

## INERGEN Mono orifice nozzle

### General

Nozzle for use in land based INERGEN-systems.

The nozzle is designed to control the flow using a single orifice with dimensions from Ø1mm to Ø36mm.

The nozzle is designed to disperse the flow laterally (360°) and slightly away from the mounting surface (ceiling/wall).

The nozzle orifice must be calculated specifically for each installation.

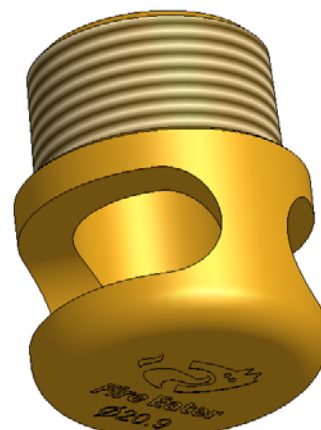
Each nozzle must be calibrated and marked individually and permanently with the orifice diameter.

An uncalibrated nozzle is delivered with a 3 mm orifice.

A calibrated nozzle can be ordered with a -8 after the item no.

For example 210204-8 is an IN-15 ISO Nozzle Calibrated.

IMT-calculation or info on the needed orifice diameter must follow orders for -8 item nos.



### General specifications

Pressure (work max.): 75 -125 bar (pipe pressure ahead of nozzle)

Temperature: -60 to +300°C

Material: CuZn39Pb3

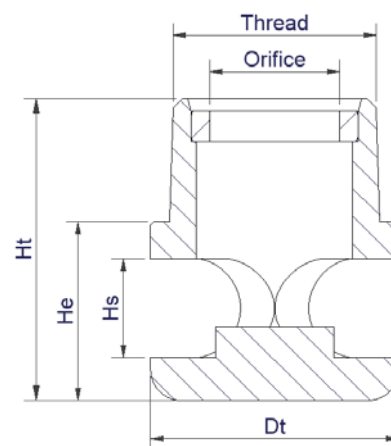
Marking: Fire Eater logo and orifice diameter

Inter nozzle distance: max. 7.32 m.

Height:

Min: 0.3m

Max: 4.7m



### Types

Type (pipe size)	Item number (not calibrated)		Max orifice (pipe w.p. 125 bar)		Max orifice (pipe w.p. 75 bar) (extra large orifice)			Dimension				Mass  kg
	Thread	Thread	Area	Ø	Area	Ø	Hw	Dt	Ht	He	Hs	
	ISO7/1	NPT	mm <sup>2</sup>	mm	mm <sup>2</sup>	mm	mm	mm	mm	mm	mm	
1/2" (DN15) Orifice Ø1-Ø3mm	210203	210223	7.1	3.0	-	-	-	24	44	18	8	0.10
1/2" (DN15)	210204	210224	130	12.9	201	16	23	24	35	18	8	0.07
3/4" (DN 20)	210206	210226	285	19.0	346	21	27	32	42	24	12	0.12
1" (DN 25)	210208	210228	500	25.2	572	27	28	40	49	29	16	0.20
5/4" (DN32)	210210	210230	800	31.9	1018	36	35	47	59	36	20	0.32

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Text

Product:

Mech Components

Id: MK

Rev: 2011.05.24



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**FIRE EATER** 1/2

**Operating**

The nozzle is an open nozzle and there are no requirements.

**Maintenance**

Clean at regular intervals. Avoid getting dirt inside the pipe system.

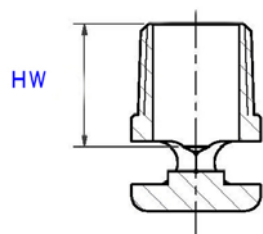
**Routine testing**

No requirements.

**Calibration**

The nozzle must be calibrated individually with the correct diameter according to IMT-calculation. The calibration can be made either using a drill or a lathe to obtain the correct diameter. After calibration the diameter of the orifice must be stamped into the top of the nozzle.

If an extra large orifice is desired (maximum 75 bar pressure), the nozzle has to be drilled down into the open area, see table above for correct drill depth (Hw). It is very important not to drill deeper than shown.



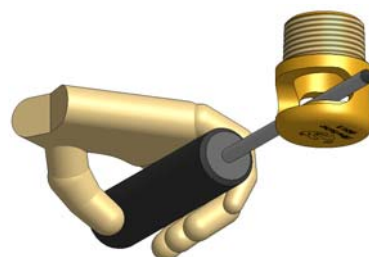
If an orifice of less than Ø3.0 mm is used, a filter must be fitted before the orifice (in accordance with EN12094-7). Nozzle w. filter is supplied in item 210203 and 210223 or separately in 210303. After discharge of Inergen the filter must be cleaned.

Filter: 600my x 0.25mm thread and 50% unrestricted area.

**Installation**

The nozzle is screwed on to the pipe system by hand.

A round bar (i.e. a screwdriver shaft or similar) may be used for appropriate tightening.

**Installation options**

For an enhanced appearance, it is possible to mount the nozzles with an additional cover that conceals the pipe holes in false ceiling installations.

In applications where the pipe system must be sealed (to avoid contamination), this can be achieved simply by covering the nozzle exhaust holes with one or two wraps of a suitable (compatible with the environment) adhesive tape (do not use reinforced tape!)

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