# HORIZONTAL SIDEWALL SPRINKLER STANDARD & QUICK RESPONSE

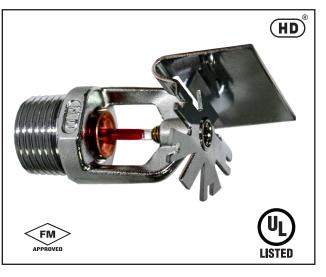


## **TECHNICAL DATA**

STYLE	Horizontal Sidewall Sprinklers		
TEMPERATURE RESPONSE	Standard Response with 5mm glass bulb, Quick Response with 3mm glass bulb		
COVERAGE	Standard Coverage		
K-FACTOR	5.6 US (80 metric)		
NOMINAL THREAD SIZE	1/2" BSPT (NPT Optional)		
MAXIMUM WORKING PRESSURE	12 kg/sq.cm		
FACTORY HYDROSTATIC TEST PRESSURE	25 kg/sq.cm		
MINIMUM OPERATING PRESSURE	0.5 kg/sq.cm		
TEMPERATURE RATING	68°C (155°F) / 57°C (135°F) 79°C (175°F) / 93°C (200°F) 141°C (200°F)		
APPROVALS	Refer Table		
FINISH	Chrome Plated For SIN Nos. HD403/HD503, chrome plating will not be done on the threaded portion.		
ORDERING INFORMATION	Style,Temperature Rating & Response,Thread type, Finish, Approval required- UL or UL & FM		
SIN NUMBER	HD403/ HD603/ HD103 - SR HD503/ HD703/ HD203 - QR		

### DESCRIPTION

HD Horizontal Sidewall Sprinklers are designed for use in light and ordinary hazards for standard installation. The design provides a crescent-shaped water discharge pattern for installation along a wall or side of a beam and just beneath a smooth ceiling. The temperature response type is standard response (5 mm. glass bulb) and quick response (3mm glass bulb). The fast response type glass bulb and the special deflector combine speed of operation and area of coverage making it an ideal choice for standard coverage applications while being aesthetically pleasing. Chrome plating gives the sprinkler a good corrosion resistance in most types of corrosive environments.



### APPROVALS

Response	Orientation	Temperature	Аррі	roval	Code No
Туре	Type / SIN No.	Rating	UL	FM	
SR	SIDEWALL	57°C (135°F)	V	V	T10077
	HD403	68°C (155°F)	$\checkmark$	V	T10078
		79°C (175°F)		V	T10084
		93°C (200°F)	V	V	T10086
QR	SIDEWALL	57°C (135°F)	$\checkmark$	V	T10049
	HD503	68°C (155°F)		V	T10072
		79°C (175°F)	V	V	T10083
		93°C (200°F)	V	V	T10085
SR	SIDEWALL	57°C (135°F)	V	—	T10077U
	HD603	68°C (155°F)	$\checkmark$	—	T10078U
		79°C (175°F)		—	T10084U
		93°C (200°F)	V	—	T10086U
		141°C (286°F)	V	_	T10039U
		57°C (135°F)	√ ,	√ ,	T10077UF
		68°C (155°F)	V	√ ,	T10078UF
		79°C (175°F)	√ ∕	√ ,	T10084UF
		93°C(200°F) 141°C(286°F)			T10086UF T10039UF
				v	
QR	SIDEWALL HD703	57°C (135°F) 68°C (155°F)	V	-	T10049U
	HD/03	79°C (175°F)		_	T10072U T10083U
		93°C (200°F)	v √	_	T10085U
		141°C (286°F)	v √		T100830
				./	
		57°C (135°F) 68°C (155°F)		√ √	T10049UF T10072UF
		79℃ (175°F)	v √	v √	T100720F
		93°C (200°F)	v √	v v	T10085UF
		141°C (286°F)	v √	v √	T10040UF
SR	SIDEWALL	57°C (135°F)	V	V	T10077F
	HD103	68°C (155°F)	√	√	T10078F
		79°C (175°F)		V	T10084F
		93°C (200°F)		$\checkmark$	T10086F
QR	SIDEWALL	57°C (135°F)		—	T10071
	HD203	68°C (155°F)			T10072F
		79°C (175°F)	V	V	T10083F
		93°C (200°F)	V	$\checkmark$	T10085F



### SPRINKLER OPERATION

The Sprinkler operating device is state of the art heat responsive frangible glass bulb supplied by a world leader in this innovative technology. The glass bulb contains fluid which expands when exposed to heat. When rated temperature is reached, the bulb shatters and water flows through the sprinkler and strikes deflector, forming an uniform water spray pattern to control or extinguish fire.

#### CARE AND HANDLING

Sprinklers must be handled with due care, they must be stored at ambient temperature for best results and in a separate space in order NOT to allow metal parts coming in contact with sprinkler or bulb. Storage as well as any onward shipment is to be made in original packaging only.

Always store the sprinklers with protective sprinkler caps. Do not remove the protective sprinkler caps until the sprinklers are installed in the system, in order to protect sprinklers from mechanical damage. Sprinklers caps must be removed carefully without touching / damaging the bulb element, before placing the system in service.

Sprinklers must be visually inspected carefully before installation. Sprinklers visibly damaged, dropped or exposed to temperature in excess of the maximum ambient temperature permitted, should never be installed.

Never install any glass blub sprinkler if the bulb is cracked or if there is a loss of liquid from the bulb. Sprinkler must be installed after the piping is in place to prevent mechanical damage.

Use Teflon Tape or soft thread sealent on male thread of the Sprinkler for the leak tight Sprinkler joint.

Use proper wrench. The sprinkler must be hand tightened into the fitting. After hand tightening, use Sprinkler Wrench Model SP-M for wrench tightening into sprinkler fittings. A leak-tight 1/2 NPT/BSPT Sprinkler joint should be obtained by applying maximum torque of 19.0 N-m (14 lb-ft). Excessive tightening torque may distort the Sprinkler inlet and cause leakage.

Sprinkler must never be painted, plated or coated after they leave factory.

The HD Sprinkler described herein must be installed and maintained in accordance with the latest edition of HD technical data, the latest standard of National Fire protection Association (NFPA) and Factory Mutual (FM) or to the standard of any other authorities having jurisdiction. The owner is solely responsible for maintaining their fire protection system and device in proper operating condition.

Exposure to ultraviolet or direct sunlight for extended period may cause the liquid dye in glass bulb to fade or lose colour. Colourless or faded bulbs are not a problem, as long as the fluid level has not been affected. The loss of colour in the liquid will not affect sprinkler performance, as long as the bulb is intact and not damaged. The loss of colour may be an issue in identifying sprinkler temperature rating, but the temperature rating is still stamped on the sprinkler deflector.

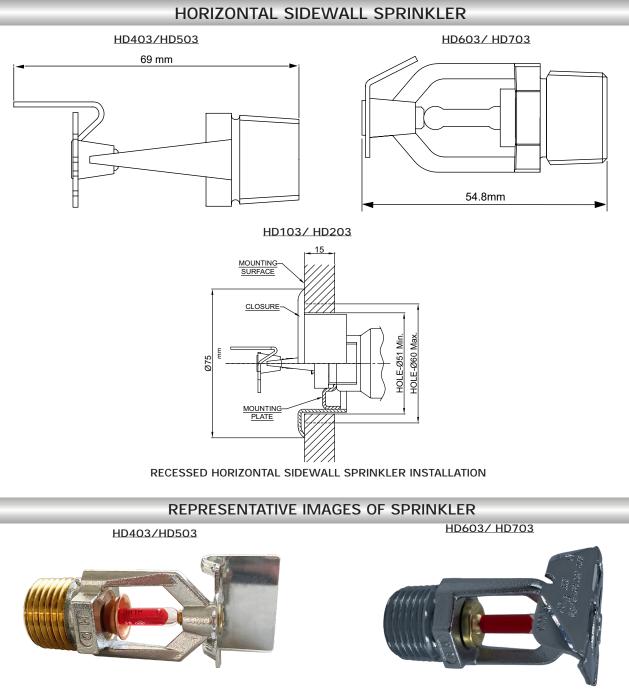
## INSPECTION TESTING AND MAINTENANCE

Refer to NFPA 25 for inspection, testing and maintenance requirement or to the authority having jurisdiction. For detail of warranty refer HD's current conditions of sale or contact HD Sales directly.

MATERIAL SPECIFICATION			
Deflector	Brass		
Bulb	Glass		
Сар	Copper*		
Frame	Brass		
Seal	Teflon Coated Washer		
Bulb Nominal Diameter	Standard Response 5.0mm Quick Response 3.0mm		

\*Note: For SIN Nos. HD603 / HD703 the Cap material is Brass.





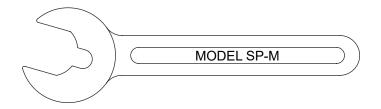
HD103/ HD203



NOTE: These are representative images of sprinkler. Please contact HD Sales for any further details.



### SPRINKLER WRENCH



#### 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 charges or expenses 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.



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