Equipment Manual
Branch Foam Chubb FB5X

Operational Guidance
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Fire & Rescue Service
Operational Guidance

Equipment Manual
Branch

Chubb FB5X Foam Making Branch

1 General Description
The FB5X is a lightweight, easy to handle foam making branch.

2 Primary Function
This branch is intended to produce relatively low quantities of fully aspirated foam using either concentrate through a 3m foam pick up tube connected and inducted at the branch or a premixed solution supplied via either fire pump with an around-the-pump foam proportioner or an inline foam generator.

3 Hazards
There are no specific hazards for this piece of equipment

4 Construction
4.1 Main Parts
The FB5X has two main parts:
- Foam concentrate pick-up tube (which is detachable)
- The branch-pipe (see figure 1)

4.2 The Pick-Up Tube
The pick-up tube is used to induct foam concentrate directly into the foam branch. It consists of a stainless steel tube with a hole at the base designed to filter the foam concentrate as it enters the pick-up tube.

4.3 The Branch-pipe
The majority of the branch-pipe is constructed from a light alloy. The component parts are detailed in figure 1.
5 Operation

The FB5X branch pipe has an operational pressure range between 3 bar and 10 bar. For optimum results the branch requires a water supply of 230 l/min at 5.5 bar to produce approximately 2270 l/min of fully aspirated finished foam.

Unless instructed otherwise, pump operators should always aim to provide that pressure at the branch. At these ratios the branch will use 7 l/min of foam concentrate at 3% or 14 l/min at 6%.

5.1 Using the Foam Pick-Up Tube

Ensure that the Concentrate Selector Valve is set to the percentage rating of the foam concentrate being used either 3% or 6% (see figure 1, item a).

Place the pick-up tube into a fire service bucket and continuously decant the foam concentrate from the storage drums directly into the bucket. This will allow a constant supply of foam concentrate to enter the branch and maintain a continuous flow of finished foam.
5.2 Using the Foam Branch with a Premixed Solution

When the foam branch is being supplied by either, a pump with an integrated foam system (like a round the pump proportioner) or an inline inductor, set the Concentrate Selector Valve on the foam branch to PREMIX (see figure 1, item a).

![Warning Icon]

When the foam branch is used with an inline inductor the distance between the inline inductor and the branch must not exceed 60m.

5.3 Using the Foam Branch in Conjunction with a Foam Inlet

When using the branch in conjunction with foam inlets of the instantaneous coupling type, connect the shaft of a standpipe to the foam inlet via the instantaneous coupling to enhance the flow of finished foam.

Hold the branch firmly against the screw thread end of the standpipe shaft.

5.4 After Use

After use thoroughly flush and then test the foam branch and all the equipment used in the production of foam including pumps to prevent future malfunction and chemical decomposition from contact with the foam.

6 Advantages/Disadvantages/Limitations

6.1 Advantages

The FB5X is light and contains very few moving parts and when used with a premixed solution, can be moved around with very little effort.

6.2 Disadvantages/Limitations

The limited jet range requires the operator to work in close proximity to the hazard area.

7 Tests

Test the foam branch in accordance with Standard Test Procedure Branch Foam - Low expansion branches.

8 Technical Information

Table 1 shows the technical information relevant to this piece of equipment.

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Inlet 64mm (2.5”) Anodized male instantaneous coupling
Foam Pick-up 20mm quick release
Material Light alloy
Dimensions 460mm long
205mm wide
Weight 2kg

NOTE: Performance figures are based on equipment using the appropriate foam liquid with clean water at 15°C at an atmospheric pressure of 1 bar.

9 Further Reading

Further information regarding this equipment and the principles of operation can be found in the following documents:
- Fire Service Manual Volume 1 Fire Service Technology, Equipment and Media