

NATIONAL STANDARDS COMMISSION

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5/6A/83 24/2/86

NATIONAL MEASUREMENT (PATTERNS OF INSTRUMENTS) REGULATIONS

REGULATION 9

CERTIFICATE OF APPROVAL No 5/6A/83

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

Email ECC-U Pacesetter Series Driveway Flowmeters

submitted by Email Limited (formerly Kelvinator Australia Limited) Petroleum Equipment Division 114 Abbotts Road Dandenong Vic 3175.

Conditions of Approval

General:

This approval is subject to review on or after 1/8/90.

Instruments purporting to comply with this approval shall be marked NSC No 5/6A/83.

This approval may be withdrawn if instruments are constructed and used other than as described in the drawings and specifications lodged with the Commission.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

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

Signed

adams

Acting Executive Director

Descriptive Advice

Pattern: approved 11/7/85

Email ECC-U Pacesetter series driveway flowmeters as listed in Table 1.

Technical Schedule No 5/6A/83 describes the pattern.

Filing Advice

The documentation for this approval comprises:

Certificate of Approval No 5/6A/83 dated 24/2/86 Technical Schedule No 5/6A/83 (including Table 1) dated 24/2/86 Test Procedure No 5/6A/83 dated 24/2/86 Figures 1 to 15 dated 24/2/86



NATIONAL STANDARDS COMMISSION

TECHNICAL SCHEDULE No 5/6A/83

Pattern: Email ECC-U Pacesetter Series Driveway Flowmeters

<u>Submittor</u>: Email Limited Petroleum Equipment Division 114 Abbotts Road Dandenong Vic 3175

1. Description of Pattern

The Email ECC-U Pacesetter series driveway flowmeters (Figures 1 to 3) are approved for use with maximum and minimum flow rates of 50 L/min and 15 L/min respectively in the models and with the features listed in Table 1.

1.1 Components

The system uses the Wayne 605 series hydraulics incorporating a Wayne 2-piston meter (Figure 4) with the driveway flowmeter computer, indicator and housing of the Email ECC Pacesetter series.

Single driveway flowmeters have hydraulic systems (Figures 5 to 7) which use different gas separators to the dual systems (Figures 8 and 9), or they may use one set of the dual hydraulic components.

When used with diesel or kerosene the gas detector must be fitted (Figure 10).

The system may include an Email MkI or MkII control console (Figures 11 and 12).

When fitted with a preset panel (model numbers are shown as [EDC 1U] etc in Table 1) the instrument is fitted with a slow-down facility (Figures 13 to 15) for correct termination of preset deliveries, which may be set via the preset panel or the **console**.

1.2 Markings

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

Manufacturer's name or mark	
Model number	
Serial number	
NSC approval number	5/6A/83
Maximum flow rate	L/min
Minimum flow rate	L/min
Liquid temperature range	5°C to 40°C
Maximum operating pressure	kPa
Approved for use with (product)	

1.3 Sealing and Verification Provision

Provision is made for the application of a verification mark.

The meter calibration is sealed,

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Technical Schedule No 5/6A/83

TABLE_1							
Model No	Туре	Fuels	Console	Preset			
ECC 1U [EDC 1U] ECC 2U [EDC 2U] ECC 1DU [EDC 1DU] ECS 1U [EDS 1U] ECS 2U [EDS 2U] ECS 1DU [EDS 1DU]	Single Dual Single Single Dual Single	Petrol/Kerosene Petrol/Kerosene All * Petrol/Kerosene Petrol/Kerosene All *	No No Yes Yes Yes	No [Yes] No [Yes] No [Yes] No [Yes] No [Yes] No [Yes]			

* Petrol, Distillate, and Kerosene

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Approved Models and Capabilities

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TEST PROCEDURE No 5/6A/83

Carry out at least five test deliveries by comparing the volume indication of the instrument with the actual volume delivered.

The maximum permissible errors at verification are:

(a)	Linearity:	± 0.3% over the flow rate range approved for t flowmeter.	.he
(Ь)	Repeatability:	± 0.15% from the mean of at least five test runs any constant flow rate.	at
(c)	Price indication:	± 0.5c for unit prices up to \$1.00/L, ± 1.0c for unit prices over \$1.00/L and up to \$2.00/	L.

The hose dilation and the anti-drain valve of a nozzle are checked when the pump is stopped and the trigger of the nozzle is depressed; the measured volume of the product shall not exceed 50 mL.

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Typical ECC-U Series Single Driveway Flowmeter

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Typical Single Hydraulics

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Typical Dual Hydraulics

5/6A/83 24/2/86 FIGURE 5/64/83 - 4 Wayne 2-piston Mater

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Hydraulic Diagram - Models ECC 1U And ECS 1U





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FIGURE 5/6A/83 - 8



Hydroulic Diogrom - Models ECC 2U And ECS 2U

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Wayne P5184 Gas Separator

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Hydroulic Diagram - Models ECC 1DU And ECS 1DU



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Emoil Mk II Console

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Hydraulic Diogram - Models EDC 1U And EDS 1U







Hydroulic Diagram - Madels EDC 2U And EDS 2U