

## Portable Foam Uniductors

### UNI-225 (1x3) & UNI-450 (1x3) UNI-225 (3x6) & UNI-450 (3x6)

- Hi-Combat® Portable Foam Uniductors
- High Standard of Accuracy
- Corrosion Resistant
- Efficient and Accurate



Angus Hi-Combat® Portable Foam Uniductor, when matched with Angus Hi-Combat® Foam branchpipes or nozzles, provides the simplest possible means of getting foam to the fire where it is needed. They can be placed near a portable pump or hydrant outlet, minimizing manpower requirements and leaving the firefighter to concentrate on effective application of the foam to control the fire situation.

Angus Hi-Combat® Portable Foam Uniductors are venturi-type eductor devices, designed for use with the full Angus Fire range of Hi-Combat® branchpipes and nozzles for quick and reliable response to first aid fire attack duties.

There are two models, the UNI-225 and UNI-450. They are each available with either (1x3) or (3x6) proportioning rates, matched for use with aspirating foam branchpipes flowing 59 and 119 GPM (225 and 450 LPM) at 100 PSI (7 Bar). These Uniductors™ typically experience a 35-40% pressure drop across the eductor and operate within a recommended pressure range of 73-145 PSI (5-10 Bar).

A simple but positive “twist and click” operation of the control knob allows easy selection of the percentage setting for the foam concentrate in use. Once selected it is quick to change but cannot be unintentionally moved “off-position”. This precision engineering is designed to achieve high standards of accuracy.

Engineered to work with the widest range of 1% and 3% or 3% and 6% foam concentrates, depending on the model. These eductors have been specially designed for efficiency and accuracy, optimizing the use of your foam.

The standard settings of 1%, 3% and 6% are tailored for any standard foams. The additional settings of 1%AR, 3%AR and 6%AR are specifically for use with the multi-purpose foams and offer unequalled performance on these thicker thixotropic foams which conventional portable eductors struggle to proportion accurately. High performing examples of AR type foams are Alcolseal and Tridol Ultra and Niagara.

This exceptional accuracy when using these higher performance foam concentrates can help ensure faster control of an incident by not only achieving more accurate proportioning but also ensuring valuable foam is not wasted.

#### Using a Hi-Combat® Portable Uniductor™

Angus Hi-Combat® Portable Uniductors have been designed to match the characteristics of Angus Hi-Combat® foam branchpipes. Correct matching is essential if optimum performance is to be obtained.

If the flow rating of the branchpipe is greater than that of the Uniductor, range from the branchpipe will be reduced. If the flow rating of the branchpipe is less than K factor 6 (85), induction may cease.

All Uniductor units are available in corrosion resistant light alloy as standard, although gunmetal versions are available where salt-water applications are anticipated. A tough, chip-resistant yellow thermoplastic finish is provided as standard on both versions.

Normally one or two lengths of 1-3/4 In (45 mm) Duraline fire hose can be used between each portable Uniductor and Hi-Combat® branchpipe but it is recommended that a hose with 2-1/2 In (64 mm) diameter is chosen for the UNI-450 to minimize pressure losses. Longer lengths can be used if care is taken to keep the hose as straight and level as possible between eductor and branchpipe.

It is recommended that Hi-Combat® branchpipes and nozzles are operated no more than 19-1/2 Ft (6 M) vertically above the UNI-225 and UNI-450 Portable Uniductors to avoid back pressure problems occurring, and achieve maximum performance at the nozzle.

Each portable Uniductor is fitted with a check valve and 1-1/4 Ft (1 M) long pick-up tube, to allow use with 5 gallon foam pails or temporary reservoirs. This also avoids the potential risk of water diluting the foam supply, which can be caused by high back pressures occurring due to poor hose configurations, operating up steep slopes, or mismatching of equipment.

#### Listings and Approvals

UNI-225 (1x3), UNI-225 (3x6),  
UNI-450 (3x6)..... UL Listed

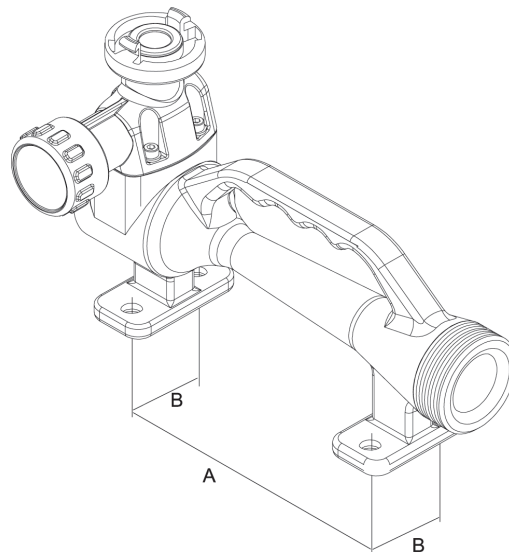
# Portable Foam Uniductors

**UNI-225 (1x3) & UNI-450 (1x3)**  
**UNI-225 (3x6) & UNI-450 (3x6)**

| DIMENSIONS - IN (MM)                                     |  |  |
|--|--|--|
| Model  | UNI-225 (1X3) / UNI-450 (1X3)                  | UNI-225 (3x6) / UNI-450 (3x6)                  |
| Overall Length   | 11-7/8 (302)                                   | 11-7/8 (302)                                   |
| Overall Height   | 7-1/4 (185)                                    | 7-1/4 (185)                                    |
| Maximum Width  | 5-1/8 (130)                                    | 5-1/8 (130)                                    |
| Dimension A  | 7-1/2 (185)<br>(7/16 (12) Ø)                   | 7-1/2 (185)<br>(7/16 (12) Ø)                   |
| Dimension B  | 2 (50)<br>(7/16 (12) Ø)                        | 2 (50)<br>(7/16 (12) Ø)                        |
| Approximate Weight - Lb (Kg)<br>(Including Pick-Up Tube) | Light Alloy: 7 (3.1)<br>Gunmetal: 12-1/2 (5.7) | Light Alloy: 7 (3.1)<br>Gunmetal: 12-1/2 (5.7) |

| To Avoid Confusion, Angus Hi-Combat Portable Uniductors and Branchpipes are Color Coded: |                |
|--|----------------|
| UNI-225, F225/HU, MEX225 and Angus Mini-Turbex   | No Color Band  |
| UNI-450, F450/HU and MEX450  | Red Color Band |

Normally supplied with 2½" BS.336 Instantaneous couplings or BSP male threaded connections as standard, but many other connections are available from the "Armourite" range. **For further details** of the Angus Hi-Combat® foam branchpipe range see data sheets AFD3042 and AFD5007, and for details on the IND900 see data sheet AFD3171.



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