MOBILE UNITS

HIGH FLOW MOBILE/STATIONARY/FOAM WATER MONITORS
2,000-10,000 GPM (7,570-37,850 LITERS)

DESCRIPTION

The Buckeye High Volume Delivery Device is a large and dependable industrial grade monitor designed for use where high flows of water or foam/water solution are required. It has the capability of being stationary, skid mounted or on a trailer.

This device is typically used for large flammable liquid fires involving large diameter above-ground storage tanks and process areas.

When on a trailer, the unit can be towed to the emergency site and set-up by one man. The trailer base and frame assembly are manufactured in carbon steel and have an epoxy paint finish. (Other paint options available on request).

The monitor trailer is easy to place into operation by situating the unit on solid ground, pulling out the outriggers, laying out the work-platform and connecting the hose or hoses. Worm gear drive hand wheels control elevation and horizontal movement of the monitor. Several types of nozzle are available, including a fixed flow version, adjustable gallonage and adjustable gallonage self-educting type.

When changing the flow rate of the nozzle, it is not necessary to shut-down the nozzle to make adjustments. An inner collar can be rotated by the rear-most handle to adjust the flow rate from 2,000 – 10,000 gpm with indications at 2,000 gpm increments.

SELF-EDUCTING FOAM OPERATION

Remote jet pumps are water powered proportioners using water from the monitor supply to supply foam concentrate to the nozzle. Similar to an eductor, they pick-up the foam concentrate and feed a rich foam/water solution through fire hoses to the foam nozzle inlet where it mixes with the monitor water supply.

NOTE: *It is recommended by Buckeye that the operational manual supplied with the monitor is read and the operating guidelines are understood before any testing or operation of the monitor is undertaken.*

FEATURES

Monitor

The monitor is available with 6" (150 mm) or 8 inch (200 mm) carbon steel or stainless steel waterways depending on flow rate required, with minimum friction loss and maximum efficiency. Horizontal and vertical motion is controlled by worm gear drives. For trailer applications, the monitors have positive stops at a minimum 30° above horizontal up to a maximum 60° above horizontal, with full 360º rotation.

Grease fittings provide lubrication to all bearings.

The monitor is provided with a pressure gauge and digital flow-meter to indicate actual flow through the monitor.

Nozzle

The high performance foam/water nozzle can be provided with factory pre-set flow ranges of 2,000 gpm to 10,000 gpm. Both the nozzle and foam concentrate diffuser attachment are constructed in hard-anodized aluminum with the nozzle having a full discharge pattern selection capability of wide angle fog to straight stream during operation. The foam solution inlet into the nozzle from the jet pump controllers is through two 2 ½" NH (NST) female inlets.

FOAM CONCENTRATE CONTROLLERS

Jet pump eductors are used to supply the monitor with the correct quantity of foam concentrate. They have 1-½" (38 mm) NH (NST) female inlets, a 2-½" (63 mm) NH (NST) male outlet and a 1-½" (38 mm) or 2" (50 mm) NPT male inlet for attachment of the foam concentrate pickup hose assembly. A preset foam concentrate inlet orifice is supplied with each controller based on a nominal monitor foam solution flow rate. Jet pumps with a 1-½" NPT inlet can be supplied to furnish 1% concentrate at 2000, 3000, or 4000 GPM concentrations. Jet pumps with a 2" NPT inlet can be supplied to furnish 3% concentrate at 1000, 1500, or 2000 GPM concentrations.

Thus, for a monitor flow rate of 4,000 gpm @ 3%, two (2) jet pumps with 2" NPT connections would be required.

Different size orifices are available if other monitor flow rates or foam concentrate injection is required. The pickup hose assembly is 10' in length and has a tube attached that is suitable for use with 55 gallon (208 litres) drums, or 275 (1,040 litres) gallon tote containers.

TRAILER

Carbon steel construction with steel plate deck, folding work area to minimize trailering width and provided with anti-skid surface and a 2" (50 mm) ball type trailer hitch, four (4) stabilizer jacks, all of which retract when not in use. The trailer has a single axle, with 5000 lb. suspension, ST225-75-R15 Load Range D tires and 15" X 6" White Spoke rims with 6 on 5-1/2" bolt pattern.

Storage box at front of trailer is provided for foam concentrate jet pumps, hoses and other tools for normal operation.

Water supply connections on the trailer are available as multiple 5", 6" or large Storz, up to 12" Storz. For the 2000 GPM monitor at least two (2) 5" (125 mm) Storz couplings are required. For greater flows, up to six (6) 5" or 6" Storz couplings may be provided, or single 12" Storz couplings can be provided.

The trailer can be equipped with electric or surge hydraulic brakes and lights for over the road use as required.

NOZZLE RANGE

Range in still air to the center of the impact area with nozzle at 30 to 35° above the horizontal, straight stream / nozzle inlet pressure, at:

Flow rate	80 psi (5.5 Bar)	100 psi (7 Bar)
2,000 gpm	260 ft. (79 m)	300 ft. (91 m)
4,000 gpm	350 ft. (106 m)	400 ft. (121 m)
6,000 gpm	410 ft. (124 m)	470 ft. (143 m)
8,000 gpm	460 ft. (140 m)	500 ft. (152 m)

SHIPPING WEIGHT

These shipping weights and dimensions are for the standard trailer.
Approximate ship weight: 4200 lbs. (1909 kg)

APPROXIMATE DIMENSIONS

Overall length of trailer - 200" (5080 mm)

Width (Folded) - 91" (2311 mm)

Width (Set-up for use) – 139-1/2" (3543 mm)

Height - 66" (1676 mm)

ORDERING INFORMATION

Part No. BF-HFMT2/4-5/1
Standard trailer with 2 x 5" Storz inlets/ monitor/2,000-4,000 gpm nozzle/foam /diffuser jet pump controllers for 1% concentrate.

Part No. BF-HFMT2/4-5/3
Standard trailer with 2 x 5" Storz inlets/ monitor/2,000-4,000 gpm nozzle/foam /diffuser jet pump controllers for 3% concentrate.

Part No. BF-HFMT2/4-6/1
Standard trailer with 2 x 6" Storz inlets/ monitor/2,000-4,000 gpm nozzle/foam /diffuser jet pump controllers for 1% concentrate.

Part No. BF-HFMT2/4-6/3
Standard trailer with 2 x 6" Storz inlets/ monitor/2,000-4,000 gpm nozzle/foam /diffuser jet pump controllers for 3% concentrate.

Part No. BF-HFMT2/8-5/1
Standard trailer with 4 x 5" Storz inlets/ monitor/2,000-8,000 gpm nozzle/foam /diffuser jet pump controllers for 1% concentrate.

Part No. BF-HFMT2/8-5/3
Standard trailer with 4 x 5" Storz inlets/ monitor/2,000-8,000 gpm nozzle/foam /diffuser jet pump controllers for 3% concentrate.

Part No. BF-HFMT2/8-6/1
Standard trailer with 4 x 6" Storz inlets/ monitor/2,000-8,000 gpm nozzle/foam /diffuser jet pump controllers for 1% concentrate.

Part No. BF-HFMT2/8-6/3
Standard trailer with 4 x 6" Storz inlets/ monitor/2,000-8,000 gpm nozzle/foam /diffuser jet pump controllers for 3% concentrate.

Part No. BF-HFMT2/8-12/1
Standard trailer with 1 x 12" Storz inlet/ monitor/2,000-8,000 gpm nozzle/foam /diffuser jet pump controllers for 1% concentrate.

Part No. BF-HFMT2/8-12/3
Standard trailer with 1 x 12" Storz inlets/ monitor/2,000-8,000 gpm nozzle/foam /diffuser jet pump controllers for 3% concentrate.