

UPRIGHT, PENDENT AND RECESSED PENDENT SPRINKLER_(STANDARD & QUICK RESPONSE)



TECHNICAL DATA

STYLE	Upright, Pendent and Recessed Pendent
TEMPERATURE RESPONSE	Standard Response - 5mm glass bulb Quick Response - 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	57°C (135° F), 68°C (155° F), 79°C (175° F), 93°C (200° F), 141°C (286° F), 182°C (360° F)
APPROVALS	Refer Table
FINISH	Brass, Chrome Plated, White Painted. White shade is RAL9010. For other shades, contact HD Sales. For SIN Nos.HD401/402/501/502, 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	HD401/ HD101 - Pendent, SR HD402/ HD102 - Upright, SR HD501/ HD201 - Pendent, QR HD502/ HD202 - Upright, QR

DESCRIPTION

HD Pendent and Upright sprinklers are designed for use in light and ordinary hazards. The temperature response is standard response (5mm glass bulb) and quick response (3mm glass bulb). The sprinklers come with compact design, glass bulb type, available in several different finishes and temperature ratings. The pendent sprinklers must be installed in pendent position, and upright sprinklers are to be installed in the upright position.

Pendent Recessed Sprinklers are installed with adjustable or non-adjustable Escutcheon plates (also termed as Rosette plates). These are intended to be installed with finished ceilings. Escutcheon plate adjustment provides convenience in Pendent Sprinkler installation in case of areas with finished ceilings or walls.



APPROVALS

Response Type	Orientation Type / SIN No.	Temperature Rating	Approval		Code No
			UL	FM	
SR	PENDENT HD401	57°C (135°F)	✓	✓	T10021
		68°C (155°F)	✓	✓	T10022
		79°C (175°F)	✓	✓	T10023
		93°C (200°F)	✓	✓	T10024
SR	UPRIGHT HD402	57°C (135°F)	✓	✓	T10055
		68°C (155°F)	✓	✓	T10056
		79°C (175°F)	✓	✓	T10057
		93°C (200°F)	✓	✓	T10058
QR	PENDENT HD501	57°C (135°F)	✓	✓	T10050
		68°C (155°F)	✓	✓	T10002
		79°C (175°F)	✓	✓	T10003
		93°C (200°F)	✓	✓	T10004
QR	UPRIGHT HD502	57°C (135°F)	✓	✓	T10051
		68°C (155°F)	✓	✓	T10042
		79°C (175°F)	✓	✓	T10043
		93°C (200°F)	✓	✓	T10044
SR	PENDENT HD101	57°C (135°F)	✓	✓	T10021F
		68°C (155°F)	✓	✓	T10022F
		79°C (175°F)	✓	✓	T10023F
		93°C (200°F)	✓	✓	T10024F
		141°C (286°F)	✓	—	T10035
		182°C (360°F)	✓	—	T10037
SR	UPRIGHT HD102	57°C (135°F)	✓	✓	T10055F
		68°C (155°F)	✓	✓	T10056F
		79°C (175°F)	✓	✓	T10057F
		93°C (200°F)	✓	✓	T10058F
QR	PENDENT HD201	57°C (135°F)	✓	—	T10001
		68°C (155°F)	✓	✓	T10002F
		79°C (175°F)	✓	✓	T10003F
		93°C (200°F)	✓	✓	T10004F
		141°C (286°F)	✓	—	T10036
QR	UPRIGHT HD202	57°C (135°F)	✓	—	T10041
		68°C (155°F)	✓	✓	T10042F
		79°C (175°F)	✓	✓	T10043F
		93°C (200°F)	✓	✓	T10044F

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 a 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. Storage as well as any onward shipment is to be made in original packing only. 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. 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 coloured bulbs are not a problem, as long as the fluid level has not been affected. The loss of colour in the liquid will not effect 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 details of warranty, refer HD's current price list, conditions of sale or contact HD directly.

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

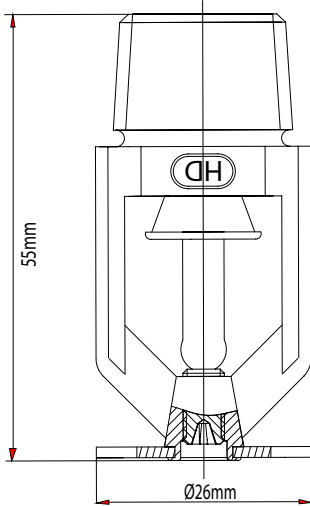
SPRINKLER RATINGS

SPRINKLER TEMP. CLASSIFICATION	NORMAL SPRINKLER TEMP. RATING	NFPA MAX. CEILING TEMP. ALLOWED	GLASS BULB COLOUR
Ordinary	57° C (135° F)	38° C (100° F)	Orange
Ordinary	68° C (155° F)	38° C (100° F)	Red
Intermediate	79° C (175° F)	66° C (150° F)	Yellow
Intermediate	93° C (200° F)	66° C (150° F)	Green
High	141° C (286° F)	107° C (225° F)	Blue
Extra High	182° C (360° F)	149° C (300° F)	Purple

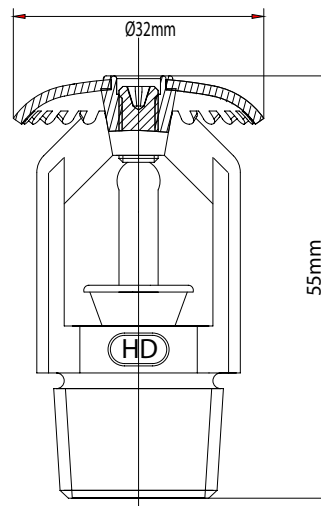
As per Table 6.2.5.1 NFPA 13

PENDENT & UPRIGHT SPRINKLER

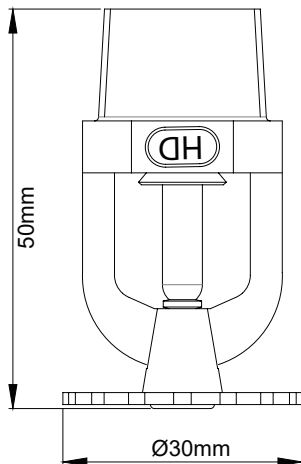
SIN # HD401/HD501



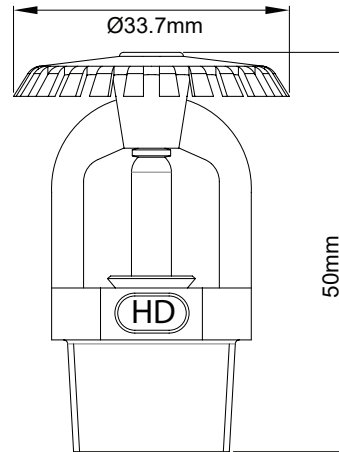
SIN # HD402/ HD502



SIN # HD101/ HD201

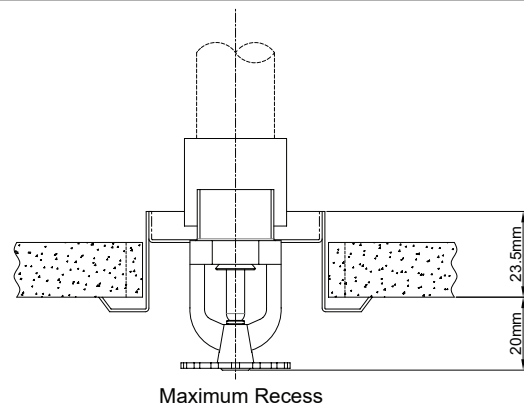
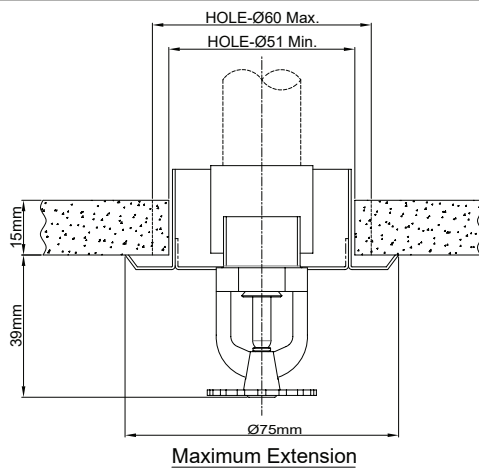


SIN # HD102/ HD202



* For T10002F/T10003F/T10004F Deflector diameter is 25 mm.

RECESSED PENDENT



REPRESENTATIVE IMAGES OF SPRINKLERS

HD401/HD501



HD402/HD502



HD101/HD201



HD102/HD202



T10002F/T10003F/T10004F



RECESSED PENDENT HD101 (WHITE)



NOTE: These are representative images of sprinklers. Please contact HD Sales for any 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

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HORIZONTAL SIDEWALL SPRINKLER

STANDARD & QUICK RESPONSE



TECHNICAL DATA

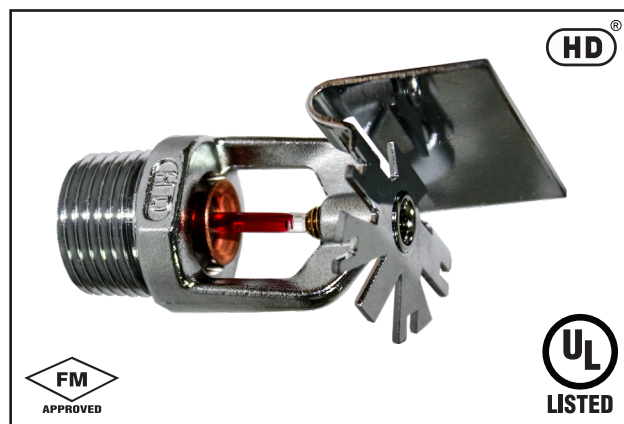
STYLE	Horizontal Sidewall Sprinklers
TEMPERATURE RESPONSE	Standard Response with 5mm glass bulb, Quick Response with 3mm glass bulb
COVERAGE	Standard Coverage
K-FACTOR	5.6 US (80 metric)
NOMINAL THREAD SIZE	½" BSPT (NPT Optional)
MAXIMUM WORKING PRESSURE	175 psi (12 bar)
FACTORY HYDROSTATIC TEST PRESSURE	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)
APPROVALS	Refer Table
FINISH	Chrome Plated For SIN Nos. HD403/503, 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 / HD103 - SR HD503 / 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.

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.



APPROVALS

Response Type	Orientation Type / SIN No.	Temperature Rating	Approval		Code No
			UL	FM	
SR	SIDEWALL HD403	57°C (135°F)	✓	✓	T10077
		68°C (155°F)	✓	✓	T10078
		79°C (175°F)	✓	✓	T10084
		93°C (200°F)	✓	✓	T10086
QR	SIDEWALL HD503	57°C (135°F)	✓	✓	T10049
		68°C (155°F)	✓	✓	T10072
		79°C (175°F)	✓	✓	T10083
		93°C (200°F)	✓	✓	T10085
SR	SIDEWALL HD103	57°C (135°F)	✓	✓	T10077F
		68°C (155°F)	✓	✓	T10078F
		79°C (175°F)	✓	✓	T10084F
		93°C (200°F)	✓	✓	T10086F
QR	SIDEWALL HD203	57°C (135°F)	✓	—	T10071
		68°C (155°F)	✓	✓	T10072F
		79°C (175°F)	✓	✓	T10083F
		93°C (200°F)	✓	✓	T10085F

CARE AND HANDLING

Sprinklers must be handled with due care, they must be stored at ambient temperature for best results. Storage as well as any onward shipment is to be made in original packing only. 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 bulb 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 sealant on male thread of the sprinkler for leak tight sprinkler joint. Use proper wrench. 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. Sprinklers must never be painted, plated or coated after they leave factory.

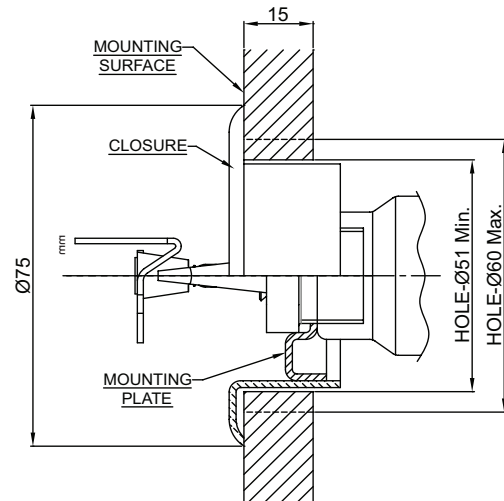
The HD sprinkler described herein must be installed and maintained in accordance with the latest edition of HD technical data, the latest standards of the National Fire Protection Association (NFPA) and Factory Mutual (FM) or to the standard of any other authorities having jurisdiction. The owner is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

INSPECTION TESTING AND MAINTENANCE

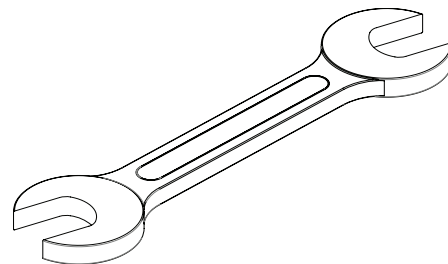
Refer to NFPA 25 for inspection, testing and maintenance requirement or to the authority having jurisdiction. For detail of warranty refer HD's current conditions of sale or contact HD Sales directly.

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.

RECESSED HORIZONTAL SIDEWALL SPRINKLER



SPRINKLER WRENCH



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

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.

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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.

