

DATASHEET



Flare Tips FN Series – Pipe Flare

The FN series flare tips are used for flaring gases which produce either no smoke or so little that smoke suppression with steam, air or high pressure gas is not required or where the environmental condition allows the burning of smoke producing gases.

Examples of gas used with these tips are Hydrogen, Blast Furnace waste gas, Coke Oven gas, Ammonia, Hydrogen Sulphide and Methane

Mode of Operation

The FN series flare tips are simple in design to allow straightforward flaring of gas not requiring specialized smoke suppression equipment.

The FN series has been designed to operate with all available pilot and ignition systems, e.g. Natural Draught, Natural Draught Splitter System and Forced Draught. Mode of Operation

Flame Stability

The FN series is supplied as standard with a perforated windshield to prevent flame lick and to help cool the top of the flare tip closest to the flame envelope. However, with a constant wind direction or where the land formation around the site creates unusual eddy air currents, a heat shield is supplied to give greater protection.

In order to prevent flame lift off from the tip, the FN series has bluff bodies positioned above the refractory lined upper section of the flare tip.



Key Features

- Heat shield/wind shield supplied as standard
- Unique refractory lining system
- Good flame retention
- Low gas consumption pilots
- Low gas purge rates
- Prolonged tip life

Refractory System

The unique refractory lining system is secured to the tip by heat resistant steel bull horn sprags. Many thousands of fine stainless steel needles are mixed thoroughly with the refractory to reinforce the material evenly over its full depth without producing expansion/contraction shear planes. This refractory installation procedure has been developed and proven over many years to give the longest possible operating life, even in the most arduous conditions.

Engineering Services

Hamworthy Combustion can offer a range of services from a single flare tip through to a complete flare systems including ignition systems, instrumentation and control panels for new and refurbishment projects.

Other Hamworthy Combustion Services

Related to This Product

- Steam assist smokeless flare tips
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- Sonic Flare Tips
- FFG Ignition systems
- HE Ignition systems
- Flarscan smoke detection Systems
- Support Structures
- Spares and After sales Service

Required Information

- Flare Gas Composition
- Flare Gas Flows rates
- Flare Gas Pressure
- Flare Gas Temperature
- Site Data – Altitude, Ambient Temperatures
- Radiation Criteria

SPECIFICATION	
Tip size	1 in. dia. to 72 in. dia.
Tip connection	4 in. to 10 in. dia. flanged
No. of pilots	1 in. to 10 in. dia. 2 pilots 12 in. to 30 in. dia. 3 pilots 36 in. to 72 in. dia. 4 pilots
Pilot gas connection	1 in. dia. flanged
Flame front connection	1 in. dia. 3,000 unions or 1 in. flanged as required.
Pilot thermocouples	Cromel/Alumel (if required terminate in a junction box)
Lifting lugs	Provided as standard.

Note: Each flare tip is designed specifically for each application

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Hamworthy Combustion Engineering Limited reserve the right to make changes and improvements which may necessitate alteration to the specification without prior notice



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