III(2)

Pursuant to Section 12 of the Weights and Measures Act 1985 Certificate No 2988 Revision 3

Issued by:

The Office for Product Safety and Standards

In accordance with the provisions of Section 12 of the Weights and Measures Act 1985, the Secretary of State for Business and Trade has issued this UK national type-approval certificate to:

U-Group Ltd 194 Waterloo Road Yardley Birmingham B25 8LD United Kingdom

And hereby certifies as suitable for use for trade the following pattern of a spirit measuring instrument, for use in dispensing intoxicating liquor in fixed quantities of 25 ml, which is supplied from an inverted bottle connected to its inlet.

The necessary data (principal characteristics, alterations, securing, functioning etc) for identification purposes and conditions (when applicable) are set out in the descriptive annex to this certificate.

Under the provisions of section 12(5) of the said Act, this certificate is subject to the conditions described in the descriptive annex.

Note: This certificate relates to the suitability of the equipment for use for trade only in respect of its metrological characteristics. It does not constitute or imply any guarantee as to the safety of the equipment in use for trade or otherwise.

This revision replaces previous versions of the certificate.

Issue Date: 09 April 2024 Valid Until: 08 April 2034

Grégory Glas Technical Manager

For and on behalf of the Secretary of State

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CERTIFICATION No. 2988

Descriptive Annex

1 INTRODUCTION

This pattern of a spirit measuring instrument is for use in dispensing intoxicating liquor in fixed quantities of 25 ml (Figure 1).

The instrument is supplied from an inverted bottle, connected to its inlet, and dispenses when an operating arm at the delivery port is raised to its maximum. A transparent chamber displays the complete charging and discharging of the instrument.

2 CONSTRUCTION

2.1 Mechanical (Figure 2)

2.1.1 Components

The instrument is constructed mainly in plastic with stainless steel springs and silicone rubber seals. The circular sight glass is moulded in transparent plastic. The head, which includes the mounting bracket, and sight glass are permanently bonded in place preventing adjustment or tampering once assembled.

The delivery tube is in four parts. The lower part is the tri-arm which is fitted to the spindle which extends through the sight glass chamber and is connected to the capacitor. The tri-arm is fitted with a spring assembly which opens the inlet port after the dispensing operation.

A static O-ring is situated above the cross bore. The lower end of the delivery tube is enlarged to retain a snap-on operating lever arm.

The upper end of the delivery tube has a valve assembly which actuates the air valve to admit air into the liquid chamber as the instrument discharges. The air valve is fitted with a return spring.

The top and bottom surfaces of the liquid chamber are slightly angled to allow complete charge and discharge of liquid when the instrument is not mounted perfectly vertical.

The head plate cover (component index No. 03) snaps onto the main body and holds the air valve assembly in place.

The main body (component index No. 13) and sight glass (component index No. 12) are ultrasonically welded together to form a tamperproof assembly.

2.2 Legends

- **2.2.1** The instrument shall bear the following legends:
 - the number of the certificate of approval preceded by the words 'Certification No', or 'Cert No', legibly and durably marked on the chamber body:

- the nominal quantity conspicuously, legibly and durably marked on the front of the unit in plain block characters on a plain background and in distinct contrast thereto:
- 25 ml
- the name or code of its manufacturer or supplier, legibly and durably marked onto the chamber body:

E, or U-GROUP LTD

- **2.2.2** The capacity characters legend, 25 ml, is durably marked on the sight glass. The characters are nominally 10 mm high.
- **2.2.3** Additional advertising may be fitted to the head assembly, which shall not obscure the sight glass in any way.
- **2.2.4** The manufacturer's name or code and certificate number are moulded into the chamber body as shown in Figure 2.

2.3 Sealing and stamping

2.3.1 The instrument is permanently bonded during manufacture to form a tamperproof, non-adjustable assembly. No further sealing is necessary.

The stamp is formed by an impact process directly onto the side face of the head/mounting bracket assembly.

3 OPERATION

With the instrument fully charged with liquid the operating lever is raised. The capacitor rises and the O-ring makes positive contact with the delivery tube thus preventing the ingress of further liquid. Further upward movement of the capacitor to its maximum travel causes the lug (at the rear of the capacitor) to open the air vent, and uncovers the cross bores at the bottom of the liquid chamber allowing the liquid to discharge. The cross bores do not completely clear the chamber base in order to ensure complete discharge. On completion of dispense the operating arm is released, the downward movement operates the sequence in the reverse order. Liquid refills the instrument whilst venting air into the bottle. At no time will the inlet/outlet valves be open together.

4 AUTHORISED ALTERNATIVES

- **4.1** Having an alternative fixed capacity of 35 ml by fitting a different size delivery chamber. The quantity legend is amended accordingly.
- **4.2** Having an alternative fixed capacity of 50 ml by fitting a different size delivery chamber. The quantity legend is amended accordingly (Figure 4).
- 4.3 Having an alternative fixed capacity of 70 ml by fitting a different size delivery chamber. The quantity legend is amended accordingly (Figure 4).
- Having an alternative dispense operation construction in the form of a Lever-Arm mechanism for fixed capacities of 25 ml, 35 ml, 50 ml and 70 ml (Figure 5).

5 RECOMMENDED TESTS

For verification purposes tests may be performed with water or any of the prescribed spirits.

Providing the instrument fills correctly the dispensed quantity should be within statutory limits irrespective of the liquid used.

6 ILLUSTRATIONS

Figure 1	25 ml Tri-Arm measure
Figure 2	General assembly
Figure 3	Component index
Figure 4	Examples of 50 ml and 70 ml Tri-Arm alternatives
Figure 5	Example of alternative Lever-Arm dispense operation construction
Figure 6	Authorised alternative Lever-Arm general assembly
Figure 7	Authorised alternative Lever-Arm component index
Figure 8	Example of alternative manufacturer name or supplier layout

7 CERTIFICATE HISTORY

CERTIFICATE No.	DATE	DESCRIPTION
2988	14 April 2014	Certificate first issued.
2988 Revision 1	21 October 2014	Revision 1 issued.
		Change of address details on page 1
		Addition of an authorised alternative in section 4.4.
		Addition of figures 5, 6 and 7.
		Added phrase "Tri-Arm" to Figure 1 and Figure 4 descriptions.
2988 Revision 2	09 January 2015	Revision 2 issued.
		Addition of alternative manufacturer name added in section 2.2.1.
		Addition of figure 8.
2988 Revision 3	09 April 2023	Revision 3 issued.
		References to National Measurement Office replaced with Office for Product Safety and Standards.
		Certificate renewed for 10 years.
		Change of address from:
		1277 Coventry Road
		Yardley
		Birmingham, B25 8BP United Kingdom



Figure 1 25 ml Tri-Arm measure

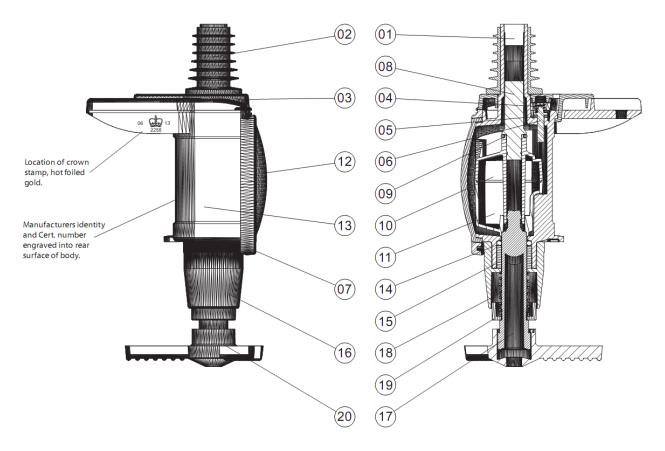


Figure 2 General assembly

No.	DESCRIPTION
01	Separator
02	Fluted Standard Cork
03	Standard Headplate
04	Air Valve Spring
05	Air Valve Washer
06	Air Valve Pin
07	Bezel
80	Flow Divider
09	Top Valve "O" Ring
10	Large Capacitor - Upper Half
11	Large Capacitor - Lower Half
12	25ml Sight Glass
13	Main Body
14	Bottom Valve "O" Ring
15	Spacer
16	Hood
17	Spindle
18	Return Spring
19	Spring Cup
20	Operating Arm - Tri Arm

Figure 3 Component index





50 ml 70 ml Figure 4 Examples of 50ml and 70ml Tri-Arm alternatives



Figure 5 Example of alternative Lever-Arm dispense operation construction

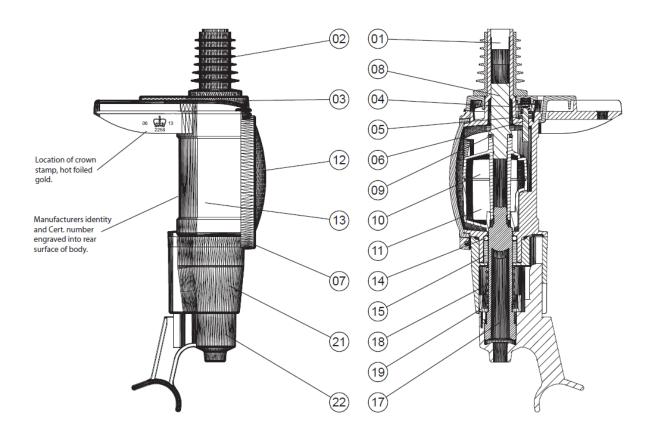


Figure 6 Authorised alternative Lever-Arm general assembly

No.	DESCRIPTION
01	Separator
02	Fluted Standard Cork
03	Standard Headplate
04	Air Valve Spring
05	Air Valve Washer
06	Air Valve Pin
07	Bezel
80	Flow Divider
09	Top Valve "O" Ring
10	Large Capacitor - Upper Half
11	Large Capacitor - Lower Half
12	25ml Sight Glass
13	Main Body
14	Bottom Valve "O" Ring
15	Spacer
17	Spindle
18	Return Spring
19	Spring Cup
21	Lever Hood
22	Operating Arm - Lever Arm

Figure 7 Authorised alternative Lever-Arm component index

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Figure 8 Example of alternative manufacturer name or supplier layout