

# TANK COOLING NOZZLE

## MODEL - TS & TSS



### TECHNICAL DATA

MODEL	TS in Brass Construction TSS in Stainless Steel Construction
MAXIMUM WORKING PRESSURE	12 bar (175 psi)
END CONNECTION	1/2" BSPT (NPT optional)
K-FACTOR	K20, K30, K37, K42, K58, K79
FINISH	Natural Optional: For model TS - Ni-Cr plated For model TSS- Electroless Ni. plated
WEIGHT (Approx.)	0.180 kg
APPROVAL	UL Listed
ORDERING INFORMATION	Specify: a) Model b) K factor c) Finish



### DESCRIPTION

The Tank Cooling Nozzle distributes water in a curtain shaped pattern. Tank Cooling Nozzle is typically mounted in upright position at a distance from the exterior wall of the fuel storage tank for cooling of the tank. In case of fire in the vicinity of the tank it prevents the tank from absorbing the heat radiation. The nozzle position should direct water spray onto all exposed surfaces of the equipment to absorb heat from the fire and keep the equipment at a safe temperature.

Tank Cooling Nozzles are available in Brass and Stainless Steel construction with different k-factors. NFPA-15 can be referred for design guidelines. Do not leave dry/uncovered areas and ensure that the spray pattern covers complete surface.

The main pipeline strainers as per NFPA-15 are required for system utilizing nozzles with orifice diameter less than 9.5 mm (3/8 inch).

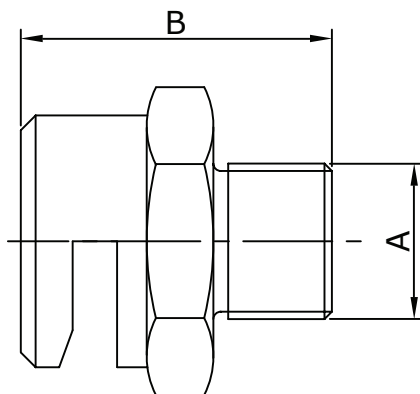
### MAINTENANCE

The spray nozzle must be handled with due care. For best results, the storage as well as any further shipment be made in original packing only. Nozzle which is visibly damaged should not be installed.

Use Teflon tape or soft thread sealant on male thread of the nozzle. Excessive tightening torque may result into serious damage to nozzle arms and deflector, which may affect the spray pattern of the nozzle and it's performance.

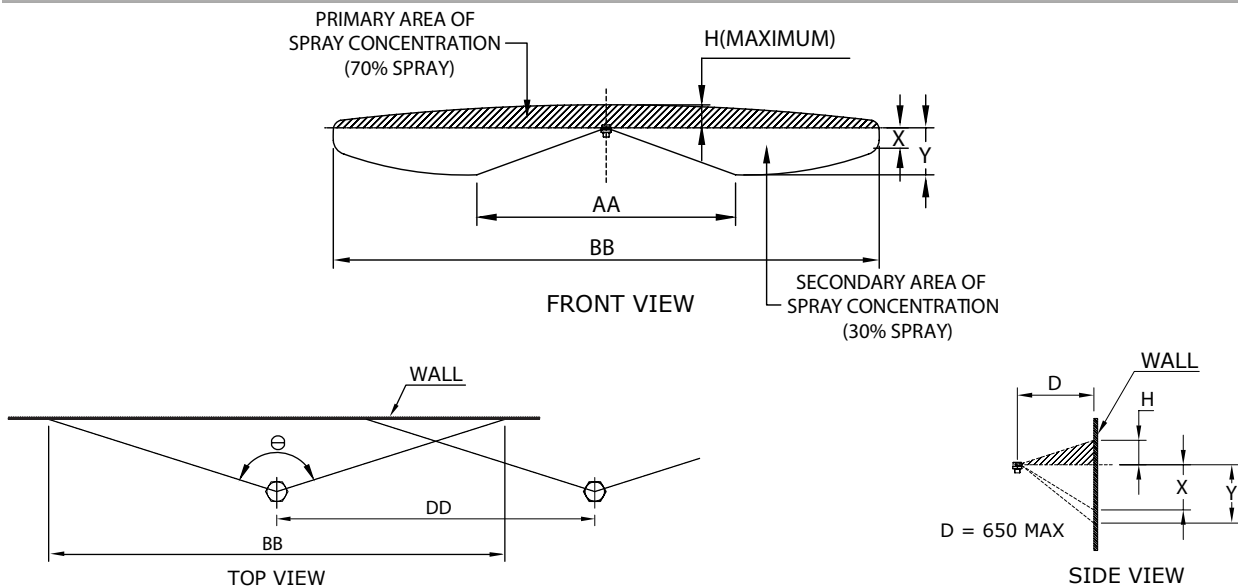
It is recommended that water spray system be inspected regularly by authorised technical personnel. The nozzle must be checked for atmospheric effects, external and internal obstruction, blockage if any. The nozzle should be cleaned or replaced if required. The system must be operated with optimum water flow atleast twice in a year or as per the provisions of NFPA or local authority having jurisdiction.

The owner is solely responsible for maintaining the water spray system and the components therein so that it performs properly when required.



MODEL	A	B In mm
TS & TSS	1/2" BSPT	44

## SPRAY PATTERN



K FACTOR	DIMENSIONS (IN MM)						ANGLE (°) (IN DEGREE)
	AA	BB	H	X	Y	DD	
K20	3.3 x D	7.0 x D	0.25 x D	0.3 x D	0.7 x D	5.0 x D	150°
K30	3.3 x D	7.0 x D	0.25 x D	0.3 x D	0.7 x D	5.0 x D	150°
K37	3.5 x D	7.3 x D	0.25 x D	0.4 x D	0.85 x D	5.0 x D	150°
K42	3.5 x D	7.3 x D	0.25 x D	0.4 x D	0.85 x D	5.0 x D	155°
K58	3.7 x D	7.6 x D	0.35 x D	0.4 x D	0.85 x D	6.0 x D	155°
K79	4.0 x D	9.0 x D	0.35 x D	0.4 x D	0.85 x D	6.0 x D	160°

### Note:

Spray pattern profiles are given in the graph for discharge pressure from 1.4 to 4.1 bar. In case of higher pressure, effective spray pattern will remain more or less the same. The spray pattern data provided is from tests carried out in still air condition. Consult HD FIRE Sales for further details.

### LIMITED WARRANTY

HD FIRE PROTECT PVT. LTD. hereby referred to as HD FIRE warrants to the original purchaser of the fire protection products manufactured by HD FIRE and to any other person to whom such equipment is transferred, that such products will be free from defect in material and workmanship under normal use and care, for two (2) years from the date of shipment by HD FIRE. Products or Components supplied or used by HD FIRE, but manufactured by others, are warranted only to the extent of the manufacturer's warranty. No warranty is given for product or components which have been subject to misuse, improper installation, corrosion, unauthorized repair, alteration or un-maintained. HD FIRE shall not be responsible for system design errors or improper installation or inaccurate or incomplete information supplied by buyer or buyer's representatives. HD FIRE will repair or replace defective material free of charge, which is returned to our factory, transportation charge prepaid, provided after our inspection the material is found to have been defective at the time of initial shipment from our works. HD FIRE shall not be liable for any incidental or consequential loss, damage or expense arising directly or indirectly from the use of the product including damages for injury to person, damages to property and penalties resulting from any products and components manufactured by HD FIRE. HD FIRE shall not be liable for any damages or labour charges or expense in making repair or adjustment to the product. HD FIRE shall not be liable for any damages or charges sustained in the adaptation or use of its engineering data & services. In no event shall HD Fire's product liability exceed an amount equal to the sale price. The foregoing warranty is exclusive and in lieu of all other warranties and representation whether expressed, implied, oral or written, including but not limited to, any implied warranties or merchantability or fitness for a particular purpose. All such other warranties and representations are hereby cancelled.

### NOTICE :

The equipment presented in this bulletin is to be installed in accordance with the latest publication standards of NFPA or other similar organisations and also with the provision of government codes or ordinances wherever applicable.

The information provided by us is to the best of our knowledge and belief, and consist of general guidelines only. Site handling and installation control is not in our scope. Hence we give no guarantee for result and take no liability for damages, loss or penalties whatsoever, resulting from our suggestion, information, recommendation or damages due to our product.

Product development is a continuous programme of HD FIRE PROTECT PVT. LTD. and hence the right to modify any specification without prior notice is reserved with the company.



**HD FIRE PROTECT PVT. LTD.**  
Protecting What Matters Most to You

D-6/2, ROAD NO. 34, WAGLE INDUSTRIAL ESTATE, THANE 400 604, INDIA.  
 • TEL: + (91) 22 2158 2600 • FAX: +(91) 22 2158 2602  
 • EMAIL: info@hdfire.com • WEB: www.hdfire.com