



TECHNICAL DATA

FIXED EDUCATORS

The Viking Corporation, 210 N Industrial Park Drive, Hastings MI 49058

Telephone: 269-945-9501 Technical Services: 877-384-5464 Fax: 269-818-1680 Email: techsvcs@vikingcorp.com

1. DESCRIPTION

Fixed educators present a simple, cost-effective method to proportion foam concentrate and water at the proper percentage. Chemguard offers a full range of Fixed Educators in corrosion resistant brass. Fixed Educators are constant flow devices that produce accurate proportioning of foam concentrate at a specified flow and pressure. It is therefore critical to match the line proportioner with all downstream devices, including all friction loss associated with delivering that flow to the particular discharge device(s) at the design pressure.

Fixed Educators are typically used in fixed systems where simple and cost effective foam proportioning is required. Other than flowing water, no external power supplies are required to operate Fixed Educators.

Features

- All brass construction
- Custom flow and pressure options available
- Optional threaded or flanged connections



2. LISTINGS AND APPROVALS

See Table 2.

3. TECHNICAL DATA

Specifications:

See Tables 1 & 2.

Material Standards:

Brass

Ordering Information:

See Tables 1 & 2.

Viking Technical Data may be found on The Viking Corporation's Web site at <http://www.vikinggroupinc.com>. The Web site may include a more recent edition of this Technical Data Page.

4. INSTALLATION

For proper operation and to achieve a respectable nozzle operating pressure, Fixed Educators require inlet pressures in the range of 80 – 200 psi (5.4 – 14 bar), since friction loss through the device is in the order of 35%. Care should also be taken to ensure that the line proportioner is mounted at a maximum of 8 - 10 ft. (2.4 - 3.0 m) above the minimum expected foam liquid surface.

5. INSPECTIONS, TESTS AND MAINTENANCE

NOTICE: The owner is responsible for maintaining the fire protection system and devices in proper operating condition. For minimum maintenance and inspection requirements, refer to recognized standards such as those produced by NFPA, LPC, and VdS which describe care and maintenance of sprinkler systems. In addition, the "Authority Having Jurisdiction" may have additional maintenance, testing and inspection requirements which must be followed.

WARNING: Any system maintenance or testing which involves placing a control valve or detection system out of service may eliminate the Fire Protection of that system. Prior to proceeding, notify all Authorities Having Jurisdiction. Consideration should be given to employment of a Fire Patrol in the affected area.

6. AVAILABILITY

Viking Foam Products are available through a network of domestic and international distributors. See the Viking web site for closest distributor or contact The Viking Corporation.

7. GUARANTEE

For details of warranty, refer to Viking's current list price schedule or contact Viking directly.



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Table 1: Specifications				
Part No.	K Factor Water	K Factor 3%	K Factor 6%	Listings and Approvals
FE60 F09519 F09512 F09513 F09520	4.54	4.55	4.76	None
FE90 F09180 F09183 F09404	6.39	6.73	7.15	See Table 2
F14983	9.2	9.5	9.8	None
F14984	16.1	16.6	17.1	None
F14985	18.4	19.0	19.6	None
F14986	21.5	22.2	22.9	None
F14987	26.9	27.7	28.6	None
F14988	32.2	33.2	34.3	None
F14989	36.8	38.0	39.2	None
F14990	42.2	43.5	44.9	None
F14991	46.1	47.5	49.0	None
F14992	50.7	52.2	53.9	None
F14993	56.0	57.8	59.6	None

Table 2: Specifications for UL Listed Models					
Model No.	Part No.	Listed for use with (Foam Concentrate)	Max Inlet Pressure (PSIG)	Min Inlet Pressure (PSIG)	Max Pressure (% of Inlet)
FE90	F09180	C303 & C301MS	200	90	65%
	F09183	C363 & C361	200	90	65%
	F09183	CUG, C33LT & C134	180	50	65%
	F09404	C363	200	90	60%



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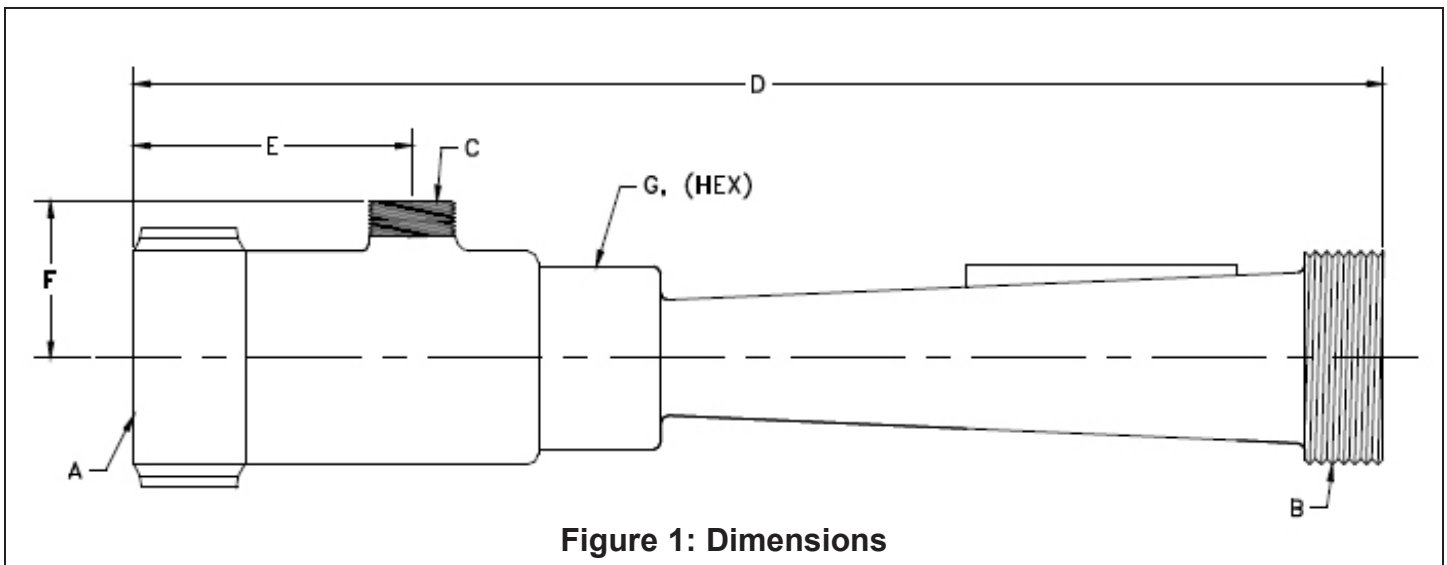
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Part No.	Table 3: Dimensions						
	A	B	C	D	E	F	G
FE60*	1-1/2" NPT	1-1/2" NPT	1/2" NPT	10.0" (25.4 cm)	2.5" (6.4 cm)	1.63" (4.1 cm)	-
FE90*	1-1/2" NPT	1-1/2" NPT	1/2" NPT	10.0" (25.4 cm)	2.5" (6.4 cm)	1.63" (4.1 cm)	-
F14983	2-1/2" NPT	2-1/2" NPT	1" NPT	16.13" (41 cm)	4.38" (11 cm)	2.75" (7 cm)	2.5" (6.35 cm)
F14984	2-1/2" NPT	2-1/2" NPT	1" NPT	16.13" (41 cm)	4.38" (11 cm)	2.75" (7 cm)	2.5" (6.35 cm)
F14985	2-1/2" NPT	2-1/2" NPT	1" NPT	16.13" (41 cm)	4.38" (11 cm)	2.75" (7 cm)	2.5" (6.35 cm)
F14986	2-1/2" NPT	2-1/2" NPT	1" NPT	16.13" (41 cm)	4.38" (11 cm)	2.75" (7 cm)	2.5" (6.35 cm)
F14987	2-1/2" NPT	2-1/2" NPT	1" NPT	16.13" (41 cm)	4.38" (11 cm)	2.75" (7 cm)	2.5" (6.35 cm)
F14988	2-1/2" NPT	3" NPT	1" NPT	18.38" (47 cm)	4.5" (11.4 cm)	3.11" (7.9 cm)	2.75" (7 cm)
F14989	2-1/2" NPT	3" NPT	1" NPT	18.38" (47 cm)	4.5" (11.4 cm)	3.11" (7.9 cm)	2.75" (7 cm)
F14990	2-1/2" NPT	3" NPT	1" NPT	18.38" (47 cm)	4.5" (11.4 cm)	3.11" (7.9 cm)	2.75" (7 cm)
F14991	3" NPT	4" NPT	1-1/4" NPT	20.5" (52 cm)	4.5" (11.4 cm)	2.72" (6.9 cm)	2.75" (7 cm)
F14992	3" NPT	4" NPT	1-1/4" NPT	20.5" (52 cm)	4.5" (11.4 cm)	2.72" (6.9 cm)	2.75" (7 cm)
F14993	3" NPT	4" NPT	1-1/4" NPT	20.5" (52 cm)	4.5" (11.4 cm)	2.72" (6.9 cm)	2.75" (7 cm)

* Refer to table 2 for part numbers for FE60 and FE90 used with a specific foam concentrate.



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