

REFERENCE DATA

APPROVED SPRINKLERS FOR USE WITH 3M FOAM

VIKING FOAM/WATER SPRINKLER HEAD APPROVAL FUEL-HYDROCARBON BASED							
3M FOAM CONCENTRATE	STANDARD SPRAY MODEL M SPRINKLERS UNLESS OTHERWISE	UL MINIMUM ² APPLICATION DENSITY		SPRII	STED ³ NKLER RESSURE	AGENCY ¹ APPROVAL	
	INDICATED	GPM/FT ²	(L/M ²)	PSI	(kPa)		
AFFF	3/8" UPRIGHT	.16	(6,5)	31.0	(213,7)	UL-FM	
FC-201F	½" UPRIGHT	.16	(6,5)	7.0	(48,2)	UL-FM	
1%	1⁄2" PENDENT	.16	(6,5)	7.0	(48,2)	UL-FM	
	3/8" UPRIGHT	.16	(6,5)	31.0	(213,7)	UL-FM	
	3/8" PENDENT	.16	(6,5)	31.0	(213,7)	FM	
	½" UPRIGHT	.16	(6,5)	7.0	(48,2)	UL-FM	
	1/2" PENDENT	.16	(6,5)	7.0	(48,2)	UL-FM	
	17/32" UPRIGHT	.22	(9,0)	7.0	(48,2)	UL-FM	
AFFF FC-203CF	17/32" PENDENT	.22	(9,0)	7.0	(48,2)	UL-FM	
3% MIL-SPEC	**D-2 140° NOZZLE	.27	(10,9)	25.0	(172,4)	UL-FM	
	**D-2 120° NOZZLE	.27	(10,9)	25.0	(172,4)	UL-FM	
	**C-2 140° NOZZLE	.21	(8,5)	25.0	(172,4)	UL-FM	
	**C-2 120° NOZZLE	.21	(8,5)	25.0	(172,4)	UL-FM	
	**D-2 30° NOZZLE	.26	(10,6)	25.0	(172,4)	UL	
	**D-2 90° NOZZLE	.27	(10,9)	25.0	(172,4)	UL	
	3/8" UPRIGHT	.16	(6,5)	31.0	(213,7)	UL-FM	
	3/8" PENDENT	.16	(6,5)	31.0	(213,7)	FM	
	7/16" UPRIGHT	.16	(6,5)	13.0	(89,3)	UL-FM	
	½" UPRIGHT	.16	(6,5)	7.0	(48,2)	UL-FM	
AFFF	1⁄2" PENDENT	.16	(6,5)	7.0	(48,2)	UL-FM	
FC-783F	17/32" UPRIGHT	.22	(9,0)	7.0	(48,2)	UL-FM	
3%	17/32" PENDENT	.22	(9,0)	7.0	(48,2)	UL-FM	
	5/8" UPRIGHT	.38	(15,4)	10.0	(68,9)	UL-FM	
	5/8" PENDENT	.38	(15,4)	10.0	(68,9)	UL-FM	
	**AQUAMISER	.79	(32,2)	50.0	(345)	UL	
	**MODEL A-2 ELO UPRIGHT	.43	(17,5)	15.0	(103,4)	FM	

¹This chart shows listings and approvals available at the time of printing. Other approvals are in process. Check with the manufacturer for additional approvals.

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

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

^{*}Passed Class B Fire Test--Listing is pending.

^{**}Do not adjust the starting pressure for any sprinklers or nozzles pre-fixed with a double asterisk.



REFERENCE DATA

APPROVED SPRINKLERS FOR USE WITH 3M FOAM

VIKING FOAM/WATER SPRINKLER HEAD APPROVAL **FUEL-ACETATE** UL MINIMUM² **UL TESTED³** STANDARD SPRAY APPLICATION **SPRINKLER** MODEL M SPRINKLERS AGENCY1 **DENSITY HEAD PRESSURE UNLESS OTHERWISE APPROVAL INDICATED** GPM/FT² (L/M^2) PSI (kPa) 3/8" UPRIGHT .16 (6,5)31.0 (213,5)UL-FM ½" PENDENT .16 (6,5)7.0 (48,2)UL-FM ½" UPRIGHT .16 7.0 (48,2)UL-FM (6,5)17/32" UPRIGHT .22 (9,0)7.0 (48,2)UL-FM

AFFF/ATC ATC 603 3 x 3 3%

3M FOAM

CONCENTRATE

AFFF/ATC FC-603F 3 x 3 3%

	17/32" PENDENT	.22	(9,0)	7.0	(48,2)	UL-FM
	5/8" ELO UPRIGHT	.31	(12,6)	12.0	(82,7)	UL-FM
	5/8" ELO PENDENT	.20	(8,1)	7.0	(48,2)	*
	**MODEL A-2 ELO UPRIGHT	.43	(17,5)	15.0	(103,4)	FM
	**AQUAMISER	.79	(32,2)	50.0	(345)	UL
	3/8" UPRIGHT	.16	(6,5)	31	(213,7)	UL-FM
	½" PENDENT	.16	(6,5)	31	(213,7)	FM
	½" UPRIGHT	.16	(6,5)	13	(89,3)	UL-FM
3	17/32" UPRIGHT	.16	(6,5)	7	(48,2)	UL-FM
	17/32" PENDENT	.16	(6,5)	7	(48,2)	UL-FM
	5/8" ELO UPRIGHT	.22	(9,0)	7	(48,2)	UL-FM
	5/8" ELO PENDENT	.22	(9,0)	7	(48,2)	UL-FM
	**MODEL A-2 ELO UPRIGHT	.38	(15,4)	10	(68,9)	UL-FM

FOOTNOTES

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

*Passed Class B Fire Test--Listing is pending.

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March 1, 2001 Foam 3M_5c



REFERENCE DATA

APPROVED SPRINKLERS FOR USE WITH 3M FOAM

UL-FM

VIKING FOAM/WATER SPRINKLER HEAD APPROVAL **FUEL-ALCOHOL** UL MINIMUM² **UL TESTED**³ STANDARD SPRAY APPLICATION **SPRINKLER** 3M FOAM MODEL M SPRINKLERS AGENCY1 **DENSITY HEAD PRESSURE** CONCENTRATE **UNLESS OTHERWISE APPROVAL INDICATED** GPM/FT² (L/M^2) PSI (kPa) ½" UPRIGHT .27 (10,9)21.0 (144,6)UL-FM ½" PENDENT .22 (9,0)14.5 (100,0)**UL-FM** AFFF/ATC FC-600 17/32" UPRIGHT .29 (11,8)11.5 (79,2)UL-FM 6% 17/32" PENDENT .29 11.5 (78,2)**UL-FM** (11,8).79 **AQUAMISER (32,2)50.0 (345)**UL-FM** ½" UPRIGHT .26 19 UL-FM (10,6)(131)AFFF/ATC .22 UL-FM ½" PENDENT (9,0)14.5 (100)FC-600F 17/32" UPRIGHT .32 UL-FM 6% (13,0)15 (103,4)5/8" ELO PENDENT .30 (12,2)7 (48,2)UL-FM ½" PENDENT .22 UL-FM (9,0)14.5 (100,0)½" UPRIGHT .22 (9,0)14.5 (100,0)UL-FM .28 (79,0)UL-FM 17/32" UPRIGHT (11,4)11.5 AFFF/ATC ATC- 603 **17/32" PENDENT** .30 (12,2)13.0 (89,0)UL-FM 3 x 3 3% 5/8" ELO UPRIGHT 12.0 **UL-FM** .42 (17,1)(82,5)5/8" ELO PENDENT .40 (16,3)11.0 (75,6)UL-FM

FOOTNOTES

.38

10.5

(72,2)

(15,5)

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*Passed Class B Fire Test--Listing is pending.

**MODEL A-2 ELO UPRIGHT

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Foam 3M_5d March 1, 2001



REFERENCE DATA

APPROVED SPRINKLERS FOR USE WITH 3M FOAM

VIKING FOAM/WATER SPRINKLER HEAD APPROVAL FUEL-ETHERS								
3M FOAM CONCENTRATE	STANDARD SPRAY MODEL M SPRINKLERS UNLESS OTHERWISE INDICATED	UL MINIMUM ² APPLICATION DENSITY		UL TESTED ³ SPRINKLER HEAD PRESSURE		AGENCY ¹ APPROVAL		
		GPM/FT ²	(L/M ²)	PSI	(kPa)			
AFFF/ATC FC-603F 3 x 3 3%	½" UPRIGHT	.24	(9,8)	16.0	(110,2)	UL-FM		
AFFF/ATC ATC 603 3 x 3 3%	½" UPRIGHT	.21	(8,5)	12.5	(86,1)	UL-FM		

VIKING FOAM/WATER SPRINKLER HEAD APPROVAL FUEL-KEYTONES								
3M FOAM CONCENTRATE	STANDARD SPRAY MODEL M SPRINKLERS UNLESS OTHERWISE	UL MINIMUM ² APPLICATION DENSITY		UL TESTED ³ SPRINKLER HEAD PRESSURE		AGENCY ¹ APPROVAL		
	INDICATED	GPM/FT ²	(L/M²)	PSI	(kPa)			
	½" UPRIGHT	.32	(13,0)	30.0	(206,8)	UL-FM		
AFFF/ATC	½" PENDENT	.32	(13,0)	29.0	(200,0)	FM		
FC-603F 3 x 3 3%	17/32" UPRIGHT	.34	(13,8)	18.0	(124,0)	UL-FM		
	17/32" PENDENT	.34	(13,8)	18.0	(124,0)	UL-FM		
	5/8" ELO UPRIGHT	.48	(19,6)	15.0	(103,4)	UL-FM		

¹This chart shows listings and approvals available at the time of printing. Other approvals are in process. Check with the manufacturer for additional approvals.
²Density indicated is minimum application density required per UL 162 *Foam Equipment and Liquid Concentrate Standard*.

This density cannot be reduced.

The pressure indicated is the minimum starting pressure required for the sprinkler or nozzle. However, the minimum density cannot be reduced.

sity shown overrides the minimum starting pressure (depending on head spacing) and cannot be reduced.

^{*}Passed Class B Fire Test--Listing is pending.
**Do not adjust the starting pressure for any sprinklers or nozzles pre-fixed with a double asterisk.

Foam 3M_5e March 1, 2001



REFERENCE DATA

APPROVED SPRINKLERS FOR USE WITH 3M FOAM

VIKING FOAM/WATER SPRINKLER HEAD APPROVAL FUEL-ESTERS EXCEPT DIETHYL AND MTBE								
3M FOAM CONCENTRATE	STANDARD SPRAY MODEL M SPRINKLERS UNLESS OTHERWISE	UL MINIMUM ² APPLICATION DENSITY		UL TESTED ³ SPRINKLER HEAD PRESSURE		AGENCY ¹ APPROVAL		
	INDICATED	GPM/FT ²	(L/M ²)	PSI	(kPa)			
AFFF/ATC	½" UPRIGHT	.26	(10,6)	19.0	(131,0)	UL-FM		
FC-603F 3 x 3 3%	½" PENDENT	.26	(10,6	19.0	(131,0)	FM		
AFFF/ATC ATC 603 3 x 3 3%	½" UPRIGHT	.20	(8,1)	11.5	(79,2)	UL-FM		

VIKING FOAM/WATER SPRINKLER HEAD APPROVAL FUEL-ACETATE								
3M FOAM CONCENTRATE	STANDARD SPRAY MODEL M SPRINKLERS UNLESS OTHERWISE INDICATED	UL MINIMUM ² APPLICATION DENSITY		UL TESTED ³ SPRINKLER HEAD PRESSURE		AGENCY ¹ APPROVAL		
		GPM/FT ²	(L/M ²)	PSI	(kPa)			
AFFF/ATC	½" UPRIGHT	.24	(9,8)	19.0	(130,0)	UL-FM		
FC-603F 3 x 3 3%	½" PENDENT	.24	(9,8)	19.0	(130,0)	UL-FM		

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 ²Density 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 or nozzle. However, the minimum density shown overrides the minimum starting pressure (depending on head spacing) and cannot be reduced.

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APPROVED SPRINKLERS FOR USE WITH 3M FOAM

VIKING FOAM/WATER SPRINKLER HEAD APPROVAL **FUEL-MTBE** (OCTANE ADDITIVE FOR GASOLINE)

	(GOTARE ADDITIVE FOR GASCEINE)								
3M FOAM CONCENTRATE	STANDARD SPRAY MODEL M SPRINKLERS UNLESS OTHERWISE	UL MINIMUM ² APPLICATION DENSITY		UL TESTED ³ SPRINKLER HEAD PRESSURE		AGENCY ¹ APPROVAL			
	INDICATED	GPM/FT ²	(L/M ²)	PSI	(kPa)				
AFFF/ATC FC-600 3%	½" UPRIGHT	.24	(9,8)	17.0	(117,2)	UL-FM			

VIKING FOAM/WATER SPRINKLER HEAD APPROVAL FUEL-HYDROCARBONS

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3M FOAM CONCENTRATE	STANDARD SPRAY MODEL M SPRINKLERS UNLESS OTHERWISE	UL MINIMUM ² APPLICATION DENSITY		UL TESTED ³ SPRINKLER HEAD PRESSURE		AGENCY ¹ APPROVAL		
	INDICATED	GPM/FT ²	(L/M ²)	PSI	(kPa)			
AFFF FC-201F	½" UPRIGHT	.16	(6,5)	7.0	(48,2)	UL-FM		
	½" PENDENT	.16	(6,5)	7.0	(48,2)	UL-FM		
	3/8" UPRIGHT	.16	(6,5)	30.0	(206,8)	UL-FM		

VIKING FOAM/WATER SPRINKLER HEAD APPROVAL

FUEL-M E K								
3M FOAM CONCENTRATE	STANDARD SPRAY MODEL M SPRINKLERS UNLESS OTHERWISE	UL MINIMUM ² APPLICATION DENSITY		UL TESTED³ SPRINKLER HEAD PRESSURE		AGENCY ¹ APPROVAL		
	INDICATED	GPM/FT ²	(L/M ²)	PSI	(kPa)			
AFFF/ATC ATC-603 3 x 3 3%	17/32" PENDENT	.32	(13,0)	15.0	(103,4)	UL-FM		

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² Density indicated is minimum application density required per UL 162 *Foam Equipment and Liquid Concentrate Standard*.

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