

# Portable Foam Uniductors

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

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

- Hi-Combat Portable Foam Uniductors
- High Standard of Accuracy
- CorrosionResistant
- 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, minimising 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 inductor 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) induction rates, matched for use with aspirating foam branchpipes flowing 225 and 450 L/ min at 7 bar g (100psi).

These Uniductors™ typically experience a 35-40% pressure drop across the inductor and operate within a recommended pressure range of 5-10 bar g.

A simple but positive “twist and click” operation of the control knob allows easy selection of the induction 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 inductors have been specially designed for efficiency and accuracy, optimising 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 inductors struggle to induce 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 induction 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, throw from the branchpipe will be reduced. If the flow rating of the branchpipe is less than K factor 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 45 mm (1¾”) Duraline fire hose can be used between each portable Uniductor and Hi-Combat branchpipe but it is recommended that a hose with 64mm (2½”) diameter is chosen for the UNI-450 to minimise pressure losses. Longer lengths can be used if care is taken to keep the hose as straight and level as possible between inductor and branchpipe.

It is recommended that **Hi-Combat** branchpipes and nozzles are operated no more than 6 metres 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 non-return valve and 1metre long pick-up tube, to allow use with 25 litre foam drums 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.



**ANGUS  
FIRE**

# Portable Foam Uniductor

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

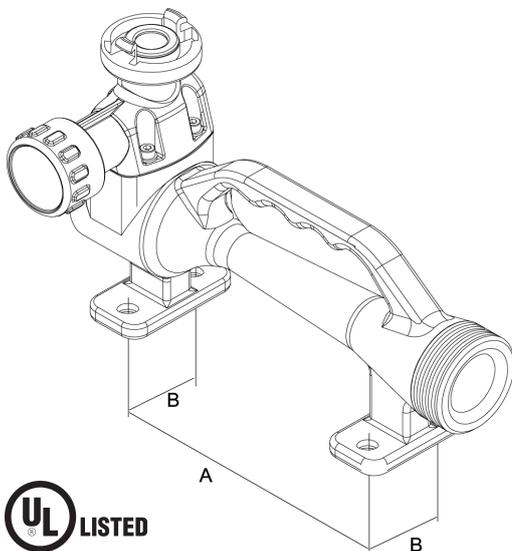
**UNI-225 (3x6) & UNI-450 (3x6)**

Dimensions in mm (nominal)	UNI-225 (1x3) / UNI-450 (1x3)	UNI-225 (3x6) / UNI-450 (3x6)
Overall length	302	302
Overall height	185	185
Max. Width	130	130
Dimension A	185 centres 12Ø	185 centres 12Ø
Dimension B	50 centres 12Ø	50 centres 12Ø
Approx. Weight kg. (incl. pick-up tube)	L/A 3.1      G/M 5.7	L/A 3.1      G/M 5.7

To avoid confusion, Angus Hi-Combat Portable Uniductors and branch pipes are colour coded:

UNI-225, F225/HU, MEX225 and Angus Mini-Turbex	No colour band
UNI-450, F450/HU and MEX450	Red colour 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 3042 and 5007, and for details on the IND900 see data sheet 3171.



Uni 225 1/3 and Uni 225 3/6  
Uni 450 3/6

**GENERAL SALES**  
**Angus Fire Ltd**  
Station Road, Bentham, Lancaster, LA2 7NA, UK  
Tel: +44 (0)1524 264000 • Fax: +44 (0)1524 264180

Angus Fire operates a continuous programme of product development. The right is therefore reserved to modify any specification without prior notice and Angus Fire should be contacted to ensure that the current issues of all technical data sheets are used.