

# Low-expansion Foam Liquid Concentrate HD AR-SFFF F3

File Number: EX15756

**COMPANY**

HD FIRE PROTECT PVT LTD  
 D-6/2, Road No. 34  
 Wagle Industrial Estate  
 Thane, Maharashtra 400604 India

**LOW-EXPANSION FOAM LIQUID CONCENTRATE INFO**

HD AR-SFFF F3  
 Alcohol Resistant Synthetic Fluorine Free Foam (AR-SFFF)

**FOAM CONCENTRATES FOR USE WITH THE FOLLOWING EQUIPMENT**

**Minimum Storage and Use Temperature**

+35 F (1.7 C)

**GENERAL**

**Hydrocarbon Fuels, percent**

3

**GENERAL**

**Polar Solvent Fuels, percent**

3

**PROPORTIONERS - PORTABLE IN-LINE INDUCTORS**

Manufacturer and Model	Use Concentration, percent	Size, in.	Orifice Diameter/Setting	Inlet Pressure, psig	Length and Diameter of hose	Discharge Device Manufacturer and Model
Angus Fire Ltd, Model UNI225	3	2-1/2	set at 3 AR	100	50 ft of 2-1/2	Angus Fire Ltd, Model F225U nozzle.

**PROPORTIONERS - FIXED IN-LINE INDUCTORS**

Manufacturer and Model	Use Concentration, percent	Size, in.	Orifice Diameter, in.	Inlet Pressure, psig	Back Pressure, psig
Angus Fire Ltd, Model IND-40	3	2-1/2	0.173	88	45

**PROPORTIONERS-BLADDER TANKS WITH CONTROLLERS**

Manufacturer and Model	Use Concentration, percent	Controller Size, in.	Orifice Diameter, in.	Flow Rate, gpm
HD Fire Protect Pvt Ltd Model RCF-B,-S,-N and RCW-B,-S,-N	3	2-1/2	0.273	157-381
HD Fire Protect Pvt Ltd Model RCF-B,-S,-N and RCW-B,-S,-N	3	3	0.393	238-812

**PROPORTIONERS-BLADDER TANKS WITH CONTROLLERS**

Manufacturer and Model	Use Concentration, percent	Controller Size, in.	Orifice Diameter, in.	Flow Rate, gpm
HD Fire Protect Pvt Ltd Model RCF-B,-S,-N and RCW-B,-S, -N	3	4	0.567	417-1561
HD Fire Protect Pvt Ltd Model RCF-B,-S,-N and RCW-B,-S, -N	3	6	0.777	705-3276
HD Fire Protect Pvt Ltd Model RCF-B,-S,-N and RCW-B,-S, -N	3	8	1.051	1838-4544
HD Fire Protect Pvt Ltd Model RCF-BM,-SM,-NM and RCW-BM,-SM, -NM	3	2-1/2	0.179	54-160

**PROPORTIONERS-BALANCED PRESSURE VALVES WITH CONTROLLERS**

Manufacturer and Model	Use Concentration, percent	Balanced Pressure Valve Size, in.	Controller Size, in.	Orifice Diameter, in.	Flow Rate, gpm
HD Fire Protect Pvt Ltd, Model PB with RCW-B-65 and RCF-B-65, Model PS with RCW-S-65 and RCF-S-65, Model PN with RCW-N-65 and RCF-N-65	3	1 -1/2	2-1/2	0.265	139-396
HD Fire Protect Pvt Ltd, Model PB with RCW-B-80 and RCF-B-80, Model PS with RCW-S-80 and RCF-S-80, Model PN with RCW-N-80 and RCF-N-80	3	1 -1/2	3	0.378	251- 795
HD Fire Protect Pvt Ltd, Model PB with RCW-B-100 and RCF-B-100, Model PS with RCW-S-100 and RCF-S-100, Model PN with RCW-N-100 and RCF-N-100	3	1 -1/2	4	0.525	234-1564
HD Fire Protect Pvt Ltd, Model PB with RCW-B-150 and RCF-B-150, Model PS with RCW-S-150 and RCF-S-150, Model PN with RCW-N-150 and RCF-N-150	3	2	6	0.708	687-3184
HD Fire Protect Pvt Ltd, Model PB with RCW-B-200 and RCF-B-200, Model PS with RCW-S-200 and RCF-S-200, Model PN with RCW-N-200 and RCF-N-200	3	2	8	0.943	1004-4255
HD Fire Protect Pvt Ltd, Model PMB with RCW-BM-65 and RCF-BM-65, Model PMS with RCW-SM-65 and RCF-SM-65, Model PMN with RCW-NM-65 and RCF-NM-65	3	1 -1/2	2-1/2	0.185	50-174

**NOZZLES**

Manufacturer and Model	Size, in.	Inlet Pressure, psig
Angus Fire Ltd, Model F225U	2-1/2	50

**FIXED FOAM DISCHARGE OUTLETS**

Manufacturer and Model	Fuel	Inlet Pressure, psig	Flow Range, gpm	Orifice Diameter, in.	Min Design Application Density, gpm/sq ft
HD Fire Protect Pvt Ltd, Model- FCA 50	Hydrocarbons	45		0.586	0.10
HD Fire Protect Pvt Ltd, Model- FCA 50	Alcohol	45		0.586	0.24
HD Fire Protect Pvt Ltd, Model- FCA 50	Alcohol	45		0.586	0.20
HD Fire Protect Pvt Ltd, Model- FCA 50	Methyl Alcohol	45		0.586	0.10
HD Fire Protect Pvt Ltd, Model- FCA 50	Ethyl Alcohol	45		0.586	0.10
HD Fire Protect Pvt Ltd, Model- FCA 50	Ketones	45		0.586	0.20

**FIXED FOAM DISCHARGE OUTLETS**

<b>Manufacturer and Model</b>	<b>Fuel</b>	<b>Inlet Pressure, psig</b>	<b>Flow Range, gpm</b>	<b>Orifice Diameter, in.</b>	<b>Min Design Application Density, gpm/sq ft</b>
HD Fire Protect Pvt Ltd, Model- FCA 50, FCA-S 50	Alcohol	30-100	15.58 - 88.76	0.398 - 0.689	0.20
HD Fire Protect Pvt Ltd, Model- FCA 65, FCA-S 65	Alcohol	30-100	35.40 - 149.80	0.590 - 0.902	0.20
HD Fire Protect Pvt Ltd, Model- FCA 80, FCA-S 80	Alcohol	30-100	71.06 - 269.18	0.831 - 1.208	0.20
HD Fire Protect Pvt Ltd, Model- FCA 100, FCA-S 100	Alcohol	30-100	137.31 - 661.40	1.181 - 1.882	0.20
HD Fire Protect Pvt Ltd, Model- RPA 65, RPA-S 65	Alcohol	30-100	12.94 - 151.65	0.334 - 0.900	0.20
HD Fire Protect Pvt Ltd, Model- FMF 50, FMF-S 50	Alcohol	30-100	15.58 - 88.76	0.398 - 0.689	0.20
HD Fire Protect Pvt Ltd, Model- FMF 65, FMF-S 65	Alcohol	30-100	35.40 - 149.80	0.590 - 0.902	0.20
HD Fire Protect Pvt Ltd, Model- FMF 80, FMF-S 80	Alcohol	30-100	71.06 - 269.18	0.831 - 1.208	0.20

**FOAM WATER SPRINKLERS**

<b>Manufacturer and Model</b>	<b>Fuel</b>	<b>Style</b>	<b>Minimum Pressure, psig</b>
Tyco Fire Products, Model B-1	Alcohol	Pendent	30
Tyco Fire Products, Model B-1	Hydrocarbons	Pendent	30
HD Fire Protect Pvt Ltd, Model H1	Hydrocarbons	Upright	30
HD Fire Protect Pvt Ltd, Model H1	Alcohol	Upright	30
HD Fire Protect Pvt Ltd, Model F1	Hydrocarbons	Pendent	30
HD Fire Protect Pvt Ltd, Model F1	Alcohol	Pendent	30
HD Fire Protect Pvt Ltd, Model H	Hydrocarbons	Pendent	30
HD Fire Protect Pvt Ltd, Model H	Alcohol	Pendent	30

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