

Description

The FIRE KILL™ low pressure, fine water spray deluge system is a Fixed Fire Suppression System suitable for fire protection purposes in high-risk industrial applications. Such systems shall typically be used when the risk level is found to be medium to very high accordingly to EN ISO 19353:2016.



Tests and Applications

The FIRE KILL™ low pressure, fine water spray deluge system has been tested to an extensive list of different protocols. To proof its use as a local application system it has been successfully tested in accordance with DFL test method 170325-1275-1 part 1, 2, 4, 5 and 8.

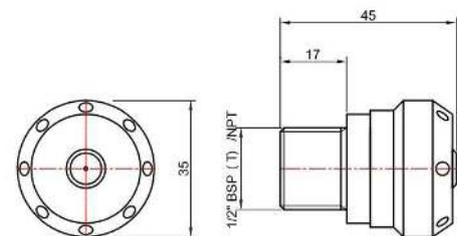
Based on the testing the system can protect but not limited to various applications such as:

- loading stations such as shredder top parts.
- local protection of volumes below machines such as shredder bottom parts.
- local protection of high-risk areas on parts of a machine or a whole machine where the main risk is class A or class B fuels.
- local protection of surrounding risks found next to mechanical machinery.

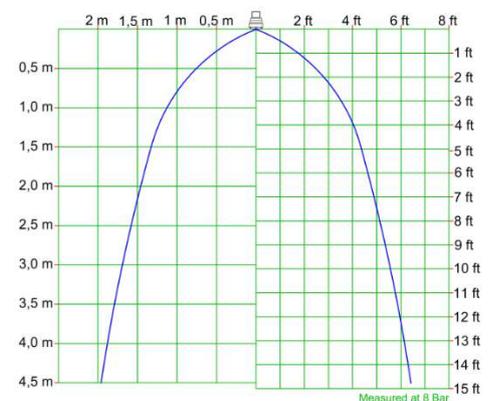
Technical data

General Description	
Min. water pressure	6,0 Bar
Max. working pressure	16 Bar
Design run time	60:00 min
Specific Description	
K-factor (metric)	5,6 (l/min@1 bar)
Drop size	DV90 < 300 µm
Weight	0.13 kg
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 50 and C-EL 80
Filter	Model F, DN 50 and DN80

Dimension



Spray pattern



Design data

Local protection of loading stations, such as shredder top part	
Nozzle position	Pendent
Fuel type	Class A
Max tested height above object	4,10 m
Nozzle spacing	1,00 m x 1,00 m
Local protection of mechanical machines Class A Fuel	
Nozzle position	Pendent
Fuel type	Class A
Max tested height above fuel	3,50 m
Nozzle spacing	1,25 m x 1,25 m
Local protection of mechanical machines Class A Fuel	
Nozzle position	Horizontal
Fuel type	Class B
Distance from fuel	0,50 m to 1,50 m
Nozzle spacing	1,00 m x 1,00 m

Local protection of volumes below machines, such as shredder bottom part	
Nozzle position	Horizontal
Fuel type	Class A
Max tested height above object	1,00 m
Nozzle spacing	1,00 m x 2,00 m
Local protection of mechanical machines Class B Fuel	
Nozzle position	Pendent
Fuel type	Class B
Max tested height above fuel	3,50 m
Nozzle spacing	1,25 m x 1,25 m
Local protection of surrounding risks found next to mechanical machinery	
Nozzle position	Pendent
Fuel type	Class B
Max tested height above fuel	3,50 m
Nozzle spacing	1,50 m x 1,50 m

The design data is for information only. Actual design will depend on the geometry of the actual object to be protected. The DIOM should also be consulted.

Nozzles successfully tested to this test method shall in real installations be designed into systems with the following minimum criteria:

- Discharge duration minimum of 60 minutes.
- The system shall as minimum be designed to be able to operate all nozzles needed to protect the risk at their minimum required water pressure and flow rate.
- In case of fire detection, the system design shall ensure interlock on all moving parts (machinery, conveyors, etc.) and forced ventilation.

The tested parameters set the limit for the actual use regarding:

- Minimum operating pressure
- Maximum nozzle spacing
- Nozzle locations and positioning
- Nozzle angles / directions

All above described criteria and limitations shall be available in the manufacturers DIOM manual which has to be approved by the AHJ before use.

Contact

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

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