

## How does AVD emulsion work?

The vermiculite particles within the mist are deposited on the surface of the burning fuel to create a film over the top of the fire. The film instantly dries and, because the high aspect ratio platelet particles overlap and bind together, a non-flammable oxygen barrier between the fuel and the atmosphere is produced.

This process has a cooling effect on the fuel source and, as the water content in AVD is evaporated, the vermiculite platelets begin to build up and the fire is brought under control.



Class A



Electrical



Li-Ion Battery



When lithium-ion batteries are exposed to heat, physical/impact damage or overcharging, they go into thermal runaway.



The cells are sufficiently swollen, releasing hot flammable gases (hydrocarbons) that are formed as the electrolyte dissociates.



The hydrocarbons burn vigorously at high temperatures and rapidly spread the fire to the surrounding cells and flammable materials.



AVD encapsulates the fuel source and insulates the cells, preventing further propagation of thermal runaway - bringing the fire under control.



AVD is applied as a fine mist, which instantly cools the batteries and extinguishes the flames.

## PERFORMANCE DATA

MODEL	KFLIHQ-1	KFLIHQ-2	KFLIHQ-6	KFLIHQ-9
Capacity	1 Ltr	2 Ltr	6 Ltr	9 Ltr
Design	Nozzle		Hose with Nozzle	
Fire Rating	3A	5A	13A	13A
Height (Approx.)	325 mm	370 mm	570 mm	640 mm
Diameter (Approx.)	86 ± 5 mm	106 ± 5 mm	150 ± 5 mm	180 ± 5 mm
Average Discharge time	25 Sec	50 Sec	120 Sec	170 Sec
Average Range of throw	1.5 - 2 m	1.5 - 2 m	1.5 - 2 m	1.5 - 2 m
Average % Discharge	97%	97%	97%	97%
Operating Temperature	+5 °C to + 60 °C			
Service/Max. service/Test Pressure	15 / 18 / 35 bar			
Expelling Agent	Nitrogen (UHP Grade)			
Empty Weight (Approx.)	2.2 kg	2.7 kg	4.9 kg	5.5 kg
Full Weight (Approx.)	4.2 kg	5.7 kg	10.9 kg	14.5 kg
Shipping Weight (Approx.)	4.5 kg	6.1 kg	11.3 kg	15.0 kg
Mounting Bracket	VEHICLE MOUNTED / WALL MOUNTED		WALL MOUNTED	