

# High Speed Deluge Nozzle

#### INTRODUCTION

The High Speed (HS) open directional spray nozzles family from Fireproducts contain a number of different nozzles. It's designed for fixed firefighting systems. The water passes first through an internal swirl plate and then distribute through orifice tip. The spray pattern is a solid cone high speed spray. The spray fluid can be fresh water, sea water or a mixture with foam AFFF or other types. The nozzles are available in number of different materials: Titanium, SS316, Duplex, Super duplex, Brass, Bronze or other material upon request. Calculation and location of deluge nozzle shall always be done by a trained safety engineer. The nozzle has been registered at the Norwegian Patent Office.

#### **COLOR-CODING**

In an installation the nozzle can be located in many different area, height and location. After the installation there would be a challenge to verify that the correct nozzle has been installed. Normally the type numbers are printed on the side of the nozzle, and after installation each nozzle must be inspected to see if the correct types are installed. This can only be done by inspection in close proximity to each nozzle that the correct type number is used.

By using color coded nozzles from FireProducts, verification of correct installation will besimplified. The color coding is only for indication.







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### **COLOR CODING**

The color coding is to simplify identification and to secure that correct deluge nozzle has been used. This version has to be special order

K-factor	Color Code	K-factor	Color Code
0	■ RED	50-59	LIGHT GREEN
01-09	BROWN	60-69	LIGHT BLUE
10-19	BLACK	70-79	BLUE
20-29	GREEN	80-89	■ GREY
30-39	MAGENTA	90-99	ORANGE
40-49	YELLOW	100-more	■ WHITE

Example: K79 = Navy Blue, K125=White and Green, K115=White and Black.



DELUGE NOZZLE K23 (GREEN)



DELUGE NOZZLE K40(YELLOW)



DELUGE NOZZLE K79(BLUE)

#### PRESSURE TEST CAP

Fireproducts has developed a nozzle that can be pressure tested after it has been installed. Normally the pipe system, including nozzles, shall be pressure tested 1,5 times more than the design pressure of the system. The pressure test covers are approved for pressure test up to 40 bar pressure. This pressure testing lid has left (Linksgewinde) threads. Pressure testing nozzle must be order for this option. The pressure test cap has been registered at the Norwegian Patent Office.







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#### TECHNICAL DATA

- Maximum Working pressure 20 Bar
- Design pressure 2-7/8 Bar

#### K-FACTOR

• K-factor are based on ISO / SI-Lpm/√bar

## Average K-factor:

- K23 g /√p 3,5–8 bar
- K43 q /√p 3,5-7 Bar
- 25,9 q /√p 3,5–7 bar
- K79 q $/\sqrt{p}$  3,5-7 bar
- K40 q /√p 3,5-7 bar

Note: Choice of pressure should be done after best, useful spray pattern. A too high pressure and the spray from the nozzle will collapse.

#### **MATERIAL**

Body and Swirl are all made of same material as specified.

• TI Norsok Approved Titanium gr2 According to M650

• SS316 Stainless steel type: SS316

• Duplex Duplex steel

• Super Duplex Super Duplex steel

• LG2 Bronze LG2

NiAlBr Nickel Aluminium Bronze

• Br Brass

#### PRESSURE TESTING LID

• Test lid Brass • Gasket NBR

#### **PAINTING**

• Powder painting Color code according applied color code list

# APPROVAL / TEST

Fireproducts has used SP Technical Research Institute of Sweden to test our deluge nozzles.









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#### ORDERING INFORMATION

The ordering code is built up according to the following:

#### FP-N-HS-01-02-03-04

• FP Fireproducts.

N Main category : NozzleHS High speed velocity

#### 01 K-FACTOR (METRIC)

• 23

• 25,9

• 40

• 43

• 79

#### 02 MATERIAL

• TI Titanium gr2

• SS316 Stainless steel type SS316

• DU Duplex steel

• SD Super Duplex steel

• LG Bronze LG2

NiAlBr Nickel Aluminum Bronze

• BR Brass

#### 03 CONNECTION TYPE

1"NPTM Thread 1"NPTM1"BSPM Thread 1"BSPM

FL1LB150 Flange ANSI 1 " ANSI 150 lb
FL1,5LB150 Flange ANSI 1,5 " ANSI 150 lb

• FL2LB150 Flange ANSI 2 " ANSI

150 lb

#### 04 OPTION

(Can choose multiple options)

- CC Painted according to color code list
- PT Pressure testing lid
- NO Material according to Norsok M650

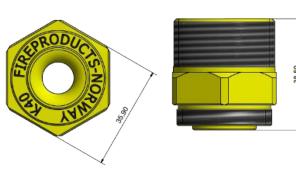




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# **TECHNICAL DRAWINGS**











DELUGE NOZZLE IN COMBINATION WITH OUR ADJUSTABLE ADAPTOR.



# Fireproducts

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