

Description

The **FIRE KILL™** Model Etna N-pipe Type I-K1 Water Mist System is a linear nozzle with the length of 6m and is designed to fight duct fires with pure water. The system is installed in extraction ducts as close to one of the upper corners for square ducts, and as close to the upper sides in round ducts as possible. The system will cover the whole duct volume in a 6 meter duct. To cover longer ducts more systems are connected to each other. The system has been tested and approved to cover any length duct when installed throughout the duct and with duct cross sections up to 0.3m x 0.6m for square ducts and a duct cross section up to 0.57m in diameter for round ducts.



The system is fast and simple to install and requires the use of a minimum of pipe fittings. The system is delivered in 6 meter N-pipe lengths with pre-made threaded connections for VID Fire-Kill K1 water mist micro nozzles. The nozzles are installed with a spacing of 0.5m between each nozzle on the pipe. A total of 12 K1 micro nozzles are used per 6m N-Pipe.

N-Pipes are available in Ø28 x 1,2mm for connections with press-fittings.

Approvals

The system has successfully been fire tested to ISO 15371 fire test standard for water mist systems for fire protection of fat fryers conducted by The Danish Fire Laboratories (DFL). The system is holding MED-B, UK MER-B and TA by DNV.



Technical data

General description		
Minimum water pressure	6 bar	
Maximum water pressure	16 bar	
K-factor 1,8m N-pipe (metric)	10.8 (l/min/√bar)	
K-factor per micro nozzle	0.9 (l/min/√bar)	
Nominal flow at min pressure	26.45 l/min	
Drop size	DV ₉₀ < 300 µm	
Application		
Nozzle Spacing on N-pipe (max)	0.5 m	
Maximum ducts cross section	Square	0,6 x 0,3 m
	Circular	0.57 m
Maximum duct length	Unlimited	

Specific description	
Pipe Dimensions	Ø28x1.2mm
Weight	1.45 kg
Pipe material	SS AISI 316L
Micro Nozzle material	SS AISI 303
Pipe for press fittings	28mm
Hydraulic system	
Water density (area 0.5m x 6.0m)	7.38 mm/min
System operation time	Minimum 5 minutes
Related products	
Control Valve	C-EL or SUFA100
Filter	Model F

Installation

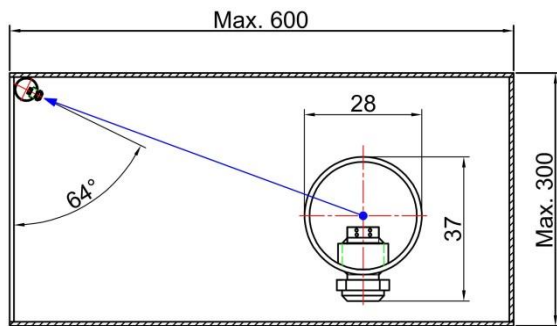
The Etna system should be hydraulic designed to provide minimum water pressure of 6 bar and a maximum water pressure of 16 bar on all K1 nozzles installed.

N-Pipes should be installed using hangers and fittings which comply with N-Pipes in stainless steel AISI316L. The system shall be flushed for debris and impurities prior to K1 nozzles are fitted the N-Pipes. In systems with nozzles having protection caps, the protection caps are fitted after the nozzle system has been functional tested.

The system can be installed with the N-Pipe located inside the duct (Fig 1.1) or it can be installed using adapter plates (Fig 1.2) fitted to the channel and the N-Pipe located outside.

Dimension

Square duct



Circular duct

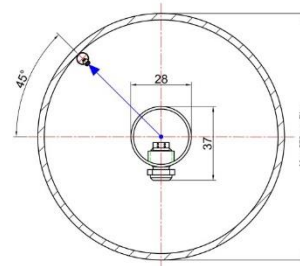
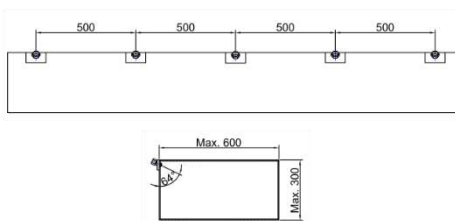
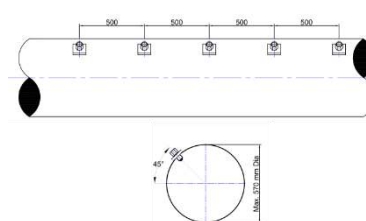


Fig. 1.1

Square duct with adapter for external N-pipe



Circular duct with adapter for external N-Pipe



Adapter plate for external N-Pipe

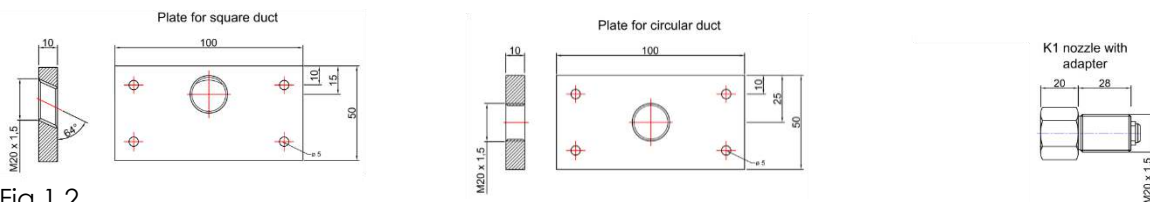
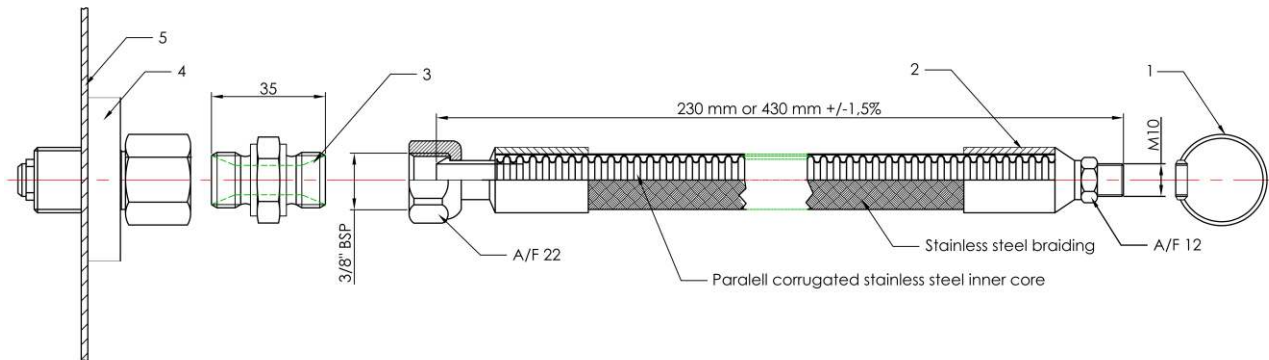


Fig 1.2

General description	
Material plate	Steel
Material nozzle adapter	Brass with NiSn

Flexible hose connection for external N-Pipe

A flexible hose connection can be supplied when the N-Pipe is to be mounted outside of the duct using N-Pipe adapter plate. The kit consists of a stainless steel hose and a hex nipple.



Item	Description	Material
1	N-Pipe	Stainless steel
2	Flexible hose	Stainless steel
3	3/8" BSP Hex nipple	Stainless steel
4	N-Pipe adapter plate with nozzle	Steel / SS
5	Duct	

Contact

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

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