DuraQuench™ K6 NOZZLE

Description

The K6 nozzle is an open head, total flooding, low pressure water mist nozzle used in the Fike DuraQuench water mist system for protection of machinery spaces, special hazard machinery spaces, combustion turbines and insulated combustion turbines with volumes up to 162,800 ft^3 (4,610 m^3). The K6 nozzle can be supplied in different materials and with different thread types to meet project requirements.

Typical applications where the K6 nozzle is used include enclosures with machinery such as internal combustion engines (excluding engine test cells), oil pumps, oil tanks, fuel filters, generators, transformer vaults, gear boxes, drive shafts, lubrication skids, diesel engine drive generators, exposed combustion turbine, insulated combustion turbine and other similar equipment using liquid hydrocarbon fuel and/or hydraulic, heat transfer, and lubrication fluids with volatility less than or equal to heptane; enclosures with incidental use or storage of hydrocarbon ignitable liquids (also known as flammable liquids) of not more than two 55 gal 208 L) drums.

Specifications

Fike Part Number	02-14871-1-1 (Brass / 1/2" NPT)
	02-14871-1-2 (Brass / 1/2" BSP)
	02-14871-2-1 (SST / 1/2" NPT)
	02-14871-2-2 (SST / 1/2" BSP)
K-factor	0.387 gal/min @ 1 psi (5.6 l/min @ 1 bar)
Flow Rate	4.1 gpm (15.54 lpm) nominal
Drop size	DV_{90} < 300 µm
Water Pressure	112 psi (7.7 bar) minimum
Working Pressure	232 psi (16 bar) maximum
Weight	0.3 lbs. (0.13 kg)
Housing	Brass (NiSn coating) Stainless Steel 316L
Strainer	Stainless Steel 316L
Thread type	½" NPT / ½" BSP-T

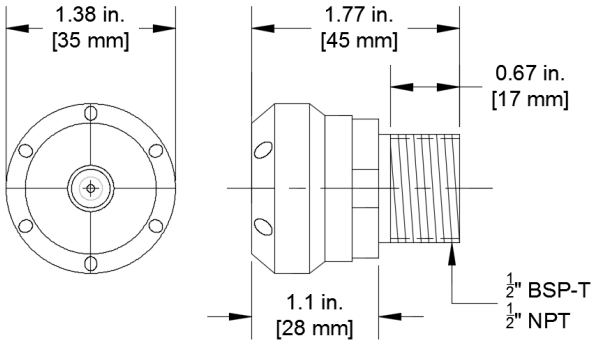
Approvals

The K6 nozzle is FM approved and has been successfully tested to the FM 5560 standard, appendix E and F in room sizes indicated in the table below. The nozzle design parameters vary depending upon the protected enclosure size, making it possible to optimize the system for a particular enclosure volume.

FM Approved Volume (max)	28,252 ft^3 (800 m^3)	162,800 ft^3 (4,610 m^3)
Ceiling height (max)	26.2 ft. (8 m)	39.4 ft. (12 m)
Nozzle spacing (max)	117.3 ft^2 (10.9 m^2) 10.8 ft. x 10.8 ft. (3.3 m x 3.3 m)	96.8 ft^2 (9 m^2) 9.8 ft. x 9.8 ft. (3 m x 3 m)
Distance to wall (max)	5.4 ft. (1.65 m)	4.9 ft. (1.5 m)
Design run time	28.5 minutes	83 minutes 142 minutes*
Water density	0.005 in/ft^2 (1.4 mm/m^2)	0.006 in/ft^2 (1.7 mm/m^2)

*Insulated combustion turbine.

Dimensions



Spray Pattern