

# Portable Foam Uniductor

UNI-900 (M)

- Hi-Combat Portable Foam Uniductor
- Venturi-Type Operation



The Angus Hi-Combat Portable Foam Uniductor UNI-900 (M), when matched with Angus Hi-Combat foam branchpipes or nozzles, provides the simplest means possible of getting substantial quantities of foam to the fire where it is needed.

These UNI-900 (M) inductors 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.

#### **Venturi-Type Operation**

This Hi-Combat Portable Foam Inductor is a venturi-type constant flow device, designed for use with the F900H Hi-Combat foam branchpipe or other nozzles with the same flow characteristics for quick and reliable response to first aid fire attack duties. The UNI-900 (M) has a flow rate of 900 litres/min at 10 bar g (145psi), typically experiencing a 30-35% pressure drop across the unit.

The recommended operating pressure range is 5-10 bar g.

The variable induction control is numbered 1-6 to indicate approximate foam concentrate percentage pick-up for each setting of the control wheel.

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

If the flow rating of the branchpipe is greater than that of the inductor, throw from the branchpipe will be reduced. If the flow rating of the branchpipe is less than that of the inductor, induction may cease

The standard unit is available in corrosion resistant light alloy, although a gunmetal version is available where salt-water applications are anticipated.

Normally one or two lengths of Duraline fire hose can be used between each portable inductor and Hi-Combat branchpipe but it is recommended that a hose with 64mm (2½") diameter is chosen for the UNI-900 (M) 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.

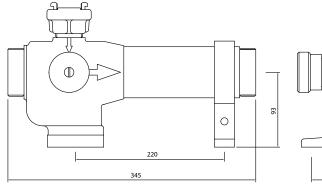
It is recommended that Hi-Combat branchpipes are operated no more than 6 metres vertically above the Hi-Combat Portable Inductor to avoid back pressure problems occurring, and achieve maximum performance at the nozzle.

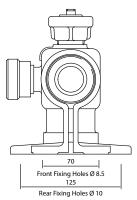
This also avoids the potential risk of water diluting the foam supply, which can be caused by high back pressures occurring due to poor hose configurations, operating up steep slopes, or mismatching of equipment.

Each portable inductor is fitted with a non-return valve and 1 metre long pick-up tube, to allow use with 25 litre foam drums or temporary reservoirs.

#### **Fixed Installations**

For use in fixed installations, the separate range of Angus "FI" IN-LINE INDUCTORS provide a cost-effective, simple and reliable method of proportioning foam concentrate where constant flow conditions prevail. There are six models in the range with performance extending from 65 to 4,000 litres/min at inlet pressures of between 4 and 16 bar g. Within these limits, the induction rate can be accurately set between 1% and 6%. Each inductor is accurately calibrated at the factory to match the specific requirements of the system into which it is to be installed.







## Portable Foam Uniductor

### UNI-900 (M)

The UNI-900 (M) Uniductor is available in two versions; the standard unit is manufactured in Light Alloy and a marine version manufactured in Gunmetal LG4.

| Performance        |                                      |                                      |  |
|--------------------|--------------------------------------|--------------------------------------|--|
|                    | Light Alloy                          | Gunmetal LG4                         |  |
| Flow               | 800 L/Min @ 8Bar, 900 L/Min @ 10 Bar | 800 L/Min @ 8Bar, 900 L/Min @ 10 Bar |  |
| Foam Pick-Up       | 1% to 6%                             | 1% to 6%                             |  |
| Pressure Range     | 4-16 bar                             | 4-16 bar                             |  |
| Weight             | 5.8kg (excludes couplings)           | 7.3kg (excludes couplings)           |  |
| Length             | 345mm (excludes couplings)           | 345mm (excludes couplings)           |  |
| Normal Carton Size | 2 170 x 170 x 540mm                  | 170 x 170 x 540mm                    |  |

| Construction |   |  |
|--------------|---|--|
|              | Light Alloy   | Gunmetal LG4   |
| Body         | Aluminium Alloy   | Gunmetal LG4   |
| Outlet       | Aluminium Alloy Anodised  | Gunmetal LG4   |
| Nozzle       | 316 Stainless Steel   | 316 Stainless Steel  |
| Bypass       | Gunmetal LG4  | Gunmetal LG4   |
| Filter       | Stainless Steel   | Stainless Steel  |
| Venturi      | High Strength Nylon   | High Strength Nylon  |
| Dial         | Anodised Aluminium Alloy  | Bronze   |
| Finish       | Epoxy Polyester Coated Red RAL 3002   | Natural  |
| Inlet/outlet | 2" BSP Male (optional fittings are available upon request)                                  | 2" BSP Male (optional fittings are available upon request)                               |
| Part Number  | M861000D - UNI-900(M) Portable foam inductor,<br>2-inch BSP connections                     | M861010D - UNI-900(M) Portable foam inductor,<br>2-inch BSP connections                  |
| Part Number  | M861100D - UNI-900 (M) Portable foam inductor,<br>2½-inch British instantaneous connections | M861110D - UNI-900 (M) Portable foam inductor, 2½-inch British instantaneous connections |