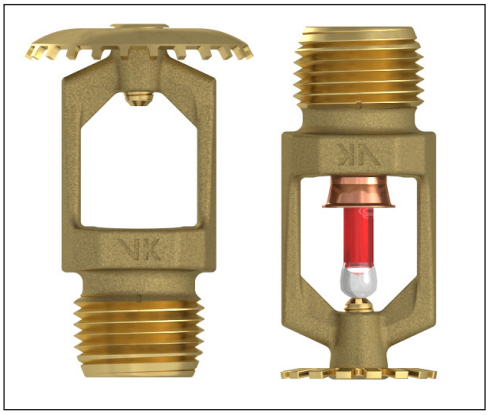
TECHNICAL DATA

APPROVED SPRINKLERS FOR USE WITH FOAM CONCENTRATES

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
Visit the Viking website for the latest edition of this technical data page.

1. GENERAL DESCRIPTION



WARNING: Cancer and Reproductive Harm- www.P65Warnings.ca.gov

Viking Pendent and Upright Foam-Water Sprinklers are non-aspirated foam discharge outlets for use in Wet, Dry, Deluge, Preaction and Refrigerated Area applications. Sprinkler applications are especially challenging for any foam due to the very low operating pressure and expansion reached. Applying foam through a sprinkler head is a very forceful application method and requires foam that can handle direct application and partial submersion into the fuel without losing its fire performance and burn-back resistance. Foams that shall be regarded as suitable for sprinkler applications shall also be able to withstand a limited time of water deluge directly onto the foam blanket without losing its burn-back properties. Viking Pendent and Upright Foam-Water Sprinklers are FM Approved and UL Listed in both closed head (with bulb) and open head (bulb removed) configurations.

Features:

- Tested, Listed and Approved as Foam-Water Sprinklers with specific Foam Concentrates (see section 7).
- Wide range of K Factors available: K5.6 (K80), K8.0 (K115), K11.2 (K161), K16.8 (K242)

For use in high risk applications such as warehouses, aircraft hangers, oil and chemical loading areas, generator rooms, petro-chemical, pharmaceutical and alcohol production plants.

2. LISTINGS AND APPROVALS

Viking Foam Water Sprinkler are FM Approved and/or UL Listed as part of a fire extinguishing system combining designated foam concentrates, bladder tanks and proportioning devices. Approved and Listed system components can be found at www.approvalguide.com and www.database.UL.com

FM Approved – Low Expansion Foam Systems (FM5130)

UL Listed – GHXV.EX27255 (UL162)

3. TECHNICAL DATA

Please refer to relevant sprinkler data page.

4. SCOPE OF DELIVERY

Ensure that all components are complete and in good condition.

Viking Foam/Water Sprinklers are supplied boxed with protective shield or cap.

5. AVAILABILITY

Please contact Viking for further information.

The product is available directly from Viking and official distributors only.

EMEA: Viking SA, Zl Haneboesch, L-4562 Differdange / Niederkorn, Tel.: +352 58 37 37 - 1, Fax: +352 38 37 36, vikinglux@viking-emea.com

Americas: The Viking Corporation, 210 N. Industrial Park Drive, Hastings, Michigan 49058, Toll free phone: (800) 968-9501

APAC: The Viking Corporation (Far East) Pte. Ltd., 69 Tuas View Square, Westlink Techpark, Singapore 637621
Tel: (+65) 6 278 4061, Fax: (+65) 6 278 4609, Email: vikingsingapore@vikingcorp.com

6. PRODUCT VARIANTS

Please refer to relevant sprinkler data page.

VIKING®

TECHNICAL DATA

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7. PERFORMANCE DATA

HYDROCARBON FUELS

	Foam Concentrate	Nominal K-Factor		Sprinkler Identification Number (SIN)		Height				Listed[2] Foam Design Density		Water Discharge Density		Tested[3] Sprinkler Pressure		Approval
						Min.		Max								
		U.S.	Metric[4]	Upright	Pendent	ft.	m	ft.	m	gpm/ft^2	lpm/m^2	gpm/ft^2	lpm/m^2	PSI	(bar)	
VIKING FOAM	AFFF 1%S C6	5.6	80.6	VK100, VK108, VK145, VK300, VK301, VK345	--	5.0	1.5	20.0	6.1	0.20	8.1	0.30	12.2	13	0,89	FM
		5.6	80.6	--	VK102, VK110, VK302, VK303	5.0	1.5	20.0	6.1	0.30	12.2	0.30	12.2	29	1,99	FM
		8.0	115.2	VK200, VK204, VK350, VK351	--	5.0	1.5	30.0	9.1	0.30	12.2	0.30	12.2	14	0,96	FM
		8.0	115.2	--	VK202, VK206, VK352, VK353	6.0	1.8	30.0	9.1	0.30	12.2	0.30	12.2	14	0,96	FM
		11.2	161.3	VK530, VK531	--	8.0	2.4	33.0	10.1	0.30	12.2	0.30	12.2	7	0,48	FM
		11.2	161.3	--	VK377, VK536	6.0	1.8	33.0	10.1	0.30	12.2	0.30	12.2	7	0,48	FM
		16.8	241.9	VK580	--	8.0	2.4	33.0	10.1	0.50	20.4	0.50	20.4	9	0,62	FM
	AFFF 3%S C6	5.6	80.6	VK100, VK108, VK145, VK300, VK301, VK345	--	5.0	1.5	20.0	6.1	0.20	8.1	0.30	12.2	13	0,89	FM
		5.6	80.6	--	VK102, VK110, VK302, VK303	5.0	1.5	20.0	6.1	0.30	12.2	0.30	12.2	29	1,99	FM
						8.0	2.4	20.0	6.1	0.20	8.1	0.30	12.2	13	0.89	FM
		8.0	115.2	VK200, VK204, VK350, VK351	--	5.0	1.5	30.0	9.1	0.30	12.2	0.30	12.2	14	0,96	FM
		8.0	115.2	--	VK202, VK206, VK352, VK353	6.0	1.8	30.0	9.1	0.30	12.2	0.30	12.2	14	0,96	FM
		11.2	161.3	VK530, VK531	--	8.0	2.4	33.0	10.1	0.30	12.2	0.30	12.2	7	0,48	FM
		11.2	161.3	--	VK377, VK536	6.0	1.8	33.0	10.1	0.30	12.2	0.30	12.2	7	0,48	FM
		16.8	241.9	VK580	--	8.0	2.4	33.0	10.1	0.50	20.4	0.50	20.4	9	0,62	FM
	AFFF 3%M C6	5.6	80.6	VK100, VK108, VK300, VK301	--	8.0	2.4	20.0	6.1	0.20	8.1	0.30	12.2	13	0,89	FM
	ARC 3X3S C6	5.6	80.6	VK100, VK108, VK145, VK300, VK301, VK345	--	5.0	1.5	20.0	6.1	0.20	8.1	0.30	12.2	13	0,89	FM
		5.6	80.6	--	VK102, VK110, VK302, VK303	5.0	1.5	20.0	6.1	0.30	12.2	0.30	12.2	29	1,99	FM
		8.0	115.2	VK200, VK204, VK350, VK351	--	5.0	1.5	30.0	9.1	0.30	12.2	0.30	12.2	14	0,96	FM
		8.0	115.2	--	VK202, VK206, VK352, VK353	6.0	1.8	30.0	9.1	0.30	12.2	0.30	12.2	14	0,96	FM
		11.2	161.3	VK530, VK531	--	8.0	2.4	33.0	10.1	0.30	12.2	0.30	12.2	7	0,48	FM
		11.2	161.3	--	VK377, VK536	6.0	1.8	33.0	10.1	0.30	12.2	0.30	12.2	7	0,48	FM
		16.8	241.9	VK580	--	8.0	2.4	33.0	10.1	0.50	20.4	0.50	20.4	9	0,62	FM

[1]This chart shows approvals available at the time of printing.
[2]Density indicated is minimum application density required per FM5130 Standard for Foam Extinguishing Systems. This density cannot be reduced.
[3]The pressure indicated is the minimum starting pressure required for the sprinkler. However, the minimum density shown overrides the minimum starting pressure (depending on head spacing) and cannot be reduced.
[4]Metric K-factor shown is for use when pressure is measured in bar. When pressure is measured in kPa, divide the metric K-factor shown by 10.0.

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ALCOHOL - IPA

	Foam Concentrate	Nominal K-Factor		Sprinkler Identification Number (SIN)		Height				Listed[2] Foam Design Density		Tested[3] Sprinkler Pressure		Approval
						Min.		Max						
		U.S.	Metric[4]	Upright	Pendent	ft.	m	ft.	m	gpm/ft^2	lpm/m^2	PSI	(bar)	
VIKING FOAM	ARC 3X3S C6	5.6	80.6	VK100, VK108, VK300, VK301	--	5.0	1.5	20.0	6.1	0.20	8.1	13	0,89	FM
		5.6	80.6	VK145, VK345	--	5.0	1.5	20.0	6.1	0.30	12.2	29	1,99	FM
		5.6	80.6	--	VK102, VK110, VK302, VK303	5.0	1.5	20.0	6.1	0.30	12.2	29	1,99	FM
		8.0	115.2	VK200, VK204, VK350, VK351	--	5.0	1.5	30.0	9.1	0.30	12.2	14	0,96	FM
		8.0	115.2	--	VK202, VK206, VK352, VK353	6.0	1.8	30.0	9.1	0.30	12.2	14	0,96	FM
		11.2	161.3	VK530, VK531	--	8.0	2.4	33.0	10.1	0.30	12.2	7	0,48	FM
		11.2	161.3	--	VK377, VK536	6.0	1.8	33.0	10.1	0.30	12.2	7	0,48	FM
		16.8	241.9	VK580	--	8.0	2.4	33.0	10.1	0.50	20.4	9	0,62	FM

KETONE - ACETONE

	Foam Concentrate	Nominal K-Factor		Sprinkler Identification Number (SIN)		Height				Listed[2] Foam Design Density		Tested[3] Sprinkler Pressure		Approval
						Min.		Max						
		U.S.	Metric[4]	Upright	Pendent	ft.	m	ft.	m	gpm/ft^2	lpm/m^2	PSI	(bar)	
VIKING FOAM	ARC 3X3S C6	5.6	80.6	VK100, VK108, VK145, VK300, VK301, VK345	--	5.0	1.5	20.0	6.1	0.30	12.2	29	1,99	FM
		5.6	80.6	--	VK102, VK110, VK302, VK303	6.0	1.8	20.0	6.1	0.30	12.2	29	1,99	FM

[1]This chart shows approvals available at the time of printing.

[2]Density indicated is minimum application density required per FM5130 Standard for Foam Extinguishing Systems. This density cannot be reduced.

[3]The pressure indicated is the minimum starting pressure required for the sprinkler. However, the minimum density shown overrides the minimum starting pressure (depending on head spacing) and cannot be reduced.

[4]Metric K-factor shown is for use when pressure is measured in bar. When pressure is measured in kPa, divide the metric K-factor shown by 10.0.

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HYDROCARBON FUELS

	Foam Concentrate	Nominal K-Factor		Sprinkler Identification Number (SIN)		Listed[2] Foam Design Density		Tested[3] Sprinkler Pressure		Listing
		U.S.	Metric[4]	Upright	Pendent	gpm/ft^2	lpm/m^2	PSI	(bar)	
VIKING FOAM	AFFF 1%S C6	5.6	80.6	VK100, VK108, VK300, VK301, VK315, VK316	VK102, VK110, VK122, VK302, VK303, VK317, VK318	0.16	6.5	7	0,48	UL
		8.0	115.2	VK200, VK204, VK350, VK351	VK206, VK352, VK202, VK353	0.22	9.1	7	0,48	UL
		11.2	161.3	VK530, VK531, VK533	VK377, VK536	0.32	13.0	7	0,48	UL
		16.8	241.9	VK580	--	0.46	18.9	7	0,48	UL
	AFFF 3%S C6	5.6	80.6	VK100, VK108, VK300, VK301, VK315, VK316	VK102, VK110, VK122, VK302, VK303, VK317, VK318	0.16	6.5	7	0,48	UL
		8.0	115.2	VK200, VK204, VK350, VK351	VK206, VK352, VK202, VK353	0.22	9.1	7	0,48	UL
		11.2	161.3	VK530, VK531, VK533	VK377, VK536	0.32	13.0	7	0,48	UL
		16.8	241.9	VK580	--	0.46	18.9	7	0,48	UL
	AFFF 3%M C6	5.6	80.6	VK100, VK108, VK300, VK301, VK315, VK316	VK102, VK110, VK122, VK302, VK303, VK317, VK318	0.16	6.5	7	0,48	UL
	ARC 3X3S C6	5.6	80.6	VK100, VK108, VK300, VK301, VK315, VK316	VK102, VK110, VK122, VK302, VK303, VK317, VK318	0.16	6.5	7	0,48	UL
		8.0	115.2	VK200, VK204, VK350, VK351	VK206, VK352, VK202, VK353	0.22	9.1	7	0,48	UL
		11.2	161.3	VK530, VK531, VK533	VK377, VK536	0.32	13.0	7	0,48	UL
		16.8	241.9	VK580	--	0.46	18.9	7	0,48	UL

[1]This chart shows listings available at the time of printing.

[2]Density indicated is minimum application density required per UL 162 - Foam Equipment and Liquid Concentrate Standard. This density cannot be reduced.

[3]The pressure indicated is the minimum starting pressure required for the sprinkler. However, the minimum density shown overrides the minimum starting pressure (depending on head spacing) and cannot be reduced.

[4]Metric K-factor shown is for use when pressure is measured in bar. When pressure is measured in kPa, divide the metric K-factor shown by 10.0.

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ALCOHOL - IPA

	Foam Concentrate	Nominal K-Factor		Sprinkler Identification Number (SIN)		Listed[2] Foam Design Density		Tested[3] Sprinkler Pressure		Listing
		U.S.	Metric[4]	Upright	Pendent	gpm/ft^2	lpm/m^2	PSI	(bar)	
VIKING FOAM	ARC 3X3S C6	5.6	80.6	VK100, VK108, VK300, VK301, VK315, VK316	VK102, VK110, VK122, VK302, VK303, VK317, VK318	0.22 (UP)* 0.16 (PD)*	9.0 (UP)* 6.5 (PD)*	14.5 (UP) 7 (PD)	0,99 (UP) 0,48 (PD)	UL
		8.0	115.2	VK200, VK204, VK350, VK351	VK206, VK352, VK202, VK353	0.29	11.8	12	0,83	UL
		11.2	161.3	VK530, VK531, VK533	VK377, VK536	0.32	13	7	0,48	UL
		16.8	241.9	VK580	--	0.46	18.9	7	0,48	UL

* UP=Upright, PD=Pendent

KETONE - ACETONE

	Foam Concentrate	Nominal K-Factor		Sprinkler Identification Number (SIN)		Listed[2] Foam Design Density		Tested[3] Sprinkler Pressure		Listing
		U.S.	Metric[4]	Upright	Pendent	gpm/ft^2	lpm/m^2	PSI	(bar)	
VIKING FOAM	ARC 3X3S C6	5.6	80.6	VK100, VK108, VK300, VK301, VK315, VK316	VK102, VK110, VK122, VK302, VK303, VK317, VK318	0.29	11.8	24	0,48	UL
		8.0	115.2	VK200, VK204, VK350, VK351	VK206, VK352, VK202, VK353	0.32	13	15	0,48	UL
		11.2	161.3	VK530, VK531, VK533	VK377, VK536	0.40	16.2	11	0,75	UL
		16.8	241.9	VK580	--	0.46	18.9	7	0,48	UL

[1]This chart shows listings and approvals available at the time of printing.
[2]Density indicated is minimum application density required per UL 162 - Foam Equipment and Liquid Concentrate Standard. This density cannot be reduced.
[3]The pressure indicated is the minimum starting pressure required for the sprinkler. However, the minimum density shown overrides the minimum starting pressure (depending on head spacing) and cannot be reduced.
[4]Metric K-factor shown is for use when pressure is measured in bar. When pressure is measured in kPa, divide the metric K-factor shown by 10.0.

HYDROCARBONS

	Foam Concentrate	Nominal K-Factor		Sprinkler Identification Number (SIN)		Listed[2] Foam Design Density		Tested[3] Sprinkler Pressure		Listing
		U.S.	Metric[4]	Upright	Pendent	gpm/ft^2	lpm/m^2	PSI	(bar)	
FOMTEC FOAM	Enviro USP[5]	8.0	115.2	--	VK2021	0.22	9.0	7	0,48	UL

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[3]The pressure indicated is the minimum starting pressure required for the sprinkler. However, the minimum density shown overrides the minimum starting pressure (depending on head spacing) and cannot be reduced.
[4]Metric K-factor shown is for use when pressure is measured in bar. When pressure is measured in kPa, divide the metric K-factor shown by 10.0.
[5]For fresh water use only.

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HYDROCARBON FUELS

	Foam Concentrate	Nominal K-Factor		Sprinkler Identification Number (SIN)		Listed[2] Foam Design Density		Tested[3] Sprinkler Pressure		Listing
		U.S.	Metric[4]	Upright	Pendent	gpm/ft^2	lpm/m^2	PSI	(bar)	
CHEMGUARD FOAM	1% AFFF Viking - F20717 CG - C1B	2.8	40.3	VK001, VK021, VK325, VK326, VK340, VK341	--	0.16	6.5	29	2	UL / FM
		4.2	60.0	VK002, VK006, VK327, VK328	--	0.16	6.5	12.8	0.89	UL / FM
		5.6	80.6	VK100, VK108, VK125, VK145, VK300, VK301, VK315, VK316, VK345	VK102, VK110, VK122, VK302, VK303, VK317, VK318	0.16	6.5	7	0.48	UL / FM
		8.0	115.2	VK200, VK204, VK350, VK351	VK206, VK352, VK202, VK353	0.22	9	7	0.48	UL / FM
	3% AFFF Viking - F20718 CG - C3B	2.8	40.3	VK001, VK021, VK325, VK326, VK340, VK341	--	0.16	6.5	29	2	UL / FM
		4.2	60.0	VK002, VK006, VK327, VK328	--	0.16	6.5	12.8	0.89	UL / FM
		5.6	80.6	VK100, VK108, VK125, VK145, VK300, VK301, VK315, VK316, VK345	VK102, VK110, VK122, VK302, VK303, VK317, VK318	0.16	6.5	7	0.48	UL / FM
		8.0	115.2	VK200, VK204, VK350, VK351	VK206, VK352, VK202, VK353	0.22	9.0	7	0.48	UL / FM
		11.2	161.3	VK530, VK531, VK533	VK377, VK536	0.32	13.0	7	0.48	UL / FM
		16.8	242.0	VK580	--	0.46	18.7	7	0.48	UL / FM
	3% AFFF - MS Viking - F20719 CG - C306-MS-C	5.6	80.6	VK100, VK108, VK125, VK300, VK301, VK315, VK316	VK102, VK110, VK122, VK302, VK303, VK317, VK318	0.16	6.5	7	0.48	UL / FM
		8.0	115.2	VK200, VK204, VK350, VK351	VK206, VK352, VK353	0.22	9.0	7	0.48	UL / FM
	3% AR-AFFF Viking - F20722 CG - C334-LV	5.6	80.6	VK100, VK108, VK125, VK145, VK300, VK301, VK315, VK316, VK345	VK102, VK110, VK122, VK302, VK303, VK317, VK318	0.16	6.5	7	0.48	UL / FM
		8.0	115.2	VK200, VK204, VK350, VK351	VK206, VK352, VK202, VK353	0.22	9.0	7	0.48	UL / FM
		11.2	161.3	VK530, VK531, VK533	VK377, VK536	0.32	13.0	7	0.48	UL / FM
		16.8	242.0	VK580	--	0.46	18.7	7	0.48	UL / FM

[1]This chart shows listings and approvals available at the time of printing.
[2]Density indicated is minimum application density required per UL 162 - Foam Equipment and Liquid Concentrate Standard. This density cannot be reduced.
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ALCOHOL FUELS

	Foam Concentrate	Nominal K-Factor		Sprinkler Identification Number (SIN)		Listed[2] Foam Design Density		Tested[3] Sprinkler Pressure		Listing
		U.S.	Metric[4]	Upright	Pendent	gpm/ft^2	lpm/m^2	PSI	(bar)	
CHEMGUARD FOAM	3% AR-AFFF Viking - F20722 CG - C334-LV	5.6	80.6	VK100, VK108, VK125, VK145, VK300, VK301, VK315, VK316, VK345	VK102, VK110, VK122, VK302, VK303, VK317, VK318	0.24	9.8	16	1.1	UL / FM
		8.0	115.2	VK200, VK204, VK350, VK351	VK206, VK352, VK202, VK353	0.29	11.8	11.4	0.79	UL / FM
		11.2	161.3	VK530, VK531, VK533	VK377, VK536	0.38	15.5	11	0.76	UL / FM
		16.8	242.0	VK580	--	0.55	22.4	9.4	0.65	UL / FM

KETONE FUELS

	Foam Concentrate	Nominal K-Factor		Sprinkler Identification Number (SIN)		Listed[2] Foam Design Density		Tested[3] Sprinkler Pressure		Listing
		U.S.	Metric[4]	Upright	Pendent	gpm/ft^2	lpm/m^2	PSI	(bar)	
CHEMGUARD FOAM	3% AR-AFFF Viking - F20722 CG - C334-LV	5.6	80.6	VK100, VK108, VK125, VK145, VK300, VK301, VK315, VK316, VK345	VK102, VK110, VK122, VK302, VK303, VK317, VK318	.28/.30*	11.4/12.2*	22/26*	1.52/1.79*	UL / FM
		8.0	115.2	VK200, VK204, VK350, VK351	VK206, VK352, VK202, VK353	0.34	13.8	16	1	UL / FM
		11.2	161.3	VK530, VK531, VK533	VK377, VK536	0.41	16.7	12	0.83	UL / FM
		16.8	242.0	VK580	--	0.55	22.4	9.4	0.65	UL / FM

ETHER FUELS

	Foam Concentrate	Nominal K-Factor		Sprinkler Identification Number (SIN)		Listed[2] Foam Design Density		Tested[3] Sprinkler Pressure		Listing
		U.S.	Metric[4]	Upright	Pendent	gpm/ft^2	lpm/m^2	PSI	(bar)	
CHEMGUARD FOAM	3% AR-AFFF Viking - F20722 CG - C334-LV	5.6	80.6	VK100, VK108, VK125, VK145, VK300, VK301, VK315, VK316, VK345	VK102, VK110, VK122, VK302, VK303, VK317, VK318	0.26	10.6	12	0.83	UL / FM
		8.0	115.2	VK200, VK204, VK350, VK351	VK206, VK352, VK202, VK353	0.30	12.2	12.7	0.88	UL / FM
		11.2	161.3	VK530, VK531, VK533	VK377, VK536	0.32	13.0	7	0.48	UL / FM
		16.8	242.0	VK580	--	0.46	18.7	7	0.48	UL / FM

[1]This chart shows listings and approvals available at the time of printing.
[2]Density indicated is minimum application density required per UL 162 - Foam Equipment and Liquid Concentrate Standard. This density cannot be reduced.
[3]The pressure indicated is the minimum starting pressure required for the sprinkler. However, the minimum density shown overrides the minimum starting pressure (depending on head spacing) and cannot be reduced.
[4]Metric K-factor shown is for use when pressure is measured in bar. When pressure is measured in kPa, divide the metric K-factor shown by 10.0.
*Where two values are given, the first value applies to upright sprinklers and the second value applies to pendent sprinklers.

TECHNICAL DATA

APPROVED SPRINKLERS FOR USE WITH FOAM CONCENTRATES

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Visit the Viking website for the latest edition of this technical data page.

ESTER FUELS

	Foam Concentrate	Nominal K-Factor		Sprinkler Identification Number (SIN)		Listed[2] Foam Design Density		Tested[3] Sprinkler Pressure		Listing
		U.S.	Metric[4]	Upright	Pendent	gpm/ft^2	lpm/m^2	PSI	(bar)	
CHEMGUARD FOAM	3% AR-AFFF Viking - F20722 CG - C334-LV	5.6	80.6	VK100, VK108, VK125, VK145, VK300, VK301, VK315, VK316, VK345	VK102, VK110, VK122, VK302, VK303, VK317, VK318	0.21	8.5	12	0.83	UL / FM
		8.0	115.2	VK200, VK204, VK350, VK351	VK206, VK352, VK202, VK353	0.26	10.6	9	0.62	UL / FM
		11.2	161.3	VK530, VK531, VK533	VK377, VK536	0.35	14.2	7	0.48	UL / FM
		16.8	242.0	VK580	--	0.46	18.7	7	0.48	UL / FM

DENATURED ALCOHOL

	Foam Concentrate	Nominal K-Factor		Sprinkler Identification Number (SIN)		Listed[2] Foam Design Density		Tested[3] Sprinkler Pressure		Listing
		U.S.	Metric[4]	Upright	Pendent	gpm/ft^2	lpm/m^2	PSI	(bar)	
CHEMGUARD FOAM	3% AR-AFFF Viking - F20722 CG - C334-*LV	5.6	80.6	VK100, VK108, VK125, VK145, VK300, VK301, VK315, VK316, VK345	VK102, VK110, VK122, VK302, VK303, VK317, VK318	0.19	7.7	10.3	0.71	UL / FM
		8.0	115.2	VK200, VK204, VK350, VK351	VK206, VK352, VK202, VK353	0.24	9.7	8	0.55	UL / FM
		11.2	161.3	VK530, VK531, VK533	VK377, VK536	0.34	13.8	8	0.55	UL / FM
		16.8	242.0	VK580	--	0.46	18.7	7	0.48	UL / FM

[1]This chart shows listings and approvals available at the time of printing.

[2]Density indicated is minimum application density required per UL 162 - Foam Equipment and Liquid Concentrate Standard. This density cannot be reduced.

[3]The pressure indicated is the minimum starting pressure required for the sprinkler. However, the minimum density shown overrides the minimum starting pressure (depending on head spacing) and cannot be reduced.

[4]Metric K-factor shown is for use when pressure is measured in bar. When pressure is measured in kPa, divide the metric K-factor shown by 10.0.

TECHNICAL DATA

APPROVED SPRINKLERS FOR USE WITH FOAM CONCENTRATES

The Viking Corporation, 210 N Industrial Park Drive, Hastings MI 49058
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Visit the Viking website for the latest edition of this technical data page.

HYDROCARBON FUELS

	Foam Concentrate	Nominal K-Factor		Sprinkler Identification Number (SIN)		Listed[2] Foam Design Density		Tested[3] Sprinkler Pressure		Listing
		U.S.	Metric[4]	Upright	Pendent	gpm/ft^2	lpm/m^2	PSI	(bar)	
NATIONAL FOAM	Aer-O-Water®C6 1% AFFF	2.8	40.3	VK001, VK325	--	0.16	6.5	30	2.06	UL
		4.2	60.0	VK002, VK327	--	0.16	6.5	13	0.89	UL
		5.6	80.6	VK100, VK108, VK130, VK300, VK552, VK556	VK910, VK102, VK110, VK132, VK302	0.16	6.5	7	0.48	UL
		8.0	115.2	VK200, VK204, VK350, VK560, VK562, VK566	VK202, VK206, VK352	0.22	9	7	0.48	UL
	Aer-O-Lite™ C6 3% AFFF	2.8	40.3	VK001, VK305, VK325	--	0.16	6.5	30	2.06	UL
		4.2	60.0	VK002, VK327	--	0.16	6.5	13	0.89	UL
		5.6	80.6	VK100, VK108, VK130, VK300, VK552, VK556	VK910, VK102, VK110, VK132, VK302	0.16	6.5	7	0.48	UL
		8.0	115.2	VK200, VK204, VK350, VK560, VK562, VK566	VK202, VK206, VK352	0.22	9.0	7	0.48	UL
		11.2	161.3	VK530, VK531, VK536	--	0.32	13.0	7	0.48	UL
	Aer-O-Water®3EMC6 AFFF	5.6	80.6	VK100, VK108, VK130, VK300, VK552, VK556	VK910, VK102, VK110, VK132, VK302	0.16	6.5	7	0.48	UL
		8.0	115.2	VK200, VK204, VK350, VK560, VK562, VK566	VK202, VK206, VK352	0.22	9.0	7	0.48	UL
	Universal® GoldC6 1%/3% AR-AFFF	5.6	80.6	VK100, VK108, VK130, VK300, VK552, VK556	VK910, VK102, VK110, VK132, VK302	0.16	6.5	7	0.48	UL
		8.0	115.2	VK200, VK204, VK350, VK560, VK562, VK566	VK202, VK206, VK352	0.22	9.0	7	0.48	UL
		11.2	161.3	VK530, VK531, VK536	--	0.32	13.0	7	0.48	UL

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[2]Density indicated is minimum application density required per UL 162 - Foam Equipment and Liquid Concentrate Standard. This density cannot be reduced.
[3]The pressure indicated is the minimum starting pressure required for the sprinkler. However, the minimum density shown overrides the minimum starting pressure (depending on head spacing) and cannot be reduced.
[4]Metric K-factor shown is for use when pressure is measured in bar. When pressure is measured in kPa, divide the metric K-factor shown by 10.0.

VIKING®

TECHNICAL DATA

APPROVED SPRINKLERS FOR USE WITH FOAM CONCENTRATES

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ALCOHOL FUELS

	Foam Concentrate	Nominal K-Factor		Sprinkler Identification Number (SIN)		Listed[2] Foam Design Density		Tested[3] Sprinkler Pressure		Listing
		U.S.	Metric[4]	Upright	Pendent	gpm/ft^2	lpm/m^2	PSI	(bar)	
NATIONAL FOAM	Universal® Gold[C6] 1%/3% AR-AFFF	5.6	80.6	VK100, VK108, VK130, VK300, VK552, VK556	VK910, VK102, VK110, VK132, VK302	0.24/.21*	9.8/8.5*	16.5/12.5*	1.14/.86*	UL
		8.0	115.2	VK200, VK204, VK350, VK560, VK562, VK566	VK202, VK206, VK352	0.29	11.8	11.4	0.79	UL
		11.2	161.3	VK530, VK531, VK536	VK377, VK536	0.42	17.1	12	0.83	UL

KETONE FUELS

	Foam Concentrate	Nominal K-Factor		Sprinkler Identification Number (SIN)		Listed[2] Foam Design Density		Tested[3] Sprinkler Pressure		Listing
		U.S.	Metric[4]	Upright	Pendent	gpm/ft^2	lpm/m^2	PSI	(bar)	
NATIONAL FOAM	Universal® Gold[C6] 1%/3% AR-AFFF	5.6	80.6	VK100, VK108, VK130, VK300, VK552, VK556	VK910, VK102, VK110, VK132, VK302	.28/.30*	11.4/12.2*	22/26*	1.52/1.8*	UL
		8.0	115.2	VK200, VK204, VK350, VK560, VK562, VK566	VK202, VK206, VK352	0.34	13.8	16	1.1	UL
		11.2	161.3	VK530, VK531, VK536	--	0.41	16.7	12	0.83	UL

ETHER FUELS

	Foam Concentrate	Nominal K-Factor		Sprinkler Identification Number (SIN)		Listed[2] Foam Design Density		Tested[3] Sprinkler Pressure		Listing
		U.S.	Metric[4]	Upright	Pendent	gpm/ft^2	lpm/m^2	PSI	(bar)	
NATIONAL FOAM	Universal® Gold[C6] 1%/3% AR-AFFF	5.6	80.6	VK100, VK108, VK130, VK300, VK552, VK556	--	0.21	8.5	12	0.83	UL
		8.0	115.2	VK200, VK204, VK350, VK560, VK562, VK566	--	0.26	10.6	9	0.62	UL
		11.2	161.3	VK530, VK531, VK536	--	0.32	13.0	7	0.48	UL

[1]This chart shows listings and approvals available at the time of printing.
[2]Density indicated is minimum application density required per UL 162 - Foam Equipment and Liquid Concentrate Standard. This density cannot be reduced.
[3]The pressure indicated is the minimum starting pressure required for the sprinkler. However, the minimum density shown overrides the minimum starting pressure (depending on head spacing) and cannot be reduced.
[4]Metric K-factor shown is for use when pressure is measured in bar. When pressure is measured in kPa, divide the metric K-factor shown by 10.0.
*Where two values are given, the first value applies to upright sprinklers and the second value applies to pendent sprinklers.

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ESTER FUELS										
	Foam Concentrate	Nominal K-Factor		Sprinkler Identification Number (SIN)		Listed[2] Foam Design Density		Tested[3] Sprinkler Pressure		Listing
		U.S.	Metric[4]	Upright	Pendent	gpm/ft^2	lpm/m^2	PSI	(bar)	
NATIONAL FOAM	Universal® Gold[C6] 1%/3% AR-AFFF	5.6	80.6	VK100, VK108, VK130, VK300, VK552, VK556	--	0.21	8.5	12	0.83	UL
		8.0	115.2	VK200, VK204, VK350, VK560, VK562, VK566	--	0.26	10.6	9	0.62	UL
		11.2	161.3	VK530, VK531, VK536	--	0.32	13.0	7	0.48	UL

[1]This chart shows listings and approvals available at the time of printing.
[2]Density indicated is minimum application density required per UL 162 - Foam Equipment and Liquid Concentrate Standard. This density cannot be reduced.
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[4]Metric K-factor shown is for use when pressure is measured in bar. When pressure is measured in kPa, divide the metric K-factor shown by 10.0.

8. INSTALLATION

Refer to appropriate Installation Standards (i.e. NFPA, VdS, LPCB, etc.) and / or applicable FM Global Property Loss Prevention Data Sheets such as 4-12, Foam-Water Sprinkler Systems.

9. OPERATION

During fire conditions, the heat-sensitive liquid in the glass bulb expands, causing the glass to shatter, releasing the pip cap and sealing spring assembly. Water or Foam/Water Solution flowing through the sprinkler orifice strikes the sprinkler deflector, forming a uniform spray pattern to extinguish or control the fire.

10. GUARANTEE

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

11. INSPECTION, TESTS AND MAINTENANCE

Refer to respective requirements, according to the relevant standards for Inspection, Testing and Maintenance. Refer to NFPA 25 for Inspection, Testing and Maintenance requirements.

If applicable, refer to FM Global Property Loss Prevention Datasheet 4-12 for specific test and commissioning criteria. In addition, the "Authority Having Jurisdiction" (AHJ) may have additional maintenance, testing and inspection requirements that must be followed.

WARNING

Any system maintenance or testing that involves placing a control valve or detection system out of service may eliminate the fire protection capabilities of that system. Prior to proceeding, notify all Authorities Having Jurisdiction. Consideration should be given to employment of a fire patrol in the affected areas.

12. DISPOSAL

At end of use the product described here should be disposed of via the national recycling system.

13. ACCESSORIES AND SPARE PARTS

Please refer to relevant sprinkler data page.