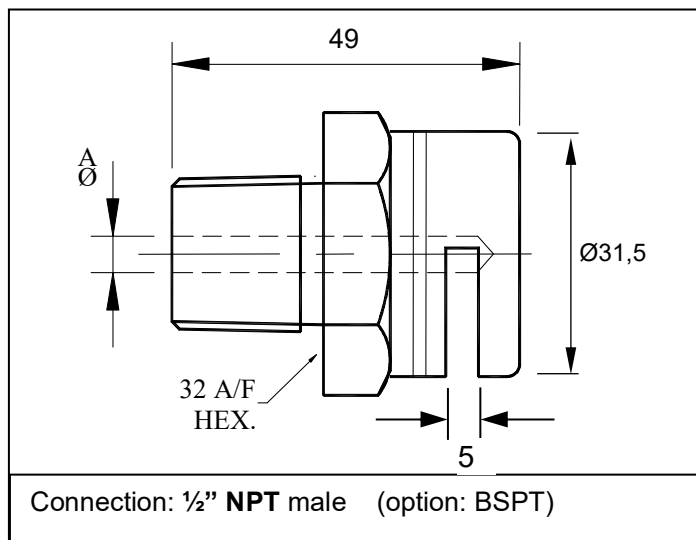


# WATER CURTAIN WATER SPRAY NOZZLE



Bore ØA (mm)	K - Factor	Weight (Brass)
8.0	23	215 g
11.0	39	206 g
13.0	53	185 g
16.3	78	165 g
Materials:		
Brass *)		*) Nozzles in brass material can also be supplied in an ENP (electroless nickel plating) coated version for improved corrosion resistance.
Ni. Al. Bronze		
St. Steel: AISI 316		
St. Steel: 254 SMO		
Titanium		

## Description

The GW Water Curtain nozzle is developed to provide a flat fan spray when water is distributed in a 240° X 15° "circular" fan from the machined orifice slot located perpendicular to the nozzle axis.

## Application:

The GW Water Curtain nozzle is designed for horizontal installation. It is typically installed as part of a deluge system to protect a surface or area from heat radiation. With the orifice slot pointing upwards or downwards, the nozzle is installed between the protected surface and the heat source. The water spray will both reflect and absorb the heat radiation thus reducing the resultant level of heat reaching the protected surface.

## Selection:

Nozzles should be selected to provide the required application rate for the hazard/application. Whilst the cooling / protective effect of the water curtain is difficult to quantify – a thumb rule is that small orifices operated at high pressure will generate small droplets (water mist) with little mass and velocity and limited spray robustness (is easily diverted by wind). The most robust spray is achieved by using nozzles with relatively large orifices, operated at low to medium pressure (recommended working pressure: 2 to 5 barg). It is recommended to consult NFPA 15 chapter 6 and 7 for more guidance on nozzle selection and installation.

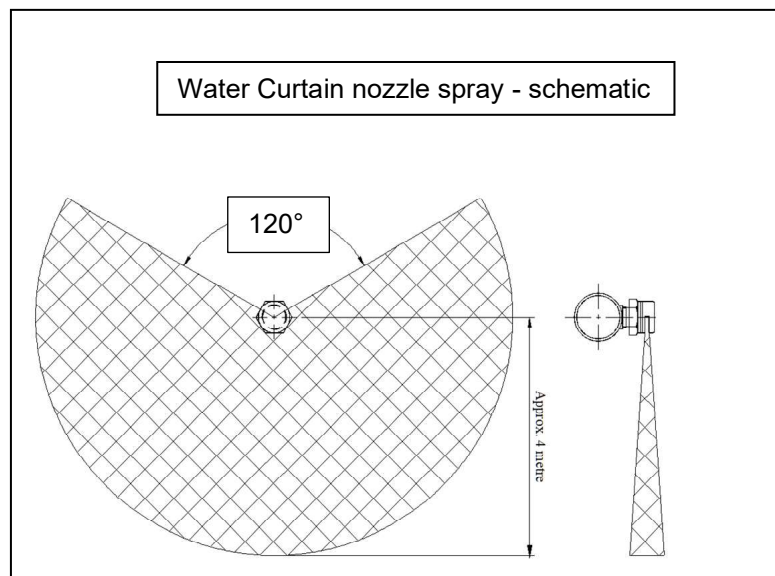
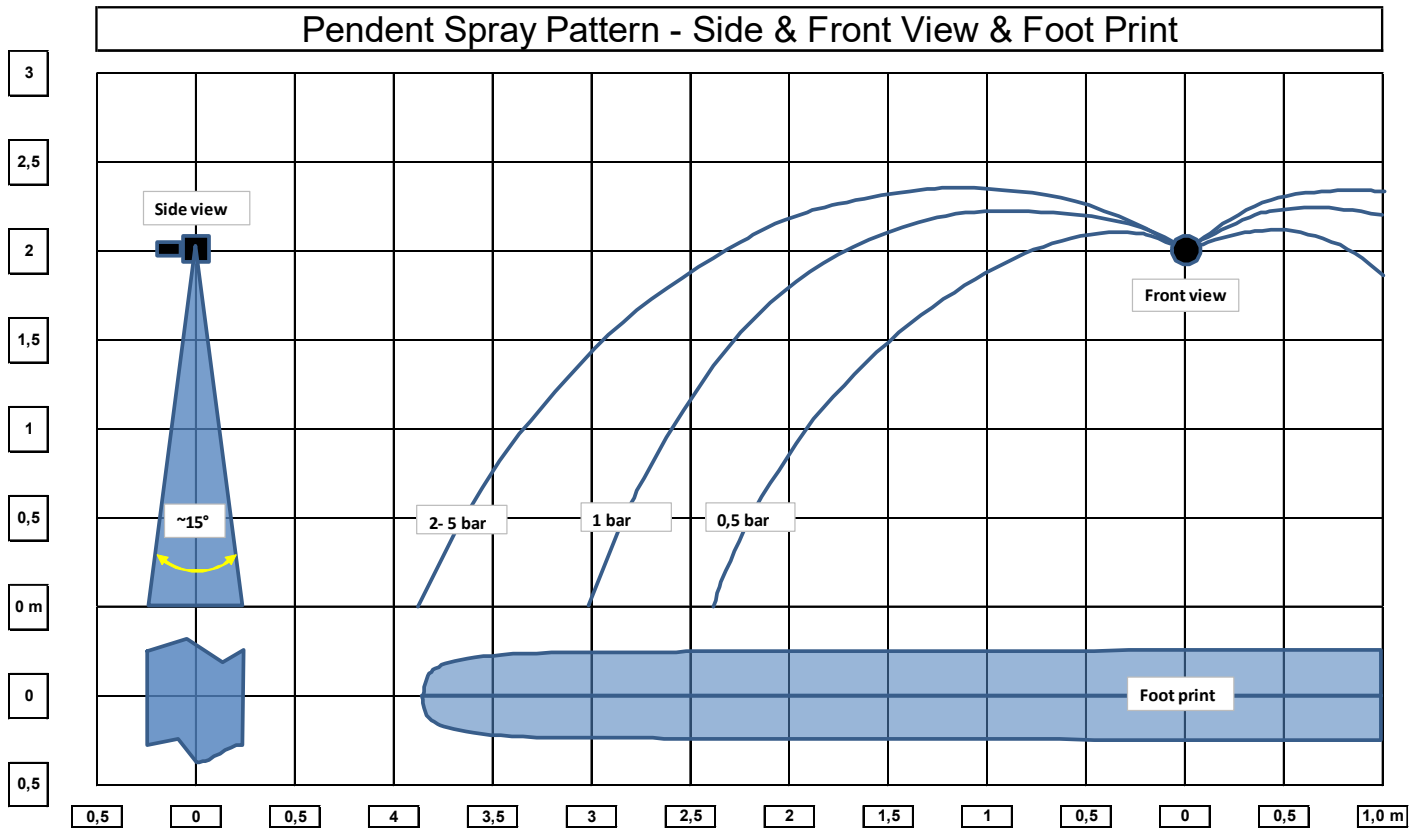
## Installation:

The GW Water Curtain nozzles should be installed in such a way that a robust uninterrupted water curtain is generated in front of the full surface of the protected structure/facility. The nozzle spacing should ideally provide a 50-75% spray overlap with the neighbour nozzle.

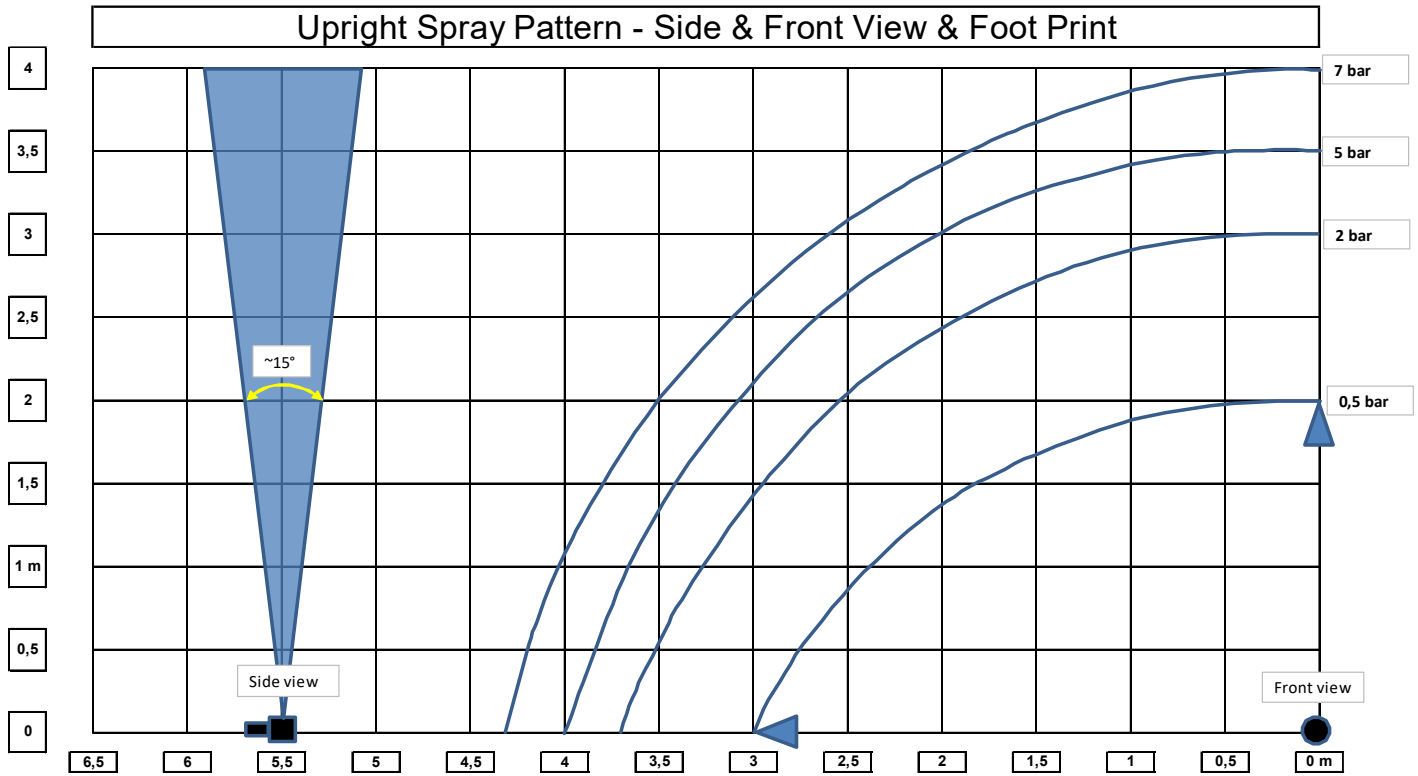
In order to avoid adjacent sprays from colliding, it is recommended to offset neighbour nozzles axially by ca. 200 mm. to allow for a double layer parallel (overlapped) spray to be formed.

# WATER CURTAIN

## WATER SPRAY NOZZLE



# WATER CURTAIN WATER SPRAY NOZZLE



**Extract from NFPA 15:**

Effective exposure protection is accomplished by application of water spray directly to the exposed structures or equipment to remove or reduce the heat transferred to them from the exposing fire. **Water spray curtains** are less effective than direct application but can, under favourable conditions, provide some protection against fire exposure through subdivision of fire areas. Unfavorable conditions can include such factors as windage, thermal updrafts, and inadequate drainage.