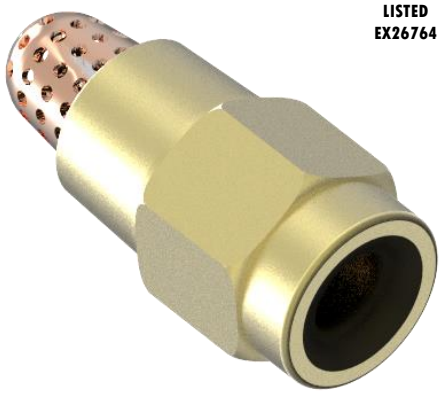
# SPRAY SYSTEM OPEN NOZZLES

## Model 1HV
## High velocity nozzle
## 1HV-1F / 1HV-2F

LISTED
EX26764



## PRODUCT DESCRIPTION

Model 1HV high velocity water spray nozzles from AG Fire Sprinkler are open (non-automatic) directional spray nozzles with individual inlet strainers.
Inside swirl plate creates a conical spray pattern shape of water droplets.
Used in water spray systems for the protection of fixed hazards such as transformers, circuit breakers, diesel engines and diesel storage tanks, turbo alternators, lube oil systems, oil fire boilers, chemical processing equipment and similar hazards. The possibility that the fire will restart decreases considerably.
A strainer should be installed in the pipeline to ensure the correct operation of the system.

## TECHNICAL DATA

| | |
|---|---|
| **Model** | 1HV-1F: Brass<br>1HV-2F: Stainless Steel |
| **Maximum Working Pressure** | 12 bar (175 psi) |
| **Effective Working Pressure** | 2,1 bar to 6 bar (30 psi to 80 psi) |
| **End connection** | 1" NPT [1" BSPT Optional] |
| **Material** | **1HV-1F**: Brass IS: 291 (equivalent to ASTM-B21)<br>Strainer – Copper (optional)<br>**1HV-2F:** Stainless Steel SS 316 (CF8M)<br>Strainer – Stainless Steel (optional) |
| **Included Water Spray Angle And K-Factor Metric (Us)** | 100º - K48 (3.37)<br>100º - K58 (4.08)<br>75º - K61 (4.29)<br>90º - K78 (5.48) |
| **Weight (Approx.)** | 0,250 Kg |
| **Finish** | **1HV-1F:** Brass Finish<br>Nickel Chrome Plated (Optional)<br>**1HV-2F:** Natural |


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## MAINTENANCE

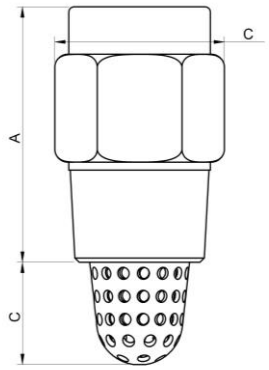
Water spray fixed systems for fire protection service require regularly scheduled care and maintenance by trained personnel.

Sprinklers which are found to be leaking or exhibiting visible signs of corrosion must be replaced. Nozzles damaged by dropping, striking, wrench twist/slip-page, or the like, must be replaced.

When replacing spray nozzles, use only new spray nozzles.

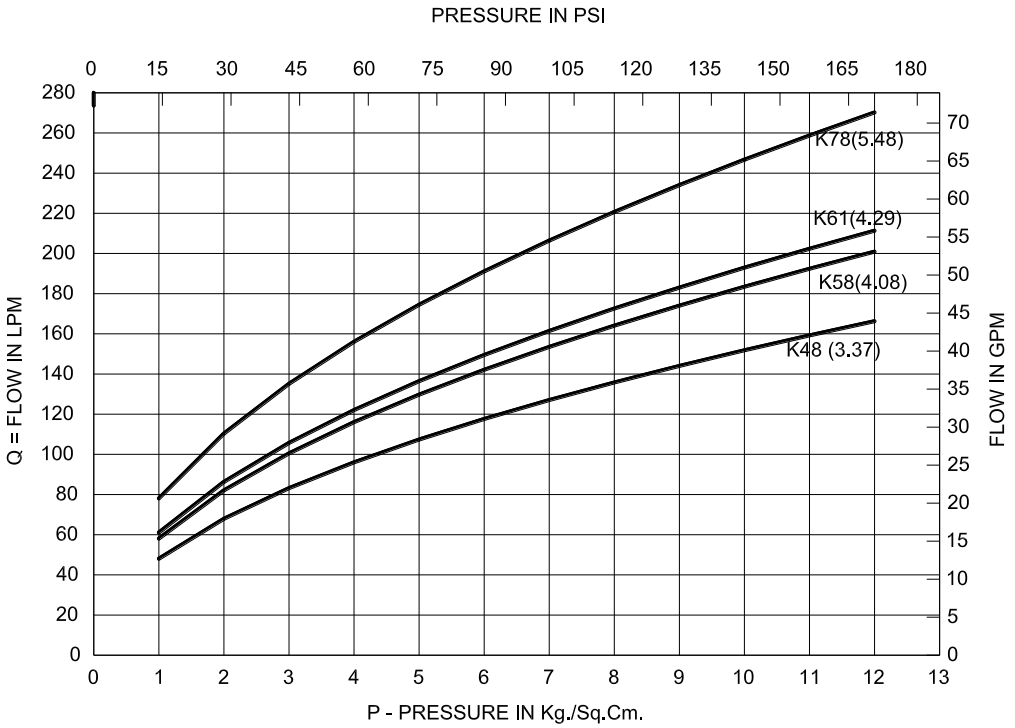
For minimum maintenance and inspection requirements, refer to NFPA standard.

## DIMENSIONS




| NOZZLE FACTOR & SPRAY ANGLE | A (mm) | B (mm) | C (mm) |
|---|---|---|---|
| K 48 X 100º | 52 | 29 | 36 |
| K 58 X 100º | 52 | 29 | 36 |
| K 61 X 75º | 52 | 29 | 36 |
| K 78 X 90º | 52 | 29 | 36 |

## DISCHARGE CURVES




$Q = K \sqrt{P}$

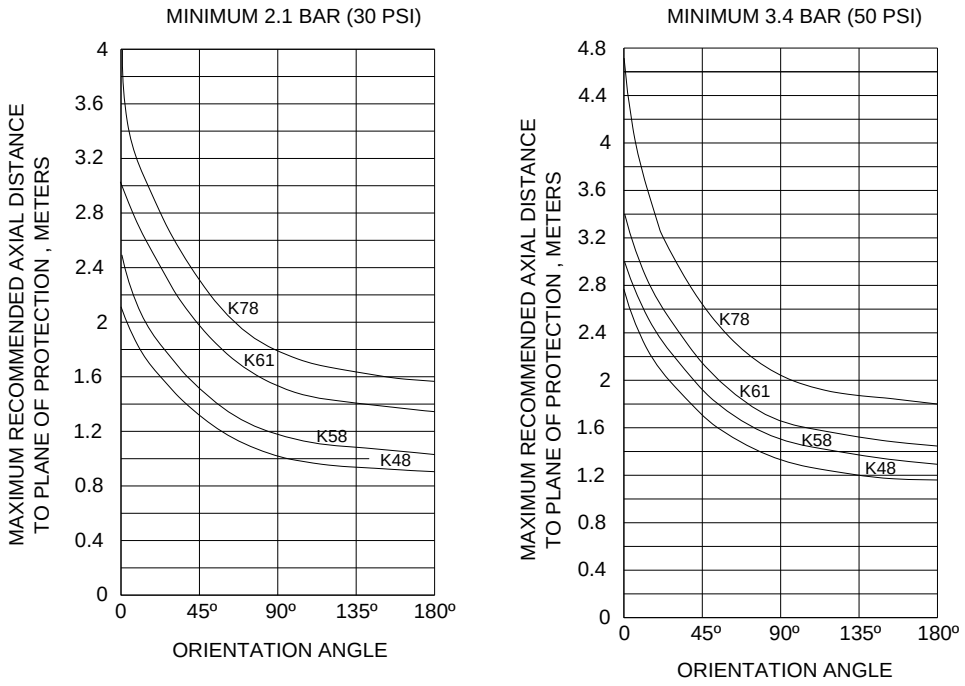
Where P is supply pressure in Kg/sq.cm., K = nozzle constant (K-factor) in metric

US K factor = Metric K factor ÷ 14.2745

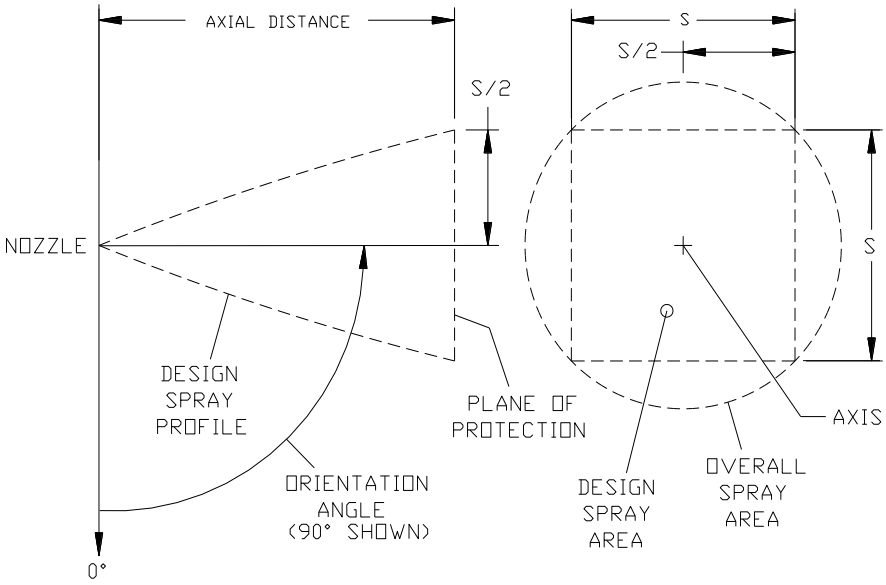


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## MAXIMUM RECOMMENDED AXIAL DISTANCE




## NOZZLE ORIENTATION

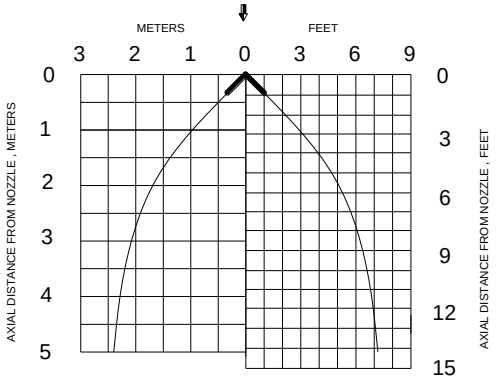




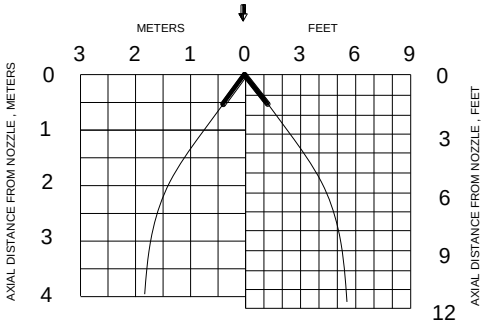
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## SPRAY PATTERN

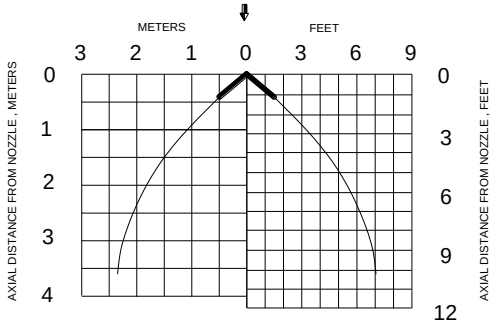
K78 X 90°



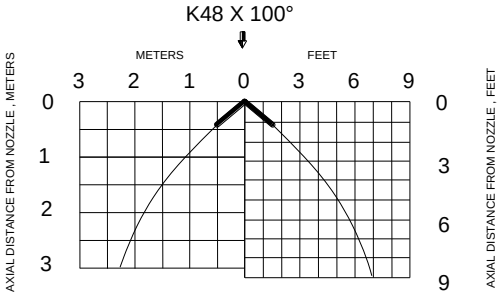

K61 X 75°




K58 X 100°




K48 X 100°




## ORDERING INFORMATION

| ANGLE | K FACTOR | MATERIAL | |
|---|---|---|---|
| | | BRASS | STAINLESS STEEL |
| 100º | K48 (3.36) | HV125048 | HV225048 |
| 100º | K58 (4.06) | HV125058 | HV225058 |
| 75º | K61 (4.27) | HV125090 | HV225061 |
| 90º | K78 (5.46) | HV125100 | HV225078 |
| PLUG | | 25HVTAPON | |

Specify:

| | |
|---|---|
| Model | |
| Quantity | |
| K-Factor | |
| Spray angle | |
| Finish | |
| End connection | |

The equipment presented in this bulletin is to be installed in accordance with the latest published Standard of the National Fire Protection Association, Factory Mutual Research Corporation, or other similar organizations and also with the provisions of governmental codes or ordinances whenever applicable.
This documentation is not contractual. AG Fire Sprinkler reserves the right to any kind of change without notice.



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