HORIZONTAL SIDEWALL SPRINKLER

STANDARD & QUICK RESPONSE



TECHNICAL DATA

| 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 | ½" BSPT (NPT Optional) | |
| MAXIMUM WORKING PRESSURE | 175 psi (12 bar) | |
| FACTORY HYDROSTATIC TEST PRESSURE | 500 psi (35 bar) | |
| MINIMUM OPERATING PRESSURE | 7 psi (0.5 bar) | |
| 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 | |
| | | |



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

| | Orientation | _ | Approval | | |
|------------------|-------------------|-----------------------|----------|----|---------|
| Response Type | Type / SIN No. | Temperature Rating | UL | FM | Code No |
| SR | SIDEWALL | 57°C (135°F) | √ | √ | T10077 |
| | HD403 | 68°C (155°F) | √ | √ | T10078 |
| | | 79°C (175°F) | √ | √ | T10084 |
| | | 93°C (200°F) | V | V | T10086 |
| QR | SIDEWALL | 57°C (135°F) | √ | √ | T10049 |
| | HD503 | 68°C (155°F) | √ | √ | T10072 |
| | | 79°C (175°F) | √ | √ | T10083 |
| | | 93°C (200°F) | V | V | T10085 |
| SR | SIDEWALL | 57°C (135°F) | √ | _ | T10077U |
| | HD603 | 68°C (155°F) | √ | _ | T10078U |
| | | 79°C (175°F) | √ | _ | T10084U |
| | | 93°C (200°F) | √ | _ | T10086U |
| | | 141°C (286°F) | √ | _ | T10039U |
| QR | SIDEWALL | 57°C (135°F) | √ | _ | T10049U |
| | HD703 | 68°C (155°F) | √ | _ | T10072U |
| | | 79°C (175°F) | √ | _ | T10083U |
| | | 93°C (200°F) | √ | _ | T10085U |
| | | 141°C (286°F) | √ | _ | T10040U |
| SR | SIDEWALL | 57°C (135°F) | √ | √ | T10077F |
| | HD103 | 68°C (155°F) | √ | √ | T10078F |
| | | 79°C (175°F) | √ . | √. | T10084F |
| | | 93°C (200°F) | V | V | T10086F |
| QR | SIDEWALL | 57°C (135°F) | √ | _ | T10071 |
| | HD203 | 68°C (155°F) | √ | √ | T10072F |
| | | 79°C (175°F) | √ | √ | T10083F |
| | | 93°C (200°F) | V | V | 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

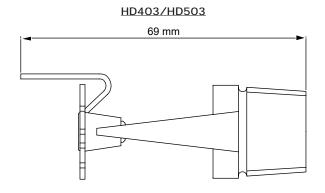
Refer to NFPA 25 for inspection, testing and maintenance requirement or to the authority having jurisdiction. For detail of warranty refer HD's current conditions of sale or contact HD Sales directly.

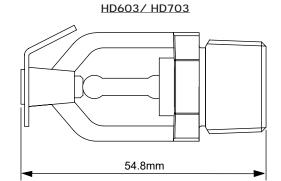
| MATERIAL SPECIFICATION | | | |
|------------------------|---|--|--|
| Deflector | Brass | | |
| Bulb | Glass | | |
| Сар | Copper* | | |
| Frame | Brass | | |
| Seal | Teflon Coated Washer | | |
| Bulb Nominal Diameter | Standard Response 5.0mm Quick Response 3.0mm | | |

^{*}Note: For SIN Nos. HD603 / HD703 the Cap material is Brass.

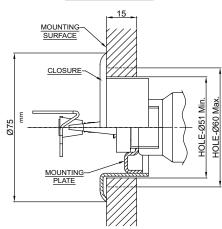


HORIZONTAL SIDEWALL SPRINKLER





HD103/ HD203



RECESSED HORIZONTAL SIDEWALL SPRINKLER INSTALLATION

REPRESENTATIVE IMAGES OF SPRINKLER

HD403/HD503







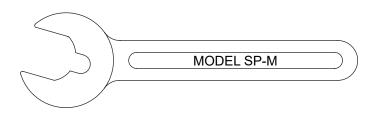
HD103/ HD203



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 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.



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