

CANCELLED



NATIONAL STANDARDS COMMISSION

CERTIFICATE OF APPROVAL No 5/6B/100

Approved: Brodie Model B31 Flowmeter

This is to certify that the pattern and variants of the Brodie Model B31 flowmeter which have been approved or deemed to be approved by a State Weights and Measures Authority for measuring in imperial units are approved under the Weights and Measures (Patterns of Instruments) Regulations, as being suitable for use for trade, when converted to read in metric units in accordance with Appendix 13 of the General Specifications for Measuring Instruments to be Used for Trade.

Date of Approval: 17 May 1974

Description:

The pattern and variants may be identified by reference to any State approval document which includes one or more of the following model numbers, or by reference to an instrument marked with one of the following model numbers and a current verification stamp:

B31 (Figures 1 and 4)	B60	$\mathbf{B80}$
B33 (Figure 2)	B62 (Figure 3)	B82
	B63	B83
B40	B64	$\mathbf{B84}$
B41	B65	B85
B43		
	B70	B92
B50 (Figure 5)	B72	B93
B51	B73	B94
B53	B74	B95
B54	B75	
B55		

These model numbers may have suffixes C, D, E, etc., designating configurations of the meter casing which do not affect the performance of the meter as a measuring instrument.

These meters are fitted with one of the following indicating devices:

- (a) Brodimatic Counter fitted with 1/10-gallon wheel, as illustrated in Figure 2; the 1/10-gallon aperture is blanked off or replaced by a full-size aperture for metric conversion;
- (b) Brodimatic Counter without 1/10-gallon wheel, as illustrated in Figure 3;
- (c) Brodimatic Quantrol Counter, which is (a) or (b) with an automatic stop:
- (d) Brodimatic Printer, which is (a) or (b) with a ticket printer, as illustrated in Figure 1, with or without Quantrol;
- (e) G-series Counter, as illustrated in Figures 4 and 5; (the 1/10-gallon indicator is blanked off for metric conversion);
- (f) G-series Quantrol Counter; (this counter is replaced by a Brodimatic-series Counter for metric conversion);
- (g) G-series Single-repeating Quantrol Counter; (this counter is replaced by a Brodimatic-series Counter for metric conversion).

Conditions of Approval:

- 1. The speed of the right-hand indicator wheel and the right-hand printing wheel shall not exceed 250 rpm at the maximum flow rate for which the instrument is verified after conversion.
- 2. This approval is subject to review on or after 31 December 1975 to determine the extent to which the pattern and variants may need to be modified to comply with the Commission's pattern approval requirements at the date of review.
- 3. All instruments conforming to this approval shall be marked "NSC No 5/6B/100".

Signed

Hamody

Executive Officer



NATIONAL STANDARDS COMMISSION

TECHNICAL SCHEDULE No 5/6B/100 VARIATION No 1

Pattern: Brodie Model B31 Flowmeter

Date of Approval of Variation: 11 July 1977

The modification described in this Schedule applies to the patterns described in Certificate No 5/6B/100 dated 28 May 1974.

All instruments conforming to this approval shall be marked "NSC No 5/6B/100".

Description:

The approved modification provides for any type, bore or length of hose, provided that:

- the minimum delivery determined from Table 1 is marked on an instrument data plate which is sealed to the instrument by a lead stamping plug or by threading the meter sealing wire through it;
- 2. the minimum delivery is acceptable to the Weights and Measures Authority taking into account the usage of the instrument;
- the pump by-pass is set so that the maximum no-flow system pressure is 480 kPa;
- 4. provision is made for a pressure gauge to be connected.

Special Tests:

Hose Dilation

A measure of the hose-dilation quantity may be obtained by the following method:

With the pump stopped and the hose fully wound on its reel, open the nozzle to reduce the pressure in the hose to the anti-drain valve retaining pressure of about 55 kPa. Then fully unwind the nose from the reel, zero the indicator, start the pump and, after allowing not less than 30 seconds for the hose to fully dilate, and with the pump still running, read the quantity on the indicator. This quantity is equal to the maximum hose dilation.

TABLE 1

Minimum delivery marked on instrument data plate	Maximum no	Maximum nose dilation		
	Indicator only fitted	Indicator and printer fitted		
۶.	l	9,		
50	0,3	-		
100	0,8	0		
150	1,3	0,5		
200	1,8	1,0		
250	2,3	1,5		
300	2,8	2,0		
350	3,2	2,5		
400	3,8	3,0		
450	4,3	3,5		
500	4,8	4,0		



FIGURE 1. Brodie Flowmeter Model B31 with Brodimatic Printer



FIGURE 2. Model B33 with Brodimatic Counter with 1/10-gallon Wheel



FIGURE 3. Model B62 — Counter without 1/10-gallon Wheel

28/5/74



FIGURE 4. Model B31 with G-series Counter



FIGURE 5. Model B50 with G-series Counter 28/5/74