



# Foam Eductors

AKRON BRASS COMPANY | PH. 800.228.1161 (330.264.5678) | [akronbrass.com](http://akronbrass.com)





Akron® Municipal Eductors feature a large, easy to read, and removable metering dial with settings between 0% and 6%. The Eductors are rated to flow at 200 psi (14 bar) inlet pressure and work well with nozzles rated at 75 and 100 psi (5 and 7 bar).

### In-Line Eductors

- 1 1/2" (38 mm) or 2 1/2" (65 mm) full-time swivel inlet x 1 1/2" (38 mm) male, except where noted
- 30" (762 mm) pickup hose standard on 60, 95 and 125 gpm (230, 360 and 475 lpm) eductors, 48" optional
- 48" (1220 mm) pickup hose standard on 250 gpm (950 lpm)

Style	Inlet Size	Outlet Size	Flow		Material	Length	Weight lbs. (kg)
			GPM	LPM			
3060	1 1/2" or 2 1/2" (38 or 65 mm)	1 1/2" (38 mm)	60	230	Pyrolite®	* 7 3/4" (197 mm)	3 1/2 (1.6 kg)
3070	1 1/2" (38 mm)	1 1/2" (38 mm)	60	230	Brass	7 3/4" (197 mm)	9 1/4 (4.2 kg)
3071	1 1/2" (38 mm)	1 1/2" (38 mm)	95	360	Brass	7 3/4" (197 mm)	9 1/4 (4.2 kg)
3072	1 1/2" (38 mm)	1 1/2" (38 mm)	125	475	Brass	7 3/4" (197 mm)	9 1/4 (4.2 kg)
3095	1 1/2" or 2 1/2" (38 or 65 mm)	1 1/2" (38 mm)	95	360	Pyrolite	* 7 3/4" (197 mm)	3 1/2 (1.6 kg)
3125	1 1/2" or 2 1/2" (38 or 65 mm)	1 1/2" (38 mm)	125	475	Pyrolite	* 7 3/4" (197 mm)	3 1/2 (1.6 kg)
3250	2 1/2" (65 mm)	2 1/2" (65 mm)	250	950	Pyrolite	12" (305 mm)	8 1/2 (3.7 kg)

\* 1 1/2" (38 mm) inlet length, 2 1/2" (65 mm) inlet length: 8 1/2" (216 mm)

### Portable Eductor with On-Board Foam Access

This quick and easy setup can be retrofitted to most apparatus to greatly increase foam capabilities over the conventional pail method. For increased flexibility, a separate standard pickup assembly can be added for standard pail use.

- What is included?
  - An Eductor with a special pickup assembly with a quick connect coupling
  - A Foam Access Panel Mount Kit
  - A Quarter Turn Valve with Tee Handle and Label



Style 3095



3095 In-Line Eductor with Quick Connect On-Board Foam Access



Quick Connect Panel Mount with Plug



Quarter Turn Valve

### Industrial/Marine In-Line Eductors

- 2328 90 gpm (340 lpm) Brass In-Line Eductor**
- Set at 6% pickup rate, easily changed to 3%
  - Includes foam shutoff valve and 60" pickup hose

- 2901 90 gpm (340 lpm) Brass In-Line Eductor**
- Set at 6% pickup rate; easily changed to 3%
  - 54" pickup hose

- 2325 95 gpm (360 lpm) Brass In-Line Eductor**
- In-Line Eductor designed for use at 125 psi (8.62 bar).  
(Note: Lower eductor inlet pressures reduce nozzle stream reach.)

- 1%, 2%, 3%, and 6% foam settings
- Removable foam pickup tube with metering dial for easy service and testing

- 2120 120 gpm (460 lpm) Brass In-Line Eductor**
- Metering dial settings: 1/2%, 1%, 3%, 6%



Style 2328



Style 2325

Style	Length	Weight lbs. (kg)	Female Inlet	Male Outlet	Operating Pressure PSI (bar)	Flow	
						GPM	LPM
2120	12 7/8" (327 mm)	12 (5.4 kg)	2 1/2" (65 mm)	2 1/2" (65 mm)	200 (14)	120	460
2325	10 1/8" (257 mm)	7 (3.1 kg)	1 1/2" (38 mm)	1 1/2" (38 mm)	125 (8.62)	95	360
2328	9 1/2" (241 mm)	8 (3.6 kg)	1 1/2" (38 mm)	1 1/2" (38 mm)	200 (14)	90	340
2901	9 1/2" (241 mm)	8 (3.6 kg)	1 1/2" (38 mm)	1 1/2" (38 mm)	200 (14)	90	340



# Foam Eductors & Truck Systems

## Portable By-Pass Eductors

The Akron By-Pass Eductor has a built-in by-pass chamber, allowing the operator to change from water to foam without shutting down.

- 1 1/2" or 2 1/2" swivel inlet x 1 1/2" male
- Brass with chrome trim
- Changes easily to water line use
- 8 quick-change handle positions with a Swing-Out™ Valve handle
- Optional pipe thread connections available for truck plumbing



Style 3097

Style	Inlet Size	Outlet Size	Flow		Material	Length	Weight lbs. (kg)
			GPM	LPM			
3062	1 1/2" or 2 1/2" (38 or 65 mm)	1 1/2" (38 mm)	60	230	Brass	18" (457 mm)	20 (9.1 kg)
3097	1 1/2" or 2 1/2" (38 or 65 mm)	1 1/2" (38 mm)	95	360	Brass	18" (457 mm)	20 (9.1 kg)
3127	1 1/2" or 2 1/2" (38 or 65 mm)	1 1/2" (38 mm)	125	475	Brass	18" (457 mm)	20 (9.1 kg)

## Foam Truck Systems

- 8 quick change handle positions (easily changed after installation) means less installation time
- Specify inlet and outlet, 2", 2 1/2" NPT or 2" victaulic
- Improved pressure recovery provides greater versatility
- Choose 60, 95, or 125 gpm (230, 360, or 475 lpm)
- Performs well with both 75 and 100 psi rated nozzles (75 psi (5 bar) nozzles allow longer hose lays and less reaction force)
- Easily changed to water line use



By-Pass Eductor

Each Truck System Includes:

- Rugged brass by-pass eductor
- Foam metering dial with six foam settings from 0% - 6%
- One 2" In-line Swing-Out™ valve - with built-in check valve
- Two 1" In-line Swing-Out valves
- One 1" check valve
- Four Style 1477 remote controls



Style 3096

Foam Metering Dial

Note: Each truck system is for a single tank operation. A two tank system requires one (1) additional 1" Swing-Out Valve, 1" check valve and 1477 Remote Control.

**3061 60 gpm (230 lpm) Foam Truck System**

**3096 95 gpm (360 lpm) Foam Truck System**

**3126 125 gpm (475 lpm) Foam Truck System**

**See Pages 210 & 211 For Foam System Plumbing**

## Off-Truck Foam Access Kit

A quick disconnect pickup tube for off-truck foam access can be easily added to an existing Akron® Foam System or can be included with any new system if specified. This option provides foam access from an off-truck foam supply.

Designed for:

- Switching between class A and B foams
- Operation through the metering panel
- Supplementing a depleted foam supply
- Foam training

Each Kit Includes:

- Quick connect panel mount and plug
- One 1" check valve
- One 5' quick connect pickup hose assembly
- One Style 57 drain valve



Style 3128

**3128 Off-Truck Foam Access Kit**

- Specify kit when ordering a Foam Truck System or order separately



## Rapid Fill™ Foam Tank Refill System

Akrion Brass increases firefighter safety with the user friendly foam tank refill system. The Rapid Fill system is a safe, cost effective alternative to fill your Class A foam tank without climbing to the top of the truck. The Rapid Fill kit includes everything needed for easy installation into new or existing apparatus. The installation is so simple that most Rapid Fill systems can be installed at the fire station. Once installed, simply attach the pickup tube to the connector on the side of the truck, insert the tube into the foam bucket, flip the switch to the on position, and fill the tank from a safe ground level.

### ARFS-500500 Rapid Fill

- Increase firefighter safety with efficient foam transfer to the tank from ground level
- Easy installation into new or existing apparatus
- Simple to use
- A cost effective foam cell refill solution
- 12v or 24v pump
- Kit includes:
  - Self-priming electric pump with integrated check valve
  - Harness assembly with activation switch
  - Foam concentrate pickup tube
  - Pump panel adapter fitting
  - Foam concentrate “full level” cutoff switch
  - 7.50' (229 cm) of braided hose
  - Tubing and connection fittings
  - Specify kit when ordering a Foam Truck System or order separately



## Eductors

## Ultra-High Expansion Foam Generator With Educator

For use with ultra-high expansion foam, the Akron Foam Generator fits a 16" (406 mm) smoke ejector for ultra-high foam expansion. The 25 gpm (100 lpm) eductor operates at 80 psi (5.5 bar) inlet pressure. The eductor is preset at 2% and works with up to 1000' (304,800 mm) of hose. The unit includes 10' (3,048 mm) Polyethylene tube and clamps.

### 3500 Ultra-High Expansion Foam Generator with Educator

- 1 1/2" (38 mm) female swivel x 1 1/2" (38 mm) male
- 19" (483 mm) square x 12" (305 mm) deep
- Weight: 25 lbs. (11.3 kg)



Style 3500

## Advantage™ Master Stream Eductors

Interchangeable metering orifices allow for 1/2%, 1%, 3%, or 6% pickup rate. Rugged brass construction. A shutoff valve is optional.

- 10' pickup hose & 40" tube - all PVC

Style	Length	Weight lbs. (kg.)	Female Inlet	Male Outlet	Operating Pressure Psi bar)	Flow	
						GPM	LPM
2302	8 1/4" (210 mm)	13 (5.9 kg)	2 1/2" (65 mm)	2 1/2" (65 mm)	150 (10)	250	950
2305	8 1/4" (210 mm)	13 (5.9 kg)	2 1/2" (65 mm)	2 1/2" (65 mm)	150 (10)	500	1900
2307	8 1/4" (210 mm)	13 (5.9 kg)	2 1/2" (65 mm)	2 1/2" (65 mm)	150 (10)	700	2660
2310	8 1/4" (210 mm)	13 (5.9 kg)	2 1/2" (65 mm)	2 1/2" (65 mm)	150 (10)	1000	3800



Style 2305

## Jet Ratio Controller

### 3030 Jet Ratio Controller

The Jet Ratio Controller (JRC) is designed to feed large volumes of foam from a safe location to a self-educing MasterStream nozzle. The JRC can deliver a 3% foam solution to a 1000 gpm (3800 lpm) nozzle at distances up to 400' (121,920 mm) away through 1 3/4" (44 mm) hose while operating at 200 psi (14 bar) inlet pressure. The Style 3030 JRC is ideal for use with the AkroFom™ Self Educing nozzle.

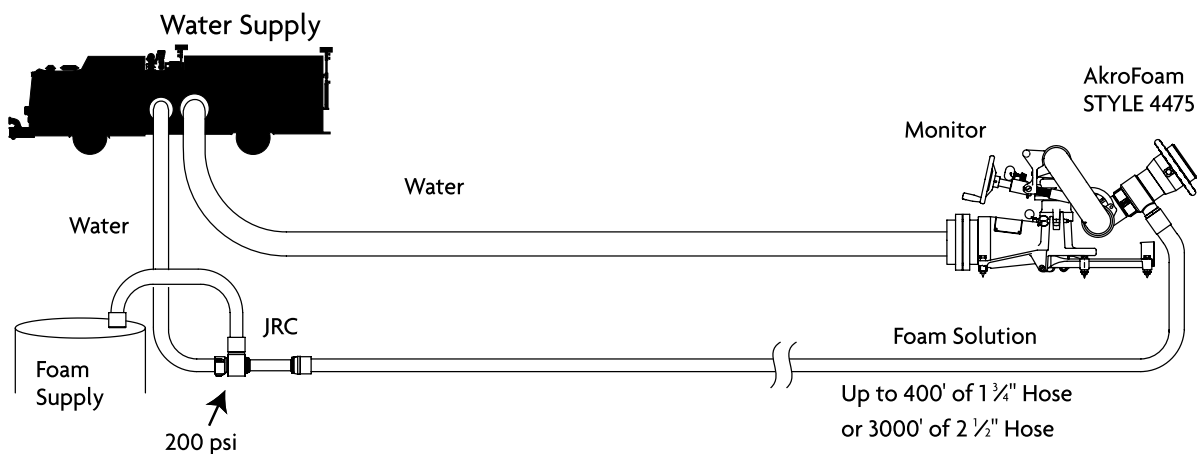
- 1 1/2" (38 mm) Inlet x 1 1/2" (38 mm) Outlet
- Durable lightweight Pyrolite® construction
- 10' (3,048 mm) pickup hose and 40" (1,016 mm) pickup tube (Stinger)
- Weight: 3 3/4 lbs. (1.7 kg)
- Flows 40 gpm (150 lpm) of water and 30 gpm (115 lpm) of foam at 200 psi (14 bar)



Style 4475  
AkroFom™ Nozzle  
See Page 38



### Style 3030

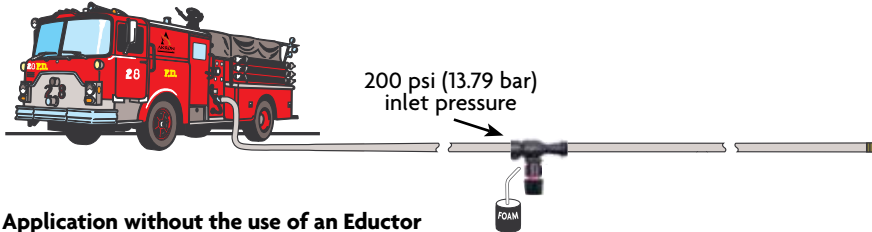


## Application Chart

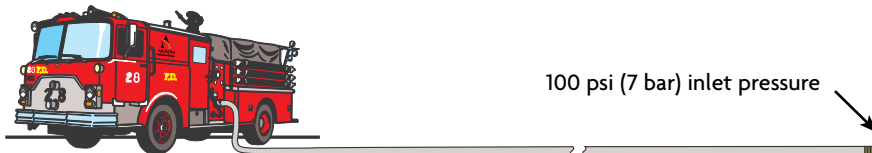
### Eductor Connected to a Pumper Discharge - 200 psi (14 bar) Inlet Pressure



### Eductor Connected at a Point Between the Pumper and the Foam Nozzle



### Foam Application without the use of an Eductor



### Foam Application with an Advantage™ Eductor/AkroFoam™



Place the Advantage Eductor between the monitor discharge and nozzle or place the AkronFoam on the monitor discharge. Place the pick-up hose in the foam supply.



## General Instructions for Akron® Eductors

(Includes in-line, by-pass and built-in types of any flow size)

- Hose lay limits past the eductor must not be exceeded. (see chart at right)
- 200 psi (14 bar) must be maintained at the eductor inlet to obtain the proper mixture.
- The nozzle and eductor must be rated at the same flow for maximum performance. However, in all cases, the nozzle flow setting must not be less than the eductor.
- The nozzle must be fully open. A throttled nozzle can cause the system to shut down.
- Always flush both the eductor and nozzle thoroughly, for at least 3 minutes, after each use.

### \*Hose Lay Limit

GPM (LPM)	Hose Size							
	Up To 1% (Class A)				3% - 6% Class B			
	1 1/2" (38 mm)	1 3/4" (45 mm)	2" (50 mm)	2 1/2" (65 mm)	1 1/2" (38 mm)	1 3/4" (45 mm)	2" (50 mm)	2 1/2" (65 mm)
60 (227)	600' (182.9 m)	900' (274.3 m)	-	-	400' (121.9 m)	600' (182.9 m)	-	-
95 (359.5)	200' (61 m)	350' (106.7 m)	-	-	150' (45.7 m)	250' (76.2 m)	-	-
125 (473)	-	200' (61 m)	400' (121.9 m)	-	-	150' (45.7 m)	300' (91.5 m)	-
250 (946)	-	-	-	350' (106.7 m)	-	-	-	300' (91.5 m)

\* All hose lays based on no elevation, measured from the discharge side of the eductor with 200 psi inlet pressure and with a 100 psi rated nozzle. If a 75 psi rated nozzle is used hose lengths may be extended.

### Notes About Various Operating Pressures

Akron eductors are designed to work at 200 psi (14 bar) inlet pressure for maximum effectiveness. At 200 psi (14 bar), the mixture percentage will be as shown on the metering dial. Akron eductors can educt foam concentrate at pressures between 50 (3.5 bar) and 200 psi (14 bar). At lower pressures the flow of water will be less, but the flow of foam concentrate will remain the same. This means the percentage of concentrate will be higher than shown on the metering dial. Since the flow out of the eductor will be reduced at lower inlet pressures, the nozzle pressure will be lower. This may significantly reduce reach.