SPRAY SYSTEM OPEN NOZZLES

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



c UL us LISTED EX26764

PRODUCT DESCRIPTION

Model HV high velocity nozzles from AG Fire Sprinkler are designed for use in water spray fixed system for fire protection applications. The nozzles are open (non-automatic) directional spray nozzles with internal swirl plate and individual inlet strainers.

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 surface cooling effects of high velocity type nozzles also minimizes the possibility of reignition after a fire extinguishment.

Optional blow-off plugs are available for protection from dust and insect infestation and other accumulation of debris. The top cover is designed for both indoor and outdoor use. The use is optional.

TECHNICAL DATA

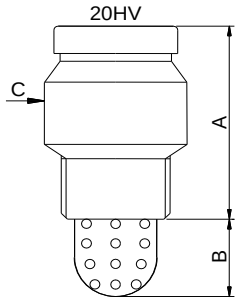
Model	HV-1F: Brass HV-2F: Stainless Steel
Maximum working pressure	12 bar (175 psi)
Effective working pressure	3,5 bar to 10,5 bar (50 psi to 150 psi)
End connection	3/4" NPT [3/4" BSPT Optional]
Materials	**HV-1F:** Brass IS: 291 (equivalent to ASTM-B21) Strainer – Copper **HV-2F:** Stainless Steel SS 316 (CF8M)
Included water spray angle and k-factor metric (US)	75º - K22 (1.54) 80º - K18 (1.26) 90º - K32 (2.24) 100º - K26 (1.82) 115º - K42 (2.94) 120º - K23 (1.61)
Weight (Approx.)	0,200 Kg
Finish	Natural Finish Nickel Chrome Plated (Optional for 20HV-1U/1FU)

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MAINTENANCE

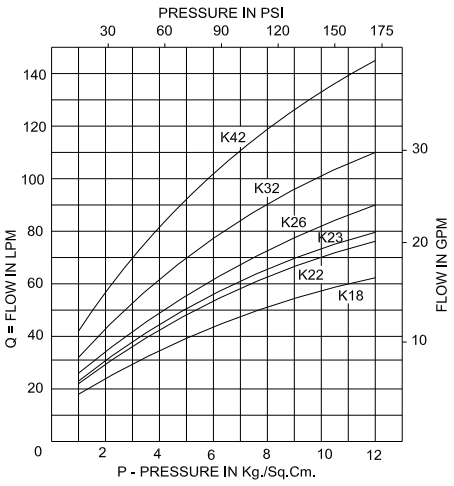
Water spray fixed systems for fire protection service require regularly scheduled care and maintenance by trained personnel. Frequent visual inspections are recommended.
Nozzles damaged by dropping, striking, wrench twist/slip-page, or the like, must be replaced.
Spray nozzle must never be painted, plated, coated or otherwise altered after leaving the factory.
For minimum maintenance and inspection requirements, refer to the NFPA standard.

DIMENSIONS



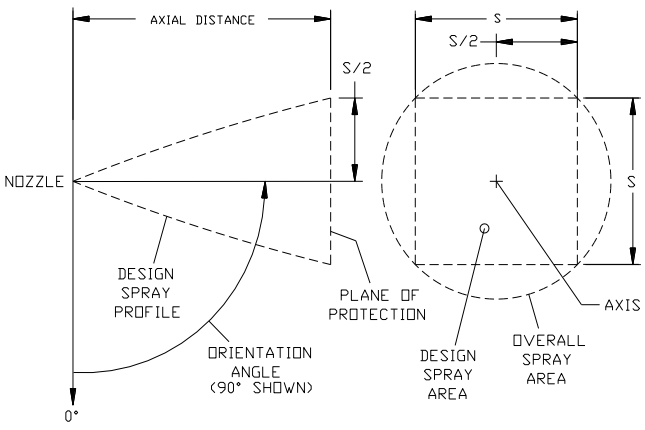
NOZZLE FACTOR & SPRAY ANGLE	A (mm)	B (mm)	C (mm)
K 22 X 75º	49	21	30
K 18 X 80º	44	21	30
K 32 X 90º	49	21	30
K 26 X 100º	55	21	30
K 42 X 115º	49	21	30
K 23 X 120º	49	21	30

DISCHARGE CURVES



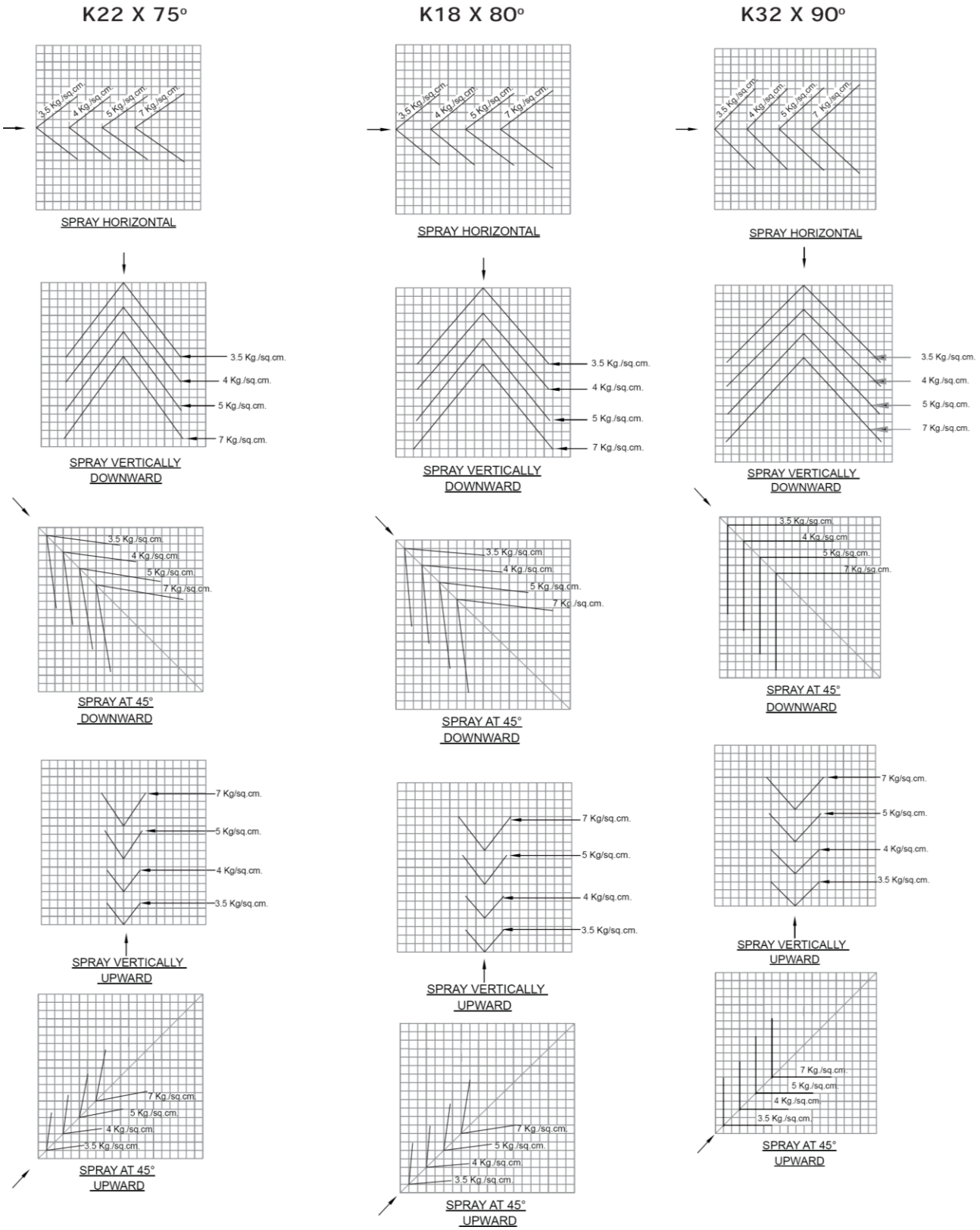
where P is supply pressure in Kg/sq.cm., K= nozzle constant (K-factor) i
US K factor = Metric K factor ÷ 14.2745

NOZZLE ORIENTATION



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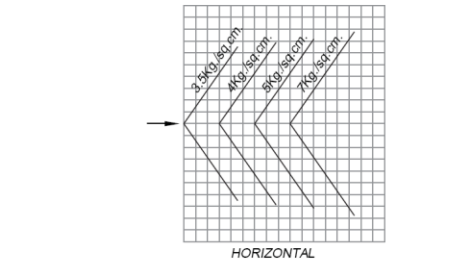
SPRAY PATTERN



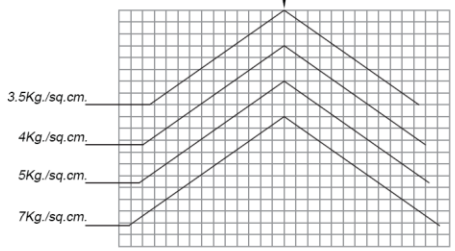
Note: One square is 200 x 200 mm.

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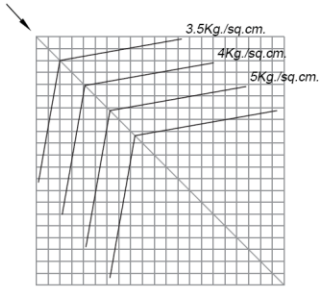
K42 X 115º



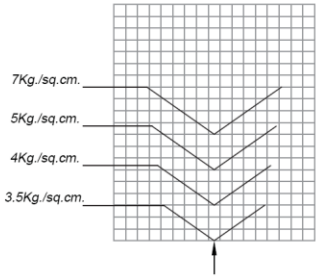
HORIZONTAL



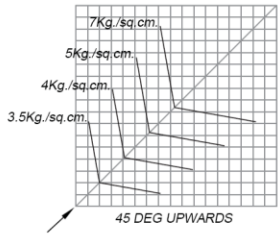
VERTICALLY DOWNWARDS



45 DEG DOWNWARDS

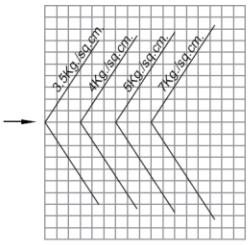


VERTICALLY UPWARDS

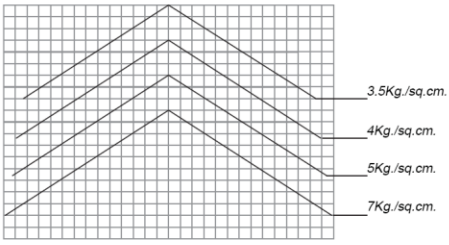


45 DEG UPWARDS

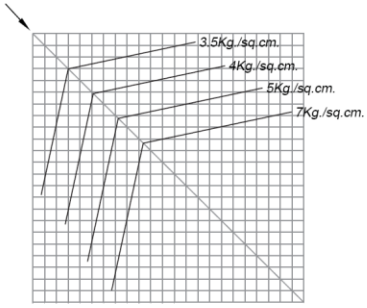
K23 X 120º



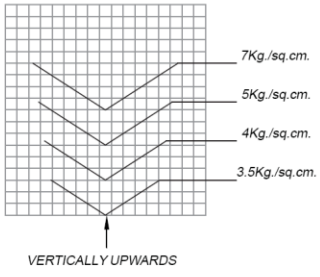
HORIZONTAL



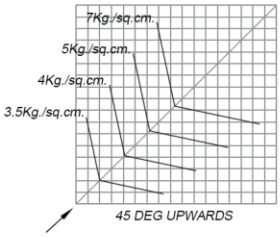
VERTICALLY DOWNWARDS



45 DEG DOWNWARDS



VERTICALLY UPWARDS

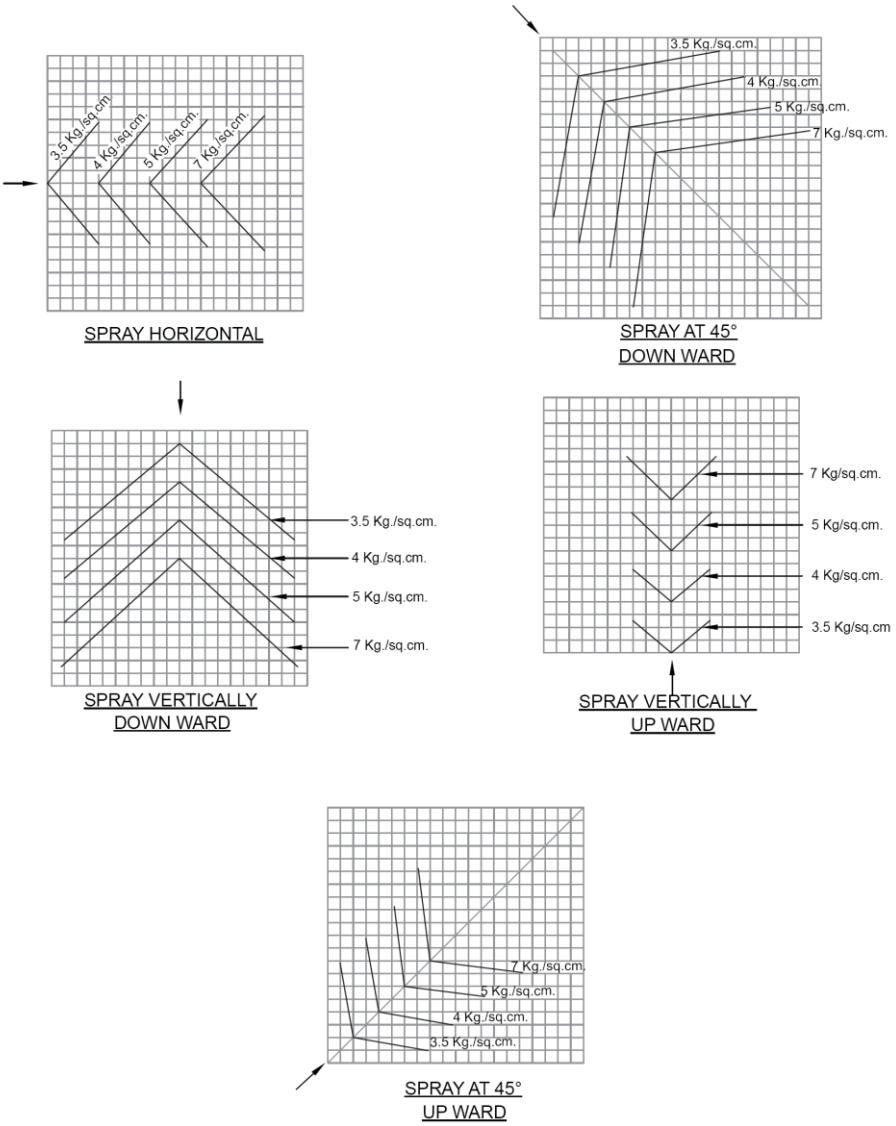


45 DEG UPWARDS

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K26 X 100º



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ORDERING INFORMATION

ANGLE	MATERIAL	
	BRASS	STAINLESS STEEL
75º	HV120075	HV220075
80º	HV120080	HV220080
90º	HV120090	HV220090
100º	HV120100	HV220100
115º	HV120115	HV220115
120º	HV120120	HV220120
PLUG	20HVTAPON	

Specify:

Model	
Quantity	
K-Factor	
Spray angle	
Finish	

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AG FIRE SPRINKLER

AG Fire Sprinkler offers a wide selection of components. Then a list of products is presented by AG Fire Sprinkler, we can offer all these components, made with precision to protect people, anywhere, anytime.

- Sprinklers
  - Standard Coverage
  - Extended Coverage
  - Storage
  - Dry
  - Accessories
- System Valves
  - Wet
  - Dry
  - Preaction Equipment
  - Accessories
- Spray System Open Nozzles
  - High Velocity Nozzles
  - Medium Velocity Nozzles
  - Window Nozzles
  - Hydroshield Nozzles
  - Mushroom Type Nozzles
- Foam equipment
  - Tanks
  - Proportioners
  - Foam Discharge Equipment
  - Foam Concentrates
- Deluge equipment for Water Spray and Foam
  - Clapper Deluge Valves
  - Diaphragm Deluge Valves
- Monitors
  - Manual Monitors
  - Remote Monitors
  - Monitor Nozzles
  - Towers and Trolleys
- Valves
  - Butterfly Valves
  - Gate Valves
  - Check Valves
  - Pressure Control Valves
  - Test and Drain
  - Hose, Hydrant and Fire Connection Valves
  - Fire Department Connections

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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