



DAHR-04 – DUAL AGENT UNIT WITH MONITOR AND LOCAL INTEGRATED FOAM TANK

Standard Material:

Cabinet: Dry chemical tank: Foam Tank: Firewater Piping: Firewater Valves: Foam piping & valves: Dry chemical piping& valves: Hose reel : Nozzle: Hose: Hand Crank: Foam Inductor: Foam pipe and valves: Oscillating monitor: SST AISI 316, painted externally SST AISI 316 SST AISI 316 Titanium gr. 2 Titanium gr. 2 SST AISI 316 SST AISI 316 SST AISI 316 Bronze Codan 5300 (1") and 5400 (1¼") SST AISI 316 Titanium (1% or 3% per project requirements) SST AISI 316 Bronze

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Installation:

Mount:

Bolted to deck

Operation:

Activate dry chemical unit by opening N2 release valve which is pressurizing dry chemical tank.

Open water valve and foam valve. When dry chemical tank is pressurized (after approx. 10 seconds) open dry chemical valve. Pull out hose to required length, and operate the dry chemical handle and water/foam handle on nozzle carefully as required. The dry chemical gives a quick knock down of the fire, and the water/AFFF foam mix provides a sealing surface to prevent re-ignition.

Be aware of the nozzle reaction forces!

The monitor can be activated by an electric push button which will cause the monitor release valve to open. The monitor will start to oscillate automatically over a predetermined sector

Options:

Water Piping & Valves:	Aluminium Bronze / Cunifer 90/10 Super Duplex Stainless Steel	
Pressure Indicators:	Project Preference	
Cabinet:	Insulation Heater (Zone 1 Certified)	
Max working pressure powder tank: Working pressure hose reel water p	18 barg art: 20 Bar	
Test pressure powder tank: Test Pressure Hose reel:	33 barg 30 barg	

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Table 1: DAHR 04 Dimensions and Weight

Description	Туре	Hose size & length	Cabinet Length	Cabinet Height	Cabinet Depth	Dry Weight
			(mm)	(mm)	(mm)	(kg) *
DA Unit w/atmospheric AFFF tank	DAHR- 04	1" x 30 m (powder) 1 ¼" x 30 m (water/foam)	2350	1560	1150	790

* Weight includes charged N2 cylinders, but not powder, AFFF or seawater.

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System logic drawing



OUTLINE OF EQUIPMENT ISCOPE OF SUPPLYI

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Dual Agent Units are manually operated units, discharging dry chemical powder and water/foam, intending to be used by trained firefighting personnel.

These Units are extremely efficient units for protection of areas with a risk of hydrocarbons or alcohol fires, such as helicopter decks and process areas.

The Dual Agent hose reels are supplied with two individual hoses, where one hose is flowing dry chemical and the other is flowing water/foam.

The hoses are connected to a common nozzle, giving individual control of the two agents.

Dual Agent Units are rapidly activated, and they are simple to use.

The dry chemical powder gives a rapid knockdown of large scale fires, while water/foam gives cooling of hot surfaces and sealing of liquid pool fires.

The Dual Agent Units must be installed in the vicinity of the area they are to protect.

Technical Description

FPE has developed a range of Dual Agent Units, installed in heated and insulated stainless steel cabinets.

The standard FPE Dual Agent Unit consists of the following main components:

- Cabinet
- Hose reel
- Dual agent nozzle
- Dry chemical system, with N2 expellant
- Foam system
- Firewater inlet piping

The dual agent unit provides two different fire extinguishing agents:

The hose reel is equipped with two hoses, where one flows a mixture of water and foam, and the other flows dry chemical powder. The hose reel is equipped with a dual agent nozzle that has individual open/shut valves for the two agents, and with a twist-action selection of jet or fog on the water/foam side.

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DAHR 04 Foam System

The selection of type of foam, and the mixing ratio of foam/water, is based on the standard on the platform. This Unit is made to connect to the platform firewater ring main system via a standard flange connection. The unit has a 32 mm (1 ¼ inch) hose for supply of foam/water as the standard . This unit, has a local foam tank which is feeding both the oscillating monitor, and the dual agent hose reel unit with foam. The dual agent hose reel is fed by a pick-up foam inductor which gives the correct flow and mixing ratio. The oscillating monitor has a nozzle with a built in venturi to give the correct foam mixing ratio. The monitor is fitted with its own Inbal deluge valve for system release. This unit is intended for use on helidecks.

Dry Chemical System

The dry chemical system consists of a storage tank for powder and an N2 expellant gas cylinder. A manual release valve is installed on the N2 cylinder valve. The tank is charged with 250 kg of powder. When the manual release valve is operated, N2 will pressurize the dry chemical system quickly, giving an initial shock of the dry chemical and functioning as an expellant during discharge.

The tank is equipped with a pressure safety valve, a fill cap and a pressure indicator.

The dry chemical inlet to the hose reel is equipped with an isolation ball valve, designed for use with dry powder.

The dry chemical system on all models is identical, and is designed to provide a flow of 2,5 kg powder per second, effective for approx. 100 seconds.

The dry chemical hose on the hose reel is 25 mm (1 inch).

Flow Capacity

The flow for water/foam is given in the table below:

Model	DAHR04		
Inlet pressure, (Barg)	Flow		
6	198		
8	229		
10	255		
Flows are given in Liter per Minute (Lpm)			

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