3000-3CH Pulse Generator