

Description

The FIRE KILL™ LAK-7 water mist system consists of open low-pressure water mist nozzles.

Fixed water-based local application fire-fighting systems shall be capable of extinguishing the fire scenarios as tested in accordance with FM5560 Appendix I.

The FIRE KILL™ LAK-7 system utilized the Model LAK-7 nozzle which can be supplied in varied materials and with different thread types.



Approvals

The FIRE KILL™ LAK-7 system has been tested in accordance with FM5560:2019 Appendix I, FIRE TEST FOR WATER MIST SYSTEMS FOR THE PROTECTION OF LOCAL APPLICATION

Technical data

General Description Pool and Channel fires				
Trade name	FIRE KILL™ LAK-7			
Object protected	Pool fire		Channel fire	
Min height above object	1,50 m	4.92 ft	1,00 m	3.30 ft
Max height above object	2,50 m	8.20 ft	1,50 m	4.92 ft
Horizontal distance to channel rim	N/A		0,10 m	0.33 ft
Max width of channel	N/A		1,00 m	3.30 ft
Min. water pressure	8,00 Bar	116 psi	8,00 Bar	116 psi
Max. working pressure	16,00 Bar	232 psi	16,00 Bar	232 psi
Nozzle spacing	2,00 m x 2,00 m	6.56 ft x 6.56 ft	2,00 m	6.56 ft
Water density	4,95 lpm/m2	0.12 gpm/ft2	9,90 lpm/m2	0.24 gpm/ft2
Specific Description				
Design run time	Min. 10 minutes			
K-factor (metric)	7,0 (l/min@1 bar)		0.48 US gpm	
Water flow at 8 bar	19,80 lpm		5.23 US gpm	
Drop size	DV90 < 300 µm			
Weight	0.13 kg		0.29 lbs	
Housing	Brass / SS316 / Titanium gr. 2*			
Coating (Brass only)	NiSn			
Strainer	Stainless Steel			
Thread	½" BSP/BSP-T/NPT			
Other products in the system				
Name	Model			
Control valve	C-EL DN50 / DN 80			
Filter	Model F, DN 50 and DN80			
Nozzle adapter	23 dg nozzle adapter			

* Brass and stainless steel approved.

General Description Spray fires				
Trade name	FIRE KILL™ LAK-7			
Object protected	Horizontal distance to object		Vertical distance between nozzles	
	Min	1,30 m 4.32 ft	0,75 m 2.55 ft	
Max	1,30 m 4.32 ft	1,00 m 3,37 ft		
Min. water pressure	9,00 Bar	130 psi	9,00 Bar	130 psi
Max. working pressure	16,00 Bar	232 psi	16,00 Bar	232 psi
Specific Description				
Design run time	Min. 10 minutes			
Min. number of nozzles	4			
Nozzle position	45 dg angled towards the object			
K-factor (metric)	7,0 (l/min@1 bar)	0.48 US gpm		
Water flow at 8 bar	20,80 lpm	5.50 US gpm		
Drop size	DV90 < 300 µm			
Weight	0.13 kg	0.29 lbs		
Housing	Brass / SS316 / Titanium gr. 2*			
Coating (Brass only)	NiSn			
Strainer	Stainless Steel			
Thread	½" BSP/BSP-T/NPT			
Other products in the system				
Name	Model			
Control valve	C-EL DN50 / DN 80			
Filter	Model F, DN 50 and DN80			
Angled pipe fittings	Model 23 dg			

Installations

For objects to be protected, the LAK-7 nozzle should be installed within the limits as defined in the general description. For objects to be sufficiently protected, the nozzles are to cover the area out to the periphery of the protected object. For channel protection the nozzles shall be directed 23 dg towards the channel. For pool protection the outer ring of nozzles shall be directed 23 dg towards the centre of the pool.

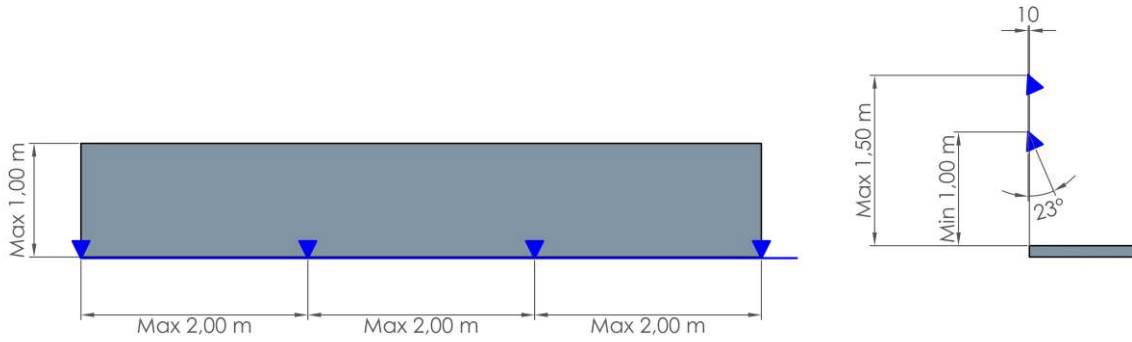
Components and pipes should be cleaned/flushed from debris, shavings and impurities and welded items should be cleaned to make sure that there is no abundance of loose debris. The installer should be careful not to get sealant into the pipe system. It should be checked extensively that the components are positioned correctly according to the system plans and specifications.

All components should be securely fastened to rigid, robust structures by approved means. The fire protection system shall not consist of material combinations with risks of galvanic corrosion system pipes and other system components. It is advised that the system utilize pipes and system components in stainless steel, AISI 304 or AISI 316, or copper alloys as to minimize risk of corrosion and clogging of the pipes and other system components.

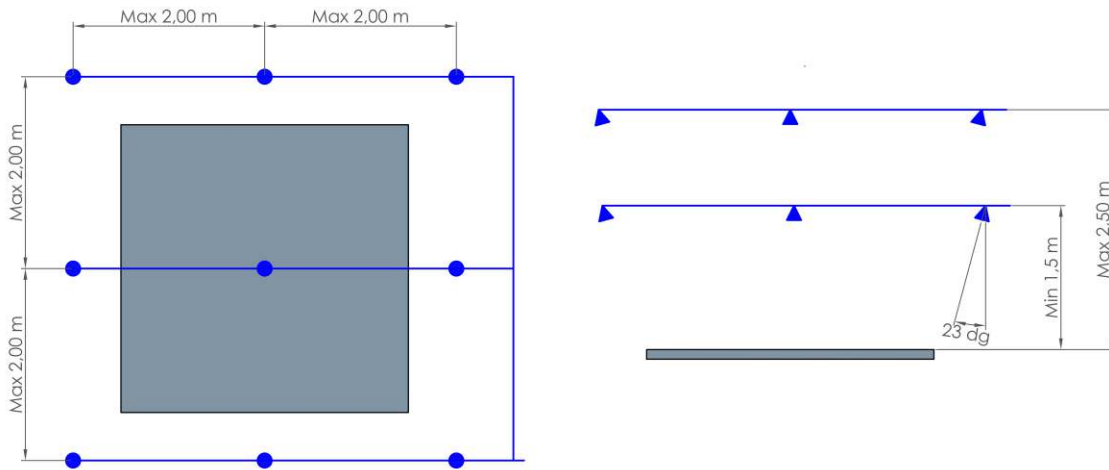
It is prohibited to use components with black iron parts and other such highly corrosive materials else used in traditional sprinkler systems.

System components shall in all cases be according to the local applicable standards and be accepted by the authorities having jurisdiction.

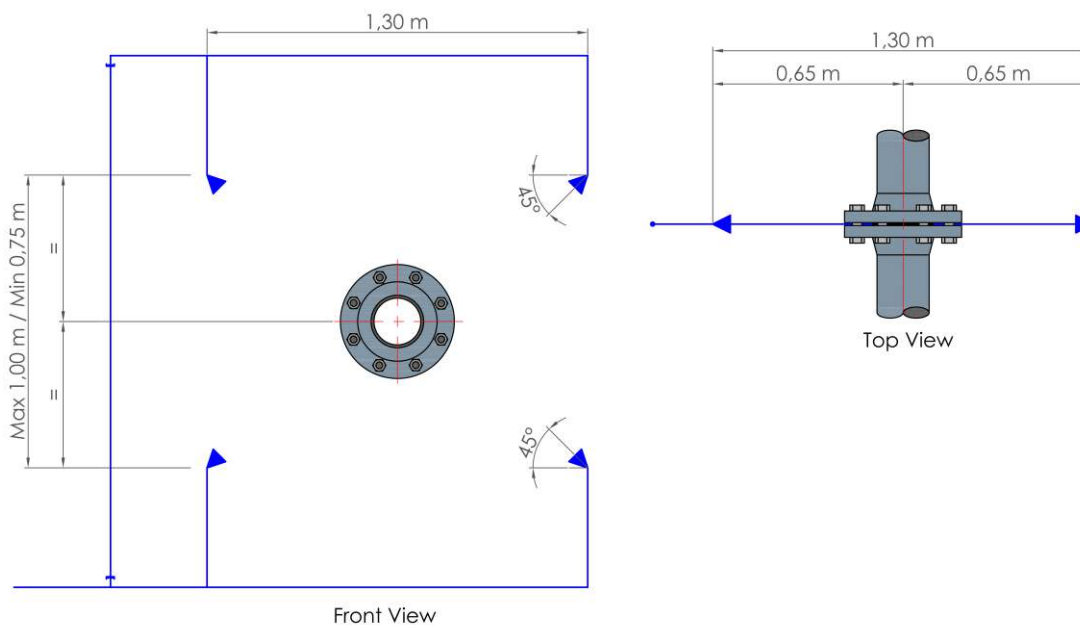
Channel protection



Pool protection



Spray fires



Caution

The LAK-7 nozzles shall be installed in locations not containing materials which may produce violent reactions or significantly hazardous materials when reacting with water and should be installed in locations where the nozzle is not likely to sustain physical damage.

Contact

For further information on **FIRE KILL™** products, please contact our sales department at Sales@vidfirekill.com

VID Fire-Kill APS is not responsible for any errors or omissions, or for the results obtained from the use of this information. All information in this document is provided "as is", with no guarantee of completeness, accuracy, functionality, timeliness or of the results obtained from the use of this information.