

STANDARD SPRAY SPRINKLERS



Standard Spray Sprinklers are comprised of two responses: standard and quick. Together they offer a wide range of sprinklers from which to choose when designing a standard coverage fire sprinkler system.

Standard Response Sprinklers are intended for use in fire sprinkler systems designed in accordance with the installation rules recognized by the applicable Listing or Approval agency. There are two types of response elements: bulb and solder.

Series TY-B bulb type sprinklers are available in a variety of attractive finishes that blend well with their surroundings. When in service, a small bubble in the fluid contained in the bulb compensates for normal temperature changes. When heated, the fluid in the bulb expands and shatters the bulb, allowing water to be discharged.

Series TY-L solder type sprinklers employ a link whose two sections are joined by solder with a predetermined temperature rating. Heat absorbed by the link is conducted directly to the soldered joint. When the solder melts, the link springs apart, releasing water that strikes the sprinkler deflector.

APPLICATIONS:

- *Office Buildings*
- *Banks*
- *Factories*
- *Libraries*
- *Theaters*
- *Light & Ordinary Hazard Occupancies*
- *Schools*

Quick Response Sprinklers are designed with a 3mm bulb or small nickel link to react more quickly at the specified temperature. They are available in pendent, upright, recessed, concealed, vertical sidewall, and horizontal sidewall styles.

The narrow profile bulbs and attractive finishes of the Series TY-FRB provide specifiers with a wide variety of sprinklers for use in quick response applications. The versatile Quick Response TY-FRL Series provides the specifier with a solder type sprinkler for most commercial and industrial applications.

Always refer to the product's Technical Data Sheet for a complete description of all Listing and Approval criteria, design parameters, installation instructions, care and maintenance guidelines, and our limited warranty.

AUTOMATIC SPRINKLERS

STANDARD SPRAY SPRINKLERS

TY-B

Upright, Pendent & Recessed Pendent

- All hazard
- 5 mm bulb
- Discharges a hemispherical water spray pattern in the area beneath the sprinkler
- Small frame, narrow profile bulb
- Designed for use in light, ordinary, or extra hazard, commercial occupancies such as banks, hotels, shopping malls, factories, refineries, chemical plants, etc.

K FACTOR	K=2.8 (40,3) • K=5.6 (80,6), K=8.0 (115,2)
THREAD SIZE	1/2" NPT • 3/4" NPT
APPROVALS	K=2.8 – UL, C-UL, FM K=5.6 – UL, C-UL, FM, CE, VdS K=8.0 – UL, C-UL, FM, LPCB, NYC, VdS
TEMPERATURE	135°F/57°C, 155°F/68°C, 175°F/79°C, 200°F/93°C, 286°F/141°C, 360°F/182°C
ESCUTCHEON	K=2.8 – Style 10 • Style 40 K=5.6 – Style 15 • Style 20 K=8.0 – Style 10 • Style 40
ESCUTCHEON FINISH	Signal or Pure White, Jet Black, Chrome Plated, Natural Brass
SPRINKLER FINISH	Natural Brass, Chrome Plated, Pure White, Signal White, Jet Black, Lead Coated, Wax Coated, Wax over Lead Coated
SIN	TY1151, TY1251, TY315, TY325, TY4151, TY4251, TY4851, TY4951
TECH DATA	K=2.8 & K=8.0 – TFP151 K=5.6 – TFP152



K=5.6 Shown

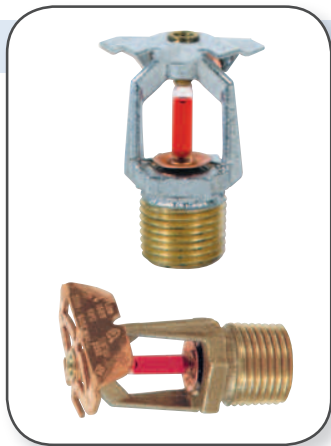
Sprinkler Wrenches



Horizontal, Recessed Horizontal & Vertical Sidewall

- Light hazard/Ordinary hazard
- 5 mm bulb
- Small frame
- Unique deflector design of the horizontal sidewall sprinkler results in smaller profile
- Designed for installation along a wall or the side of a beam just beneath a smooth ceiling
- Water discharge is directed primarily outward and downward in a quarter spherical pattern
- Sidewall sprinklers are often used in lieu of standard pendent or upright sprinklers due to building construction, economic considerations, or aesthetics
- Special deflector on the vertical sidewall sprinkler allows it to be installed in either a pendent or upright position

K FACTOR	K=5.6 (80,6)
THREAD SIZE	1/2" NPT
APPROVALS	UL, C-UL, FM, LPCB, NYC
TEMPERATURE	135°F/57°C, 155°F/68°C, 175°F/79°C, 200°F/93°C, 286°F/141°C, 360°F/182°C
ESCUTCHEON	Style 10
ESCUTCHEON FINISH	Signal or Pure White, Jet Black, Chrome Plated, Natural Brass
SPRINKLER FINISH	Natural Brass, Chrome Plated, Pure White, Signal White, Jet Black, Lead Coated, Wax Coated, Wax over Lead Coated
SIN	TY3351, TY3451
TECH DATA	TFP161



Sprinkler Wrenches



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AUTOMATIC SPRINKLERS

STANDARD SPRAY SPRINKLERS

TY-FRB

Upright, Pendent & Recessed Pendent

- Light hazard/Ordinary hazard
light hazard K=2.8 (40,3)
- 3 mm bulb
- Hemispherical water spray pattern in the area beneath the sprinkler
- Small frame and narrow profile bulb enhance appearance
- Designed for use in commercial occupancies such as banks, hotels, and shopping malls.

K FACTOR	K=2.8 (40,3) • K=4.2 (60,5) K=5.6 (80,6) • K=8.0 (115,2)
THREAD SIZE	1/2" NPT • 3/4" NPT
APPROVALS	K=2.8 – UL, C-UL, FM, NYC K=4.2 – UL, C-UL K=5.6 – UL, C-UL, FM, CE, VdS K=8.0 – UL, C-UL, FM, NYC, LPCB, VdS
TEMPERATURE	135°F/57°C, 155°F/68°C, 175°F/79°C, 200°F/93°C, 286°F/141°C
ESCUTCHEON	K=2.8, K=4.2 & K=8.0 – Style 10 • Style 20 Style 30 • Style 40 K=5.6 – Style 15 • Style 20
ESCUTCHEON FINISH	White Coated, Chrome Plated, Brass Plated
SPRINKLER FINISH	Natural Brass, Chrome Plated, Pure White, Signal White, Jet Black, Lead Coated
SIN	TY313, TY323, TY1131, TY1231, TY2131, TY2231, TY3131, TY3231, TY4131, TY4231, TY4831, TY4931
TECH DATA	K=2.8 thru K=8.0 – TFP171 K=5.6 – TFP172



K=5.6 Shown

Sprinkler Wrenches



Horizontal, Recessed Horizontal Sidewall & Vertical Sidewall

- Light hazard/Ordinary hazard
- 3 mm bulb
- Designed for use in applications where aesthetics must be considered or where building construction makes the installation of standard pendent or upright sprinklers impractical
- Vertical sidewall sprinkler can be installed in either the pendent or upright position along a wall or the side of a beam and just below a smooth ceiling

K FACTOR	K=5.6 (80,6)
THREAD SIZE	1/2" NPT
APPROVALS	UL, C-UL, FM, NYC, LPCB
TEMPERATURE	135°F/57°C, 155°F/68°C, 175°F/79°C, 200°F/93°C, 286°F/141°C
ESCUTCHEON	Style 10 • Style 20
ESCUTCHEON FINISH	Signal or Pure White, Jet Black, Chrome Plated, Brass Plated
SPRINKLER FINISH	Natural Brass, Chrome Plated, Pure White, Signal White, Jet Black, Lead Coated
SIN	TY3331, TY3431
TECH DATA	TFP176



Sprinkler Wrenches



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AUTOMATIC SPRINKLERS

STANDARD SPRAY SPRINKLERS

RFII "ROYAL FLUSH II"

Pendent Concealed

- Light hazard/Ordinary hazard
- 5 mm bulb (standard)
3 mm bulb (quick)
- Concealed in an enclosed escutcheon plate with flat cover for use in those applications where aesthetics is a primary consideration
- Separable, two-piece design of the mounting cup and cover plate allows installation of the sprinklers and pressure testing of the fire protection system prior to installation of a suspended ceiling or application of the finish coating to a fixed ceiling
- Internally threaded closure with 1/2" (12,7 mm) of adjustment
- Available with optional dust and air seal

K FACTOR	K=5.6 (80,6)
THREAD SIZE	1/2" NPT
APPROVALS	3mm= UL, C-UL, NYC, VdS 5mm= UL, C-UL, FM, NYC, LPCB
TEMPERATURE	155°F/68°C - Sprinkler 139°F/59°C - Cover Plate, 200°F/93°C - Sprinkler 165°F/74°C - Cover Plate
COVER PLATE FINISH	Chrome, Brushed Chrome, Brass, Signal White, Grey White, Jet Black, Custom
SIN	TY3551, TY3531
TECH DATA	TFP181



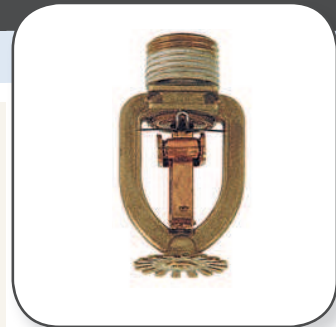
Sprinkler Wrench
RFII

TY-L

Upright, Pendent & Recessed Pendent

- All hazards
- Solder type
- Discharges a hemispherical water spray pattern in the area beneath the sprinkler
- Designed for use in light, ordinary, and extra hazard, commercial occupancies such as banks, hotels, shopping malls, factories, refineries, chemical plants, etc.

K FACTOR	K=5.6 (80,6) K=8.0 (115,2)
THREAD SIZE	1/2" NPT • 3/4" NPT
APPROVALS	UL, C-UL, FM, LPCB
TEMPERATURE	165°F/74°C, 212°F/100°C, 280°F/138°C
ESCUTCHEON	Style 20 • Style 30
ESCUTCHEON FINISH	Signal White, Chrome Plated, Brass Plated
SPRINKLER FINISH	Natural Brass, Chrome Plated, Lead Coated, Wax Coated, Wax over Lead Coated
SIN	TY3111, TY3211, TY4111 TY4211, TY4811, TY4911
TECH DATA	TFP110



Sprinkler Wrenches
W-TYPE 9
W-TYPE 10 (Recessed)

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AUTOMATIC SPRINKLERS

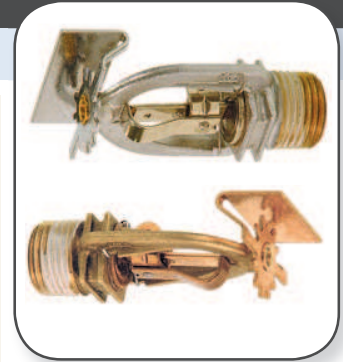
STANDARD SPRAY SPRINKLERS

TY-L

Horizontal Sidewall

- Light hazard / Ordinary hazard
- Solder type
- Suited for hotels, nursing homes and hospitals
- Design allows piping to be confined to corridors, closets or service areas

K FACTOR	K=5.6 (80,6)
THREAD SIZE	1/2" NPT
APPROVALS	UL, C-UL, FM
TEMPERATURE	165°F/74°C, 212°F/100°C, 280°F/138°C
SPRINKLER FINISH	Natural Brass, Chrome Plated, Lead Coated, Wax Coated, Wax over Lead Coated
SIN	TY3311
TECH DATA	TFP120



Sprinkler Wrench



TY-FRL

Upright, Pendent & Recessed Pendent

- Light hazard/Ordinary hazard
light hazard K=2.8 (40,3)
- Solder type
- Typically used in hotels, motels, office buildings and other commercial and industrial applications

K FACTOR	K=2.8 (40,3) • K=5.6 (80,6) K=8.0 (115,2)
THREAD SIZE	1/2" NPT • 3/4" NPT
APPROVALS	2.8=L, C-UL, NYC 5.6=UL, C-UL, FM, NYC, LPCB 8.0= UL, C-UL, FM, NYC
TEMPERATURE	165°F/74°C, 212°F/100°C
ESCUTCHEON	1/2" NPT - Style 20 3/4" NPT - Style 30
ESCUTCHEON FINISH	Signal White, Chrome Plated, Brass Plated
SPRINKLER FINISH	Natural Brass, Chrome Plated
SIN	TY1121, TY1221, TY3121 TY3221, TY4121, TY4221
TECH DATA	TFP130



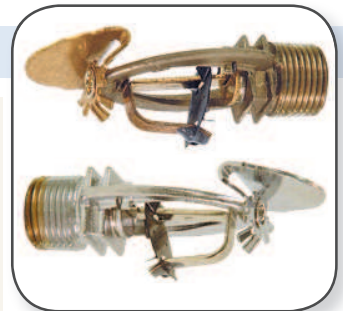
Sprinkler Wrenches



Horizontal Sidewall

- Solder type
- Light hazard/Ordinary hazard
- Designed for compact installation along a wall or on the side of a beam just beneath a smooth ceiling
- Generally used in lieu of pendent or upright sprinklers because of aesthetics, building construction, where piping across the ceiling is not desirable

K FACTOR	K=5.6 (80,6)
THREAD SIZE	1/2" NPT
APPROVALS	UL, C-UL, FM, NYC
TEMPERATURE	165°F/74°C, 212°F/100°C
SPRINKLER FINISH	Natural Brass, Chrome Plated
SIN	TY3321
TECH DATA	TFP140



Sprinkler Wrench



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AUTOMATIC SPRINKLERS

STANDARD SPRAY SPRINKLERS

TY-QRF

Flush Pendent

- Solder type
- Light hazard/Ordinary hazard
- Features separable escutcheon with $\frac{3}{8}$ " vertical adjustment

K FACTOR	K=5.6 (80,6)
THREAD SIZE	$\frac{1}{2}$ " NPT
APPROVALS	UL, ULC
TEMPERATURE	162°F/72°C
ESCUTCHEON FINISH	Chrome, Signal White, Jet Black
SPRINKLER FINISH	Chrome, Signal White, Jet Black
SIN	TY3261
TECH DATA	TFP190



Sprinkler Wrenches



ILLUSION™

Concealed Standard Coverage Pendent Sprinklers

- Extra large orifice/Special hazard
- Coverage per NFPA 13
- Available with optional dust and air seal
- The ILLUSION is concealed in an enclosed escutcheon plate with flat cover for use in those applications where architecturally sensitive areas such as casinos, hotel lobbies, office buildings, churches and restaurants

K FACTOR	K=11.2 (161,3)
THREAD SIZE	$\frac{3}{4}$ " NPT
APPROVALS	UL, C-UL
TEMPERATURE	160°F/71°C - Sprinkler 139°F/59°C - Cover Plate, 212°F/100°C - Sprinkler 165°F/74°C - Cover Plate
COVER PLATE FINISH	Brush Chrome, Brass, Signal White, Grey White, Pure White, Custom
SIN	TY5521
TECH DATA	TFP184



Sprinkler Wrench



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EXTENDED COVERAGE SPRINKLERS



Extended Coverage Sprinklers are intended for the protection of areas larger than those specified in standard installation rules and for specific light, ordinary, or extra hazard occupancies. Extended coverage sprinklers are available in both standard response (EC) and quick response (QR-EC). They are available in upright, pendent, horizontal sidewall and recessed horizontal sidewall. These sprinklers are typically used in hotels, restaurants, office buildings, warehouses, and other areas where it is desirable to reduce the overall number of required sprinklers.

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APPLICATIONS:

- *Office Buildings*
- *Hotels*
- *Hospitals*
- *Libraries*
- *High-Piled*
- *Storage*
- *"Big-Box" Retailing*

AUTOMATIC SPRINKLERS

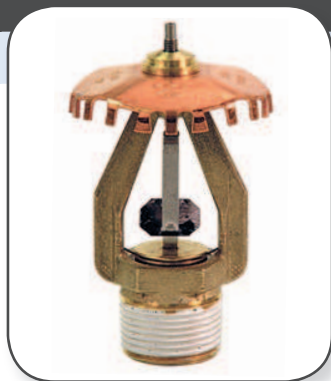
EXTENDED COVERAGE SPRINKLERS

EC-25

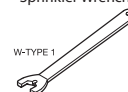
Upright

- All hazard
- Solder type
- Extended coverage area/density
- The maximum coverage area per sprinkler is 196 ft.² (18,2 m²), which is almost double the area offered by standard coverage sprinklers used for similar applications.
- For use in high density applications such as "big box" retailing, extra hazard, and high-piled storage occupancies
- Minimum operating pressure of 7 psi (0,48 bar)

K FACTOR	K=25.2 (362,9)
THREAD SIZE	1" NPT or ISO 7-R1
APPROVALS	UL, C-UL, FM, NYC
TEMPERATURE	165°F/74°C, 214°F/101°C
SPRINKLER FINISH	Natural Brass
SIN	TY9128
TECH DATA	TFP213



Sprinkler Wrench



EC-11 & EC-14

Upright, Pendent & Recessed Pendent

- Light hazard/Ordinary hazard
- 3 mm bulb
- Designed for maximum coverage applications of 400ft² - 14' x 14' (4,3 m x 4,3 m) up to 20' x 20' (6,1 m x 6,1 m)
- Low profile decorative glass bulb spray sprinklers

K FACTOR	K=11.2 (161,3), K=14.0 (201,6)
THREAD SIZE	3/4" NPT
APPROVALS	UL, C-UL, FM, NYC
TEMPERATURE	135°F/57°C, 155°F/68°C, 175°F/79°C, 200°F/93°C, 286°F/141°C
ESCUTCHEON	Style 30 • Style 40 Style 60
ESCUTCHEON FINISH	White Coated, Chrome Plated, Brass Plated
SPRINKLER FINISH	Natural Brass, Chrome Plated, White Polyester, Lead Coated
SIN	TY5137, TY5237, TY6137, TY6237
TECH DATA	TFP220



Sprinkler Wrenches



EC-8

Pendent & Recessed Pendent

- Light hazard
- 3 mm bulb
- Covers areas as large as 20' x 20' (6,1 m x 6,1 m)
- The Series EC-8 Extended Coverage Pendent Sprinklers are decorative glass bulb sprinklers designed for use in light hazard occupancies.

K FACTOR	K=8.0 (115,2)
THREAD SIZE	3/4" NPT
APPROVALS	UL, C-UL, FM, NYC
TEMPERATURE	135°F/57°C, 155°F/68°C
ESCUTCHEON	Style 30 • Style 40
ESCUTCHEON FINISH	Natural Brass, Signal White, Chrome Plated
SPRINKLER FINISH	Natural Brass, Signal White Polyester, Chrome Plated
SIN	TY4232
TECH DATA	TFP223



Sprinkler Wrenches



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AUTOMATIC SPRINKLERS

EXTENDED COVERAGE SPRINKLERS

EC-5

Pendent & Recessed Pendent

- Light hazard
- 3 mm bulb
- Coverage up to 20' x 20' (6,1 m x 6,1 m)

K FACTOR	K=5.6 (80,6)
THREAD SIZE	1/2" NPT
APPROVALS	UL, C-UL, FM, NYC
TEMPERATURE	135°F/57°C, 155°F/68°C
ESCUTCHEON	Style 50
ESCUTCHEON FINISH	Signal White, Chrome Plated, Brass Plated
SPRINKLER FINISH	Natural Brass, Chrome Plated, Signal White Polyester
SIN	TY3232
TECH DATA	TFP228



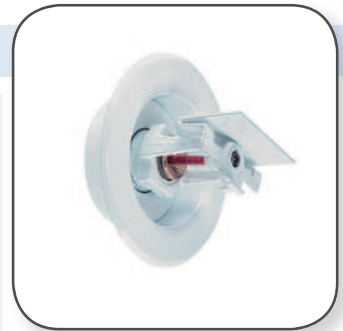
Sprinkler Wrenches



Horizontal Sidewall & Recessed Horizontal Sidewall

- Light hazard
- 3 mm bulb
- Coverage up to 16' x 24' (4,9 m x 7,3 m)
- Designed for use in hydraulically calculated sprinkler systems in commercial occupancies such as churches, restaurant seating areas, hotels, educational facilities, offices, etc.

K FACTOR	K=5.6 (80,6)
THREAD SIZE	1/2" NPT
APPROVALS	UL, C-UL, FM, NYC
TEMPERATURE	135°F/57°C, 155°F/68°C, 200°F/93°C
ESCUTCHEON	Style 50
ESCUTCHEON FINISH	Signal White, Chrome Plated, Brass Plated
SPRINKLER FINISH	Signal White, Pure White Natural Brass, Chrome Plated
SIN	TY3302
TECH DATA	TFP298



Sprinkler Wrenches



TY-FRB

Horizontal & Recessed Horizontal Sidewall

- Light hazard
- 3 mm bulb
- Two-piece escutcheon converts sidewall sprinklers into low profile sprinkler assemblies with coverage areas up to 16' x 22' (4,9 m x 6,7 m) for K=5.6 and 16' x 24' (4,9 m x 7,3 m) for K=8.0
- Provides 3/4" NPT (19,1 mm) of horizontal adjustment from the recessed sidewall position
- Quick & Standard Response (see tech data sheet)

K FACTOR	K=5.6 (80,6) K=8.0 (115,2)
THREAD SIZE	1/2" NPT • 3/4" NPT
APPROVALS	5.6= UL, C-UL, FM, NYC, VdS • 8.0= UL, C-UL, FM, NYC
TEMPERATURE	135°F/57°C, 155°F/68°C, 175°F/79°C
ESCUTCHEON	Style 10 • Style 20 Style 30 • Style 40
ESCUTCHEON FINISH	White Coated, Chrome Plated, Brass Plated
SPRINKLER FINISH	Natural Brass, White Polyester, Chrome Plated
SIN	TY3332, TY4332
TECH DATA	TFP296



Sprinkler Wrenches



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AUTOMATIC SPRINKLERS

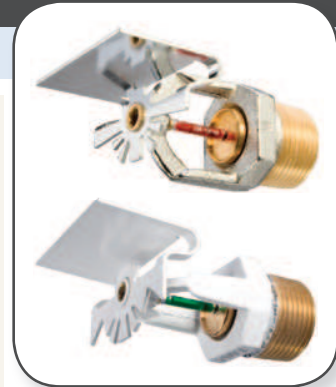
EXTENDED COVERAGE SPRINKLERS

ELO SW-20/SW-24

Horizontal Sidewall

- 3 mm bulb
- Standard Response, Extended Coverage Ordinary Hazard (ECOH) Horizontal Sidewall Sprinklers are decorative glass bulb sprinklers designed for use in ordinary hazard occupancies per NFPA 13
- SW-20 Listed to a 16'-0" (4,9 m) wide and a 20'-0" (6,1 m) throw maximum coverage area
- SW-24 Listed to a 16'-0" (4,9 m) wide and a 24'-0" (7,3 m) throw maximum coverage area

K FACTOR	K=11.2 (161,3)
THREAD SIZE	3/4" NPT
APPROVALS	UL, C-UL, NYC
TEMPERATURE	155°F/68°C, 200°F/93°C
SPRINKLER FINISH	Natural Brass, Chrome Plated, Signal White Polyester
SIN	TY5332, TY5337
TECH DATA	TFP230



Sprinkler Wrench



TY-FRL

Horizontal Sidewall

- Light hazard
- Solder type
- Designed for use in commercial occupancies such as churches, restaurant seating areas, hotels, educational facilities, offices, etc.
- Coverage up to 16 feet (4,9 m) wide by 24 feet (7,3 m) long, they are designed for installation along a wall or the side of a beam and just beneath a smooth, flat, horizontal ceiling

K FACTOR	K=5.6 (80,6) • K=8.0 (115,2)
THREAD SIZE	1/2" NPT • 3/4" NPT
APPROVALS	UL, C-UL, FM, NYC
TEMPERATURE	165°F/74°C
SPRINKLER FINISH	Natural Brass, Chrome Plated
SIN	TY3322, TY4322
TECH DATA	TFP280



Sprinkler Wrench



CHEC

Concealed Horizontal Extended Coverage Sidewall

- Light hazard
- 3 mm bulb
- Coverage up to 16' x 16' (4,9 m x 4,9 m)
- Lowest flows & pressures allowed by NFPA 13
- 1/2" adjustment
- 12" maximum deflector distance from ceiling
- No "Slots" in cover plate
- It is the best choice for architecturally sensitive areas such as dormitories, hotel rooms, reception areas, office buildings, banquet facilities, conference rooms, and hospitals

K FACTOR	K=8.0 (115,2)
THREAD SIZE	3/4" NPT
APPROVALS	UL, C-UL, NYC
TEMPERATURE	155°F/68°C - Sprinkler 139°F/59°C - Cover Plate,
COVER PLATE FINISH	Signal White, Pure White, Chrome Plated, Custom
SIN	TY4332
TECH DATA	TFP265



Sprinkler Wrench



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AUTOMATIC SPRINKLERS

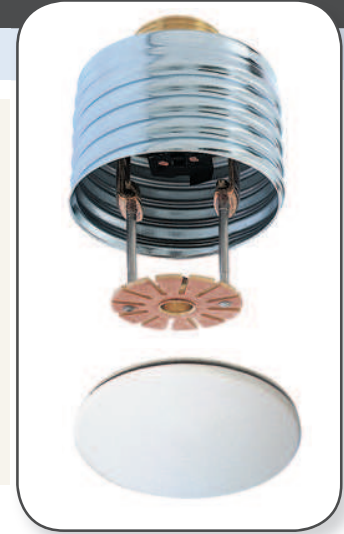
EXTENDED COVERAGE SPRINKLERS

ELOC

Concealed Pendant

- Light hazard
- Extra Large Orifice Concealed (ELOC) Pendant Sprinklers are decorative, fast response solder type sprinklers featuring a flat cover plate designed to conceal the sprinkler
- Covers 400 sq. ft. (37,2 m²) using less pressure than a standard 1/2" (12,7 mm) sprinkler at 225 sq. ft. (20,3 mm)
- Available with optional dust and air seal
- Concealed in an enclosed escutcheon plate with flat cover for use in those applications where aesthetics is a primary consideration

K FACTOR	K=11.2 (161,3)
THREAD SIZE	3/4" NPT
APPROVALS	UL, C-UL, NYC
TEMPERATURE	160°F/71°C - Sprinkler 139°F/59°C - Cover Plate, 212°F/100°C - Sprinkler 165°F/74°C - Cover Plate
COVER PLATE FINISH	Chrome Plated, Brass Plated, Signal White, Grey White, Custom
SIN	TY5522
TECH DATA	TFP250



Sprinkler Wrench
W-TYPE 18

RFII (ROYAL FLUSH II)

Concealed Pendant

- Light hazard
- 3 mm bulb
- Maximum 20' x 20' (6,1 m x 6,1 m) QR Listing
- Concealed in an enclosed escutcheon plate with flat cover for use in those applications where aesthetics is a primary consideration
- Separable, two-piece design of the mounting cup and cover allows installation of the sprinklers and pressure testing of the fire protection system prior to installation of a suspended ceiling or application of the finish coating to a fixed ceiling
- Internally threaded closure with 1/2" (12,7 mm) of adjustment

K FACTOR	K=5.6 (80.6)
THREAD SIZE	1/2" NPT
APPROVALS	UL, C-UL, NYC
TEMPERATURE	155°F/68°C - Sprinkler 139°F/59°C - Cover Plate, 200°F/93°C - Sprinkler 165°F/74°C - Cover Plate
COVER PLATE FINISH	Chrome Plated, Brass Plated, Signal White, Grey White, Custom
SIN	TY3532
TECH DATA	TFP260



Sprinkler Wrench
RFII

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Complete Box-in-Box Protection

All the confidence of ESFR protection in cold storage uncompromised by antifreeze.

The Model ESFR-17 Dry-Type Pendent Sprinkler, another cost-effective solution from the Tyco family of storage protection products.



**www.tyco-fire.com
800-558-5236**

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TFP2012002

tyco
Fire Protection
Products

STORAGE SPRINKLERS



Storage Sprinklers are intended for use in specific applications, including the protection of high-piled and rack storage of a variety of finished goods. These sprinklers can provide more water at lower pressures or more water over a greater area of coverage. In many instances, use of the storage sprinklers can eliminate the need for additional in-rack sprinklers.

Intermediate level (in-rack) sprinklers are designed for use in rack storage sprinkler systems, where their thermally sensitive elements must be shielded from the water spray of higher elevation sprinklers that could operate during a fire. Intermediate Level Sprinklers are also used in applications

APPLICATIONS:

- **High-Piled Storage**
- **Warehouse**
- **In-Rack Storage**
- **High Challenge Occupancies**

such as beneath open gridded catwalks. These sprinklers are intended for use in fire sprinkler systems designed in accordance with the standard installation rules recognized by the applicable Listing or Approval agency (e.g., FM approval and UL Listing is based on NFPA requirements).

Always refer to the product's Technical Data Sheet for a complete description of all Listing and Approval criteria, design parameters, installation instructions, care and maintenance guidelines, and our limited warranty.

AUTOMATIC SPRINKLERS

STORAGE SPRINKLERS

ESFR-25™

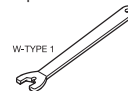
Pendent

- Early Suppression, Fast Response (ESFR)
- Solder type
- Suppression-mode sprinklers that are especially advantageous as a means of eliminating the use of in-rack sprinklers when protecting high-piled storage
- The TYCO Model ESFR-25 Pendent Sprinklers are listed by UL for Specific Applications with a ceiling height greater than 45 ft. (13,7 m) up to and including 48 ft. (14,6 m), and a storage arrangement up to and including 43 ft. (13,1 m)
- Direct attack on burning fuel by improved heavy sprinkler discharge
- Patented frame design substantially reduces the frame shadow effects that often produce non-uniformity in spray pattern
- Novel orifice seal and unique fast response link design are the very latest in sprinkler technology

K FACTOR	K=25.2 (362,9)
THREAD SIZE	1" NPT or ISO 7-R1
APPROVALS	UL, C-UL, FM, NYC, LPCB, VdS
TEMPERATURE	165°F/74°C, 214°F/101°C
SPRINKLER FINISH	Natural Brass
SIN	TY9226
TECH DATA	TFP312



Sprinkler Wrench



ESFR-17

Pendent

- Early Suppression, Fast Response (ESFR)
- Solder type
- Primarily designed for use in ceiling only sprinkler systems
- Use of this sprinkler is especially advantageous as a means of eliminating the use of in-rack sprinklers when protecting rack storage arrangements
- Operates at lower pressure than ESFR-1

K FACTOR	K=16.8 (241,9)
THREAD SIZE	3/4" NPT
APPROVALS	UL, C-UL, FM, NYC, LPCB, VdS
TEMPERATURE	165°F/74°C, 214°F/101°C
SPRINKLER FINISH	Natural Brass
SIN	TY7226
TECH DATA	TFP315



Sprinkler Wrench



Upright

- Early Suppression, Fast Response (ESFR)
- Solder type
- Primarily designed for use in ceiling only sprinkler systems
- Use of this sprinkler is especially advantageous as a means of eliminating the use of in-rack sprinklers when protecting rack storage arrangements
- Unique, upright design and large K Factor overcome many pendent obstruction problems

K FACTOR	K=16.8 (241,9)
THREAD SIZE	3/4" NPT
APPROVALS	FM
TEMPERATURE	165°F/74°C, 214°F/101°C
SPRINKLER FINISH	Natural Brass
SIN	TY7126
TECH DATA	TFP316



Sprinkler Wrench



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AUTOMATIC SPRINKLERS

STORAGE SPRINKLERS

ESFR-17

Dry-Type Pendent

- Early Suppression, Fast Response (ESFR)
- Solder type
- The Model ESFR-17 Dry Type Sprinklers are primarily used for ceiling only sprinkler protection and used to protect solid piled, palletized, and rack storage that is subject to freezing temperatures
- Suppression mode sprinklers that are especially advantageous as a means of eliminating in-rack sprinklers when protecting high-piled box-in-box refrigerated storage areas
- The drop between the inlet and sprinkler remains dry until the sprinkler operates, allowing for a pendent sprinkler installation on a wet pipe sprinkler system where the dry drop and sprinkler are located in an area subjected to freezing temperatures
- Eliminates in-rack sprinklers for box-in-box applications
- 30% lower minimum sprinkler pressure provides the opportunity to reduce pipe and pump size
- Less costly to install and maintain than pre-action or antifreeze systems

K FACTOR	K= 16.8 (241,9)
THREAD SIZE	1-1/4" NPT or ISO 7-R 1-1/4
APPROVALS	UL, FM
TEMPERATURE	165°F/74°C, 214°F/101°C
SPRINKLER FINISH	Natural Brass
SIN	TY7229
TECH DATA	TFP320



Sprinkler Wrench
W-TYPE 26
WRENCH

ESFR-1

Pendent

- Early Suppression, Fast Response (ESFR)
- Solder type
- Designed for the protection of rack storage
- They are suppression-mode sprinklers that are especially advantageous as a means of eliminating the use of in-rack sprinklers when protecting high-piled storage.
- Direct attack on burning fuel by improved heavy sprinkler discharge
- Patented frame design substantially reduces the frame shadow effects that often produce non-uniformity in spray pattern

K FACTOR	K= 14.0 (201,6)
THREAD SIZE	3/4" NPT
APPROVALS	UL, C-UL, FM, NYC, LPCB, VdS
TEMPERATURE	165°F/74°C, 214°F/101°C
SPRINKLER FINISH	Natural Brass
SIN	TY6226
TECH DATA	TFP318



Sprinkler Wrench
W-TYPE 2
WRENCH

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AUTOMATIC SPRINKLERS

STORAGE SPRINKLERS

ULTRA K-17

Upright, Control Mode Specific Application

- 5 mm bulb
- Full-scale fire testing has shown that the Ultra K17 can control fires with commodities up to Group A plastics, and eliminate the need for in-rack sprinklers
- Approved for storage heights of 25' (7,6 m) and building heights to 30' (9,1 m)

K FACTOR	K=16.8 (241,9)
THREAD SIZE	3/4" NPT
APPROVALS	UL, C-UL, FM, NYC
TEMPERATURE	155°F/68°C, 200°F/93°C
SPRINKLER FINISH	Natural Brass
SIN	TY7153
TECH DATA	TFP330



Sprinkler Wrench



Upright, Control Mode Specific Application, 286° F

- 5 mm bulb
- Control mode sprinkler

K FACTOR	K=16.8 (241,9)
THREAD SIZE	3/4" NPT
TEMPERATURE	286°F/141°C
SPRINKLER FINISH	Natural Brass
TECH DATA	Contact Tyco for details



Sprinkler Wrench



K17-231

Pendent & Upright

- 5 mm bulb
- Very large orifice sprinkler for use in high challenge storage occupancies
- Low-pressure requirement (as low as 7 psi) can save cost by reducing branch line size, taking advantage of maximized spacing, and upgrading existing densities
- They are "standard response spray sprinklers" which produce a hemispherical water distribution pattern below the deflector.

K FACTOR	K=16.8 (241,9)
THREAD SIZE	3/4" NPT
APPROVALS	Upright= UL, C-UL, FM, NYC • Pendent= UL, C-UL, NYC
TEMPERATURE	155°F/68°C, 200°F/93°C, 286°F/141°C
SPRINKLER FINISH	Natural Brass
SIN	TY7151, TY7251
TECH DATA	TFP332



Sprinkler Wrench



ELO-231B

Pendent & Upright

- 5 mm bulb
- Extra large orifice sprinklers proven for storage occupancies through full-scale fire testing
- Designed to control high challenge fires with relatively low required pressures
- Can be used as intermediate level version by adding a guard and shield

K FACTOR	K=11.2 (161,3)
THREAD SIZE	1/2" NPT • 3/4" NPT
APPROVALS	UL, C-UL, FM, NYC
TEMPERATURE	155°F/68°C, 200°F/93°C, 286°F/141°C
SPRINKLER FINISH	Brass, Chrome Plated, Lead Coated, Wax Coated, Wax over Lead Coated
SIN	TY5151, TY5251, TY5851
TECH DATA	TFP342



Sprinkler Wrench



Always refer to the product's Technical Data Sheet for a complete description of all Listing and Approval criteria, design parameters, installation instructions, care and maintenance guidelines, and our limited warranty.

AUTOMATIC SPRINKLERS

STORAGE SPRINKLERS

ELO-231 FRB

Pendent & Upright

- 3 mm bulb
- Extra large orifice sprinklers proven for storage occupancies through full-scale fire testing
- Designed to control high challenge fires with relatively low required pressures
- Can be used as intermediate level version by adding a guard and shield

K FACTOR	K=11.2 (161,3)
THREAD SIZE	3/4" NPT
APPROVALS	UL, C-UL, FM, NYC
TEMPERATURE	155°F/68°C, 200°F/93°C, 286°F/141°C
SPRINKLER FINISH	Natural Brass, Chrome Plated
SIN	TY5131, TY5231
TECH DATA	TFP344



Sprinkler Wrench



ELO-231

Pendent & Upright

- Solder type
- Extra large orifice sprinklers proven for storage occupancies through full-scale fire testing
- Designed to control high challenge fires with relatively low required pressures
- Can be used as intermediate level version by adding a guard and shield

K FACTOR	K=11.2 (161,3)
THREAD SIZE	1/2" NPT • 3/4" NPT
APPROVALS	UL, C-UL, FM, NYC
TEMPERATURE	165°F/74°C, 212°F/100°C, 286°F/141°C
SPRINKLER FINISH	Natural Brass, Chrome Plated, Lead Coated, Wax Coated, Wax over Lead Coated
SIN	TY5111, TY5211, TY5811
TECH DATA	TFP340



Sprinkler Wrench



LD "LARGE DROP"

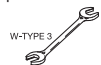
Upright, Control Mode Specific Application

- 5 mm bulb
- Control mode sprinkler
- Designed for the protection of high-piled storage
- Can provide a higher level of protection than standard spray sprinklers
- Can provide an advantage by eliminating in-rack sprinklers

K FACTOR	K=11.2 (161,3)
THREAD SIZE	3/4" NPT
APPROVALS	UL, C-UL, NYC
TEMPERATURE	155°F/68°C, 200°F/93°C, 286°F/141°C
SPRINKLER FINISH	Natural Brass
SIN	TY5153
TECH DATA	TFP335



Sprinkler Wrench



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AUTOMATIC SPRINKLERS

STORAGE SPRINKLERS

TY-B

Pendent & Upright, Intermediate Level

- 5 mm bulb
- Intermediate level (in-rack) with shield
- Factory assembled unit having an integral water shield
- Used where sprinkler guards are not required

K FACTOR	K=5.6 (80,6) K=8.0 (115,2)
THREAD SIZE	1/2" NPT • 3/4" NPT
APPROVALS	UL, C-UL, FM, NYC
TEMPERATURE	135°F/57°C, 155°F/68°C, 175°F/79°C, 200°F/93°C, 286°F/141°C, 360°F/182°C
SPRINKLER FINISH	Natural Brass, Lead Coated, Wax Coated, Wax over Lead Coated
SIN	TY3153, TY3251, TY4153, TY4251
TECH DATA	TFP351



Sprinkler Wrench

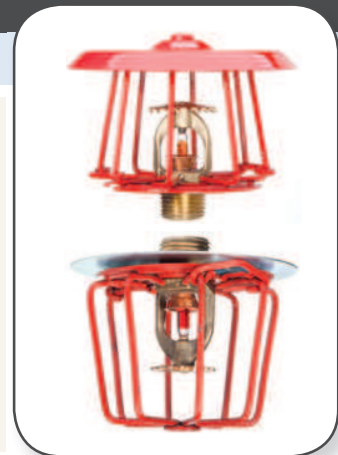


TY-B

Pendent & Upright, Intermediate Level

- 5 mm bulb
- Factory assembled unit having an integral water shield
- Intermediate Level Sprinklers are primarily designed for use in rack storage sprinkler systems where their thermally sensitive elements must be shielded from the water spray of higher elevation sprinklers that could operate earlier during a fire
- May also be used in other applications such as beneath open gridded catwalks

K FACTOR	K=5.6 (80,6)
THREAD SIZE	1/2" NPT
APPROVALS	UL, C-UL, FM
TEMPERATURE	135°F/57°C, 155°F/68°C, 175°F/79°C, 200°F/93°C, 286°F/141°C, 360°F/182°C
SPRINKLER FINISH	Natural Brass
GUARD FINISH	Red or Zinc
SIN	TY315, TY325
TECH DATA	TFP352



Sprinkler Wrench



TY-FRB

Pendent & Upright, Intermediate Level

- 3 mm bulb
- Intermediate level with shield
- Factory assembled unit having an integral water shield
- Used where sprinkler guards are not required

K FACTOR	K=5.6 (80,6) K=8.0 (115,2)
THREAD SIZE	1/2" NPT • 3/4" NPT
APPROVALS	UL, C-UL, FM, NYC
TEMPERATURE	135°F/57°C, 155°F/68°C, 175°F/79°C, 200°F/93°C, 286°F/141°C
SPRINKLER FINISH	Natural Brass, Lead Coated
SIN	TY3133, TY3231, TY4133, TY4231
TECH DATA	TFP356



Sprinkler Wrench



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AUTOMATIC SPRINKLERS

STORAGE SPRINKLERS

TY-FRB

Pendent & Upright, Intermediate Level

- 3 mm bulb
- Factory assembled unit having an integral water shield
- Intermediate Level Sprinklers are primarily designed for use in rack storage sprinkler systems where their thermally sensitive elements must be shielded from the water spray of higher elevation sprinklers that could operate earlier during a fire
- May also be used in other applications such as beneath open gridded catwalks

K FACTOR	K=5.6 (80,6)
THREAD SIZE	1/2" NPT
APPROVALS	UL, C-UL, FM
TEMPERATURE	135°F/57°C, 155°F/68°C, 175°F/79°C, 200°F/93°C, 286°F/141°C
SPRINKLER FINISH	Natural Brass
GUARD FINISH	Red or Zinc
SIN	TY313, TY323
TECH DATA	TFP357



Sprinkler Wrench
W-TYPE 6

TY-L

Pendent & Upright, Intermediate Level

- Solder type
- Intermediate level with shield
- Factory assembled unit having an integral water shield
- Used where sprinkler guards are not required

K FACTOR	K=5.6 (80,6) K=8.0 (115,2)
THREAD SIZE	1/2" NPT • 3/4" NPT
APPROVALS	UL, C-UL, FM
TEMPERATURE	165°F/74°C, 212°F/100°C, 280°F/138°C
SPRINKLER FINISH	Natural Brass
SIN	TY3113, TY3211, TY4113, TY4211
TECH DATA	TFP350



Sprinkler Wrench
W-TYPE 9

TY-FRL

Pendent & Upright, Intermediate Level

- Solder type
- Intermediate level with shield
- Factory assembled unit having an integral water shield
- Used where sprinkler guards are not required

K FACTOR	K=5.6 (80,6) K=8.0 (115,2)
THREAD SIZE	1/2" NPT • 3/4" NPT
APPROVALS	UL, C-UL, FM, NYC
TEMPERATURE	165°F/74°C
SPRINKLER FINISH	Natural Brass, Chrome Plated
SIN	TY3123, TY3221, TY4123, TY4221
TECH DATA	TFP355



Sprinkler Wrench
W-TYPE 9

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AUTOMATIC SPRINKLERS

STORAGE SPRINKLERS

SPRINKLER GUARDS

Model G1 & G4 Sprinkler Guards Model G1/S1 & G4/S3 Guards with Shields

- Designed for use with specific types of Series TY-B, TY-FRB, TY-L, and TY-FRL Sprinklers that may be located in areas that make them susceptible to mechanical or physical damage
- Rugged guard design to minimize possible damage to sprinklers
- Shields are for use in storage racks or beneath grated mezzanine, or other areas requiring the sprinklers to be shielded from possible discharge from sprinklers above
- Can be used with either 1/2" or 3/4" NPT sprinklers

APPROVALS	UL, C-UL, FM
FINISHES	Red Painted, Zinc Chromate
TECH DATA	TFP780



G1



G4/S3 with Shield



S1



G4

Model G2 Sprinkler Guard, Model WS-2 Shield, and Model WSG-2 Sprinkler Guard with Shield

- Designed for use with Series ELO-231, ELO-231B, or ELO-231FRB Sprinklers that may be located in areas that make them susceptible to mechanical or physical damage
- Rugged guard design to minimize possible damage to sprinklers
- Shields are for use in storage racks or beneath grated mezzanine, or other areas requiring the sprinklers to be shielded from possible discharge from sprinklers above
- Can be used with either 1/2" or 3/4" NPT sprinklers

APPROVALS	UL, C-UL, FM
FINISHES	Red Painted, Zinc Coated
TECH DATA	TFP782



WSG-2 with Shield



G2



WS-2 Shield

Always refer to the product's Technical Data Sheet for a complete description of all Listing and Approval criteria, design parameters, installation instructions, care and maintenance guidelines, and our limited warranty.

RAPID RESPONSE® SPRINKLERS



APPLICATIONS:

- Single Family Homes
- Apartments
- Student Housing
- Hotels
- Beamed Ceilings
- Sloped Ceilings



- Developed specifically for residential occupancies
- The most complete system on the market today from a single manufacturer
- Features BlazeMaster® CPVC pipe and fittings, making installation quick, easy, flexible, and affordable
- Tyco's exclusive ten-year limited warranty lets you install with confidence
- Product line meets all NFPA standards
- Components are all UL listed for residential installations

Residential Sprinklers offer the optimum design and flow characteristics for all residential applications. With k-factors as low as 4.2, the flow requirements are the lowest

in the industry. Other advantages are listings for beam ceilings and for sloped ceilings. These unique features avoid obstruction to the sprinkler's discharge pattern without adding additional sprinklers.



We can match any Sherwin Williams color for sprinklers with this icon.

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AUTOMATIC SPRINKLERS

RAPID RESPONSE™ SPRINKLERS



LFII

Pendent & Recessed Pendent

- 3 mm bulb type
- Intended for use in the following scenarios:
 - wet and dry pipe residential sprinkler systems for one/two-family dwellings and mobile homes per NFPA 13D
 - wet and dry pipe residential occupancies up to and including four stories in height per NFPA 13R
 - wet and dry pipe sprinkler systems for the residential portions of any occupancy per NFPA 13
- Approved for special applications with beamed ceilings

K FACTOR	K=4.9 (70,6)
THREAD SIZE	1/2" NPT
APPROVALS	UL, C-UL, NSF
TEMPERATURE	155°F/68°C, 175°F/79°C
ESCUTCHEON	Style 20
SPRINKLER FINISH	Pure White, Signal White, Chrome Plated, Natural Brass
SIN	TY2234
TECH DATA	TFP400



Pendent & Recessed Pendent

- 3 mm bulb type
- Intended for use in the following scenarios:
 - wet pipe residential sprinkler systems for one/two-family dwellings and mobile homes per NFPA 13D
 - wet pipe residential occupancies up to and including four stories in height per NFPA 13R
 - wet pipe sprinkler systems for the residential portions of any occupancy per NFPA 13

K FACTOR	K=3.0 (43,2)
THREAD SIZE	1/2" NPT
APPROVALS	UL, C-UL, NSF
TEMPERATURE	155°F/68°C, 175°F/79°C
ESCUTCHEON	Style 20
SPRINKLER FINISH	Signal White, Chrome Plated, Natural Brass
SIN	TY1234
TECH DATA	TFP402



Horizontal & Recessed Horizontal Sidewall

- 3 mm bulb type
- Intended for use in the following scenarios:
 - wet pipe residential sprinkler systems for one/two-family dwellings and mobile homes per NFPA 13D,
 - wet pipe residential occupancies up to and including four stories in height per NFPA 13R
 - wet pipe sprinkler systems for the residential portions of any occupancy per NFPA 13

K FACTOR	K=4.4 (63,4)
THREAD SIZE	1/2" NPT
APPROVALS	UL, C-UL, NSF
TEMPERATURE	155°F/68°C, 175°F/79°C
ESCUTCHEON	Style 20
SPRINKLER FINISH	Signal White, Chrome Plated, Natural Brass
SIN	TY2334
TECH DATA	TFP412



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LFII

Horizontal & Recessed Horizontal Sidewall

- 3 mm bulb type
- Intended for use in the following scenarios:
 - wet and dry pipe residential sprinkler systems for one/two-family dwellings and mobile homes per NFPA 13D
 - wet and dry pipe residential occupancies up to and including four stories in height per NFPA 13R
 - wet and dry pipe sprinkler systems for the residential portions of any occupancy per NFPA 13

K FACTOR	K=4.2 (60,5)
THREAD SIZE	1/2" NPT
APPROVALS	UL, C-UL, NYC, NSF
TEMPERATURE	155°F/68°C, 175°F/79°C
ESCUTCHEON	Style 20
SPRINKLER FINISH	Pure White, Signal White, Chrome Plated, Natural Brass
SIN	TY1334
TECH DATA	TFP410



Sprinkler Wrenches



Flat Plate Concealed Pendent

- Solder type
- Provides 1/4" inch (6 mm) vertical adjustment. This adjustment provides flexibility when cutting fixed sprinkler drops.
- Cover plate conceals sprinkler components above the ceiling
- Intended for use in the following scenarios:
 - wet and dry pipe residential sprinkler systems for one/two-family dwellings and mobile homes per NFPA 13D
 - wet and dry pipe residential occupancies up to and including four stories in height per NFPA 13R
 - wet and dry pipe sprinkler systems for the residential portions of any occupancy per NFPA 13

K FACTOR	K=4.9 (70,6)
THREAD SIZE	1/2" NPT
APPROVALS	UL, C-UL, NYC, NSF
TEMPERATURE	160°F/71°C - Sprinkler 139°F/59°C - Cover Plate
COVER PLATE FINISH	Ivory, Beige, Pure White, Signal White, Grey White, Brown, Black, Brushed Brass, Brushed Chrome, Custom
SIN	TY3596
TECH DATA	TFP442



Sprinkler Wrench



Flat Plate Concealed Pendent

- Solder type
- Can be used for horizontal and sloped ceilings
- Provides 1/2" inch (13 mm) vertical adjustment. This adjustment provides flexibility when cutting fixed sprinkler drops.
- Cover plate conceals sprinkler components above the ceiling
- Intended for use in the following scenarios:
 - wet and dry pipe residential sprinkler systems for one/two-family dwellings and mobile homes per NFPA 13D
 - wet and dry pipe residential occupancies up to and including four stories in height per NFPA 13R
 - wet and dry pipe sprinkler systems for the residential portions of any occupancy per NFPA 13

K FACTOR	K=4.9 (70,6)
THREAD SIZE	1/2" NPT
APPROVALS	UL, C-UL
TEMPERATURE	160°F/71°C - Sprinkler 139°F/59°C - Cover Plate
COVER PLATE FINISH	Ivory, Beige, Pure White, Signal White, Grey White, Brown, Black, Brushed Brass, Brushed Chrome, Custom
SIN	TY2524
TECH DATA	TFP443



Sprinkler Wrench



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AUTOMATIC SPRINKLERS

RAPID RESPONSE™ SPRINKLERS



LFII

Domed Plate Concealed Pendent

- 3 mm bulb type
- Can be used for horizontal and sloped ceilings
- Cover plate conceals sprinkler components above the ceiling
- Intended for use in the following scenarios:
 - wet and dry pipe residential sprinkler systems for one/two-family dwellings and mobile homes per NFPA 13D
 - wet and dry pipe residential occupancies up to and including four stories in height per NFPA 13R
 - wet and dry pipe sprinkler systems for the residential portions of any occupancy per NFPA 13

K FACTOR	K=4.9 (70,6)
THREAD SIZE	1/2" NPT
APPROVALS	UL, C-UL, NYC
TEMPERATURE	155°F/68°C - Sprinkler 139°F/59°C - Cover Plate
ESCUTCHEON	Style 20
COVER PLATE FINISH	Pure White, Signal White, Chrome, Custom
SIN	TY2234
TECH DATA	TFP450



Sprinkler Wrench



Flush Pendent

- Solder type
- Intended for use in the following scenarios:
 - wet and dry pipe residential sprinkler systems for one/two-family dwellings and mobile homes per NFPA 13D
 - wet and dry pipe residential occupancies up to and including four stories in height per NFPA 13R
 - wet and dry pipe sprinkler systems for the residential portions of any occupancy per NFPA 13
- Approved for special applications with beamed ceilings

K FACTOR	K=4.2 (60,5)
THREAD SIZE	1/2" NPT
APPROVALS	UL, C-UL
TEMPERATURE	162°F/72°C
ESCUTCHEON FINISH	Signal White, Jet Black, Chrome Plated, Antique Brass
SPRINKLER FINISH	Signal White, Jet Black, Chrome Plated, Antique Brass
SIN	TY2284
TECH DATA	TFP420



Sprinkler Wrenches



Flush Horizontal Sidewall

- Solder type
- Intended for use in the following scenarios:
 - wet pipe residential sprinkler systems for one/two-family dwellings and mobile homes per NFPA 13D
 - wet pipe residential occupancies up to and including four stories in height per NFPA 13R
 - wet pipe sprinkler systems for the residential portions of any occupancy per NFPA 13

K FACTOR	K=4.2 (60,5)
THREAD SIZE	1/2" NPT
APPROVALS	UL, C-UL
TEMPERATURE	162°F/72°C
ESCUTCHEON FINISH	Signal White, Chrome, Jet Black
SPRINKLER FINISH	Signal White, Chrome, Jet Black
SIN	TY2384
TECH DATA	TFP425



Sprinkler Wrenches



Always refer to the product's Technical Data Sheet for a complete description of all Listing and Approval criteria, design parameters, installation instructions, care and maintenance guidelines, and our limited warranty.

LFII

Dry Type Recessed Pendent

- 3 mm bulb type
- Where sprinklers are required on dry pipe systems that are exposed to freezing temperatures, or where sprinklers are seasonally drained to avoid freezing
- Offer the features of non-water filled pipe in addition to not having to increase the number of design sprinklers (hydraulic design area) for systems designed to NFPA 13, 13D, or 13R
- Intended for use in the following residential sprinkler systems scenarios:
 - one/two-family dwellings and mobile homes per NFPA 13D,
 - residential occupancies up to and including four stories in height per NFPA 13R
 - the residential portions of any occupancy per NFPA 13

K FACTOR	K=4.9 (70,6)
THREAD SIZE	1" NPT or ISO 7-R1
APPROVALS	UL
TEMPERATURE	155°F/68°C, 175°F/79°C (wet pipe only)
ESCUTCHEON FINISH	Signal White, Chrome Plated, Natural Brass
SPRINKLER FINISH	Signal White, Chrome Plated, Natural Brass
SIN	TY2235
TECH DATA	TFP460



Sprinkler Wrench
W-TYPE 7

Dry Type Recessed Horizontal Sidewall

- 3 mm bulb type
- Where sprinklers are required on dry pipe systems that are exposed to freezing temperatures, or where sprinklers are seasonally drained to avoid freezing
- Offer the features of non-water filled pipe in addition to not having to increase the number of design sprinklers (hydraulic design area) for systems designed to NFPA 13, 13D, or 13R
- Intended for use in the following residential sprinkler systems scenarios:
 - one/two-family dwellings and mobile homes per NFPA 13D,
 - residential occupancies up to and including four stories in height per NFPA 13R
 - the residential portions of any occupancy per NFPA 13

K FACTOR	K=4.4 (63,4)
THREAD SIZE	1" NPT or ISO 7-R1
APPROVALS	UL
TEMPERATURE	155°F/68°C
ESCUTCHEON FINISH	Signal White, Chrome Plated, Natural Brass
SPRINKLER FINISH	Signal White, Chrome Plated, Natural Brass
SIN	TY2335
TECH DATA	TFP461



Sprinkler Wrenches
W-TYPE 6 W-TYPE 7 (Recessed)

AUTOMATIC SPRINKLERS

RAPID RESPONSE™ SPRINKLERS



LFII • NFPA 13 OPTIMIZED SPRINKLERS

The large orifice 6.9 K, 5.8 K and 5.6 K sprinklers are primarily intended for residential use where there is a 0.1 gpm/sq. ft. density NFPA 13 design requirement, and are generally used for installations in excess of four stories. They are optimized for residential applications where this higher water-flow demand is required, and can meet those requirements with less pressure and smaller pipe sizes.

Pendent, Recessed Pendent & Domed Concealed

- 3 mm bulb type
- Intended for use in the following scenarios:
 - wet pipe residential sprinkler systems for one/two-family dwellings and mobile homes per NFPA 13D
 - wet pipe residential occupancies up to and including four stories in height per NFPA 13R
 - wet pipe sprinkler systems for the residential portions of any occupancy per NFPA 13



K FACTOR	K=6.9 (99,4)
THREAD SIZE	3/4" NPT
APPROVALS	UL, C-UL, FM, NYC, NSF
TEMPERATURE	155°F/68°C, 175°F/79°C, 139°F/59°C - Cover Plate
ESCUTCHEON	Style 30
ESCUTCHEON & SPRINKLER FINISH	Natural Brass, Chrome Plated, Pure or Signal White
COVER PLATE FINISH	Grey White, Pure White, Signal White, Chrome, Custom
SIN	TY4234
TECH DATA	TFP408



Sprinkler Wrenches
W-TYPE 6 W-TYPE 7 (Recessed)

Horizontal & Recessed Horizontal Sidewall Sprinklers

- 3 mm bulb type
- Can be used for horizontal and sloped ceilings
- Intended for use in the following scenarios:
 - wet pipe residential sprinkler systems for one/two-family dwellings and mobile homes per NFPA 13D
 - wet pipe residential occupancies up to and including four stories in height per NFPA 13R
 - wet pipe sprinkler systems for the residential portions of any occupancy per NFPA 13

K FACTOR	K=5.8 (83,5)
THREAD SIZE	1/2" NPT
APPROVALS	UL, C-UL, FM, NSF
TEMPERATURE	155°F/68°C, 175°F/79°C
ESCUTCHEON	Style 20
SPRINKLER FINISH	Signal White, Chrome Plated, Natural Brass
SIN	TY4334
TECH DATA	TFP417



Sprinkler Wrenches
W-TYPE 6 W-TYPE 7 (Recessed)

Horizontal & Recessed Horizontal Sidewall

- 3 mm bulb type
- Can be used for horizontal and sloped ceilings
- Intended for use in the following scenarios:
 - wet pipe residential sprinkler systems for one/two-family dwellings and mobile homes per NFPA 13D
 - wet pipe residential occupancies up to and including four stories in height per NFPA 13R
 - wet pipe sprinkler systems for the residential portions of any occupancy per NFPA 13

K FACTOR	K=5.6 (80,6)
THREAD SIZE	1/2" NPT
APPROVALS	UL, C-UL, NSF
TEMPERATURE	155°F/68°C, 175°F/79°C
ESCUTCHEON	Style 20
SPRINKLER FINISH	Natural Brass, Chrome Plated, Pure White, Signal White
SIN	TY3334
TECH DATA	TFP415



Sprinkler Wrenches
W-TYPE 6 W-TYPE 7 (Recessed)

Always refer to the product's Technical Data Sheet for a complete description of all Listing and Approval criteria, design parameters, installation instructions, care and maintenance guidelines, and our limited warranty.

DRY SPRINKLERS



APPLICATIONS:

- *Unheated Warehouses*
- *Freezing Conditions*
- *Loading Docks*
- *Covered Exterior Platforms*

Dry Sprinklers have been specifically designed for areas in which the sprinkler may be subjected to freezing conditions. These sprinklers have been developed for use in all standard applications, as well as multiple unique scenarios. Tyco Dry Sprinklers are available in both quick and standard response, and come in a variety of finishes. These features, and the advanced engineering in the development of these sprinklers, offer the industry the most complete line of dry sprinklers available. Most models are listed in lengths up to 4'-0". The extended escutcheon option has up to 3" of adjustment.

Always refer to the product's Technical Data Sheet for a complete description of all Listing and Approval criteria, design parameters, installation instructions, care and maintenance guidelines, and our limited warranty.

AUTOMATIC SPRINKLERS

DRY SPRINKLERS

DS-1

Pendent, Upright & Horizontal Sidewall

- Standard coverage
- All hazards (light hazards, horizontal sidewall)
- 5 mm bulb
- Lengths up to 48" (1220 mm)
- Designed for use in applications where sprinklers and/or connecting piping may be exposed to freezing conditions, or the sprinkler system is seasonally drained
- Special assembly provides a seal at the main pipe to prevent water from entering the assembly until the sprinkler operates
- Designed for use in applications requiring dry sprinklers, or where building construction or aesthetic considerations make the installation of dry horizontal sidewall sprinklers more desirable than the dry pendent type

K FACTOR	K=5.6 (80,6)
INLET THREAD CONNECTION	1" NPT (Standard Order) ISO 7-R1
APPROVALS	Upright=UL, C-UL, FM, NYC • Pendent & Horizontal Sidewall= UL, C-UL, FM, NYC, LPCB
TEMPERATURE	135°F/57°C, 155°F/68°C, 175°F/79°C, 200°F/93°C, 286°F/141°C, 360°F/182°C
ESCUTCHEON FINISH	Signal White, Chrome Plated, Brass Plated
SPRINKLER FINISH	Natural Brass, Chrome Plated, Signal White
SIN	TY3255, TY3155, TY3355
TECH DATA	TFP500



Sprinkler Wrench



Pendent, Upright & Horizontal Sidewall

- Light hazard/Ordinary hazard
- 3 mm bulb
- Lengths to 48" (1220 mm)
- Designed for use in applications where sprinklers and/or connecting piping may be exposed to freezing conditions, or the sprinkler system is seasonally drained
- Special assembly provides a seal at the main pipe to prevent water from entering the assembly until the sprinkler operates
- Designed for use in applications requiring dry sprinklers, or where building construction or aesthetic considerations make the installation of dry horizontal sidewall sprinklers more desirable than the dry pendent type

K FACTOR	K=5.6 (80,6)
INLET THREAD CONNECTION	3/4" or 1" NPT (Std. Order) ISO 7-R1
APPROVALS	3/4"= UL, C-UL • 1"= UL, C-UL, FM, NYC
TEMPERATURE	135°F/57°C, 155°F/68°C, 175°F/79°C, 200°F/93°C, 286°F/141°C
ESCUTCHEON FINISH	Signal White, Chrome Plated, Brass Plated
SPRINKLER FINISH	Natural Brass, Chrome Plated, Signal White
SIN	TY3235, TY3135, TY3335 TY3935, TY3735
TECH DATA	TFP510



Sprinkler Wrench



AUTOMATIC SPRINKLERS

DRY SPRINKLERS

DS-1

Extended Coverage Horizontal Sidewall

- EC light hazard
- 3mm and 5mm Glass Bulb
- Lengths up to 48" (1220 mm)
- Designed for use in light hazard occupancy applications requiring a dry sprinkler to cover areas up to:
16' x 20' (4,9 m x 6,1 m) or
18' x 16' (5,5 m x 4,9 m)
- Special assembly provides a seal at the main pipe to prevent water from entering the assembly until the sprinkler operates

K FACTOR	K=5.6 (80,6)
INLET THREAD CONNECTION	1" NPT (Standard Order) ISO 7-R1
TEMPERATURE	135°F/57°C, 155°F/68°C
APPROVALS	UL, C-UL, NYC
ESCUTCHEON FINISH	Signal White, Chrome Plated, Brass Plated
SPRINKLER FINISH	Natural Brass, Chrome Plated, Signal White
SIN	TY3338, TY3358
TECH DATA	TFP520



Sprinkler Wrench



DS-1 STAINLESS STEEL

Pendent

- 3mm and 5mm Glass Bulb
- Quick and Standard Response
- The stainless-steel construction of these sprinklers extends the life of a sprinkler beyond that of traditional copper alloy sprinklers exposed to corrosive atmospheres
- Wet-pipe, dry-pipe, or preaction installations
- Designed for use in applications where sprinklers and/or connecting piping may be exposed to freezing conditions, or the sprinkler system is seasonally drained
- Special assembly provides a seal at the main pipe to prevent water from entering the assembly until the sprinkler operates

K FACTOR	K=5.6 (80,6)
INLET THREAD CONNECTION	1" NPT (Standard Order) ISO 7-R1
APPROVALS	UL, C-UL, LPCB, CE
TEMPERATURE	135°F/57°C, 155°F/68°C, 175°F/79°C, 200°F/93°C, 286°F/141°C, 360°F/182°C
ESCUTCHEON FINISH	Stainless Steel
SPRINKLER FINISH	Stainless Steel
SIN	TY3230, TY3250
TECH DATA	TFP560



Sprinkler Wrench



Horizontal Sidewall, and Extended Coverage Horizontal Sidewall

- 3mm and 5mm Glass Bulb
- Quick and Standard Response
- The stainless-steel construction of these sprinklers extends the life of a sprinkler beyond that of traditional copper alloy sprinklers exposed to corrosive atmospheres
- Wet-pipe, dry-pipe, or preaction installations
- Extended coverages protecting areas up to 16' x 20" (4,9 x 6,1m)
- Designed for use in applications where sprinklers and/or connecting piping may be exposed to freezing conditions, or the sprinkler system is seasonally drained
- Special assembly provides a seal at the main pipe to prevent water from entering the assembly until the sprinkler operates

K FACTOR	K=5.6 (80,6)
INLET THREAD CONNECTION	1" NPT (Standard Order) ISO 7-R1
APPROVALS	UL, C-UL
TEMPERATURE	135°F/57°C, 155°F/68°C, 175°F/79°C, 200°F/93°C, 286°F/141°C, 360°F/182°C
ESCUTCHEON FINISH	Stainless Steel
SPRINKLER FINISH	Stainless Steel
SIN	TY3337, TY3357, TY3339
TECH DATA	TFP560



Sprinkler Wrench



Always refer to the product's Technical Data Sheet for a complete description of all Listing and Approval criteria, design parameters, installation instructions, care and maintenance guidelines, and our limited warranty.

AUTOMATIC SPRINKLERS

DRY SPRINKLERS

DS-2

Pendent

- Standard coverage
- All hazard (standard response)
- Light hazard/Ordinary hazard (quick response)
- 3 mm and 5 mm bulb
- Extra large orifice
- Lengths to 48" (1220 mm)
- Designed for use in applications where sprinklers and/or connecting piping may be exposed to freezing conditions, or the sprinkler system is seasonally drained
- Special assembly provides a seal at the main pipe to prevent water from entering the sprinkler assembly until the sprinkler operates

K FACTOR	K=11.2 (161,3)
INLET THREAD CONNECTION	1" NPT (Standard Order) ISO 7-R1
APPROVALS	UL, C-UL, NYC
TEMPERATURE	135°F/57°C, 155°F/68°C, 175°F/79°C, 200°F/93°C, 286°F/141°C
ESCUTCHEON FINISH	Signal White, Chrome Plated, Brass Plated
SPRINKLER FINISH	Natural Brass, Chrome Plated, Signal White
SIN	TY5255, TY5235
TECH DATA	TFP530



Sprinkler Wrench

W-TYPE 17 

Extended Coverage Pendent

- EC light hazard & ordinary hazard
- 3 mm bulb
- Extra large orifice
- Lengths to 48" (1220 mm)
- Designed for use in applications where sprinklers and/or connecting piping may be exposed to freezing conditions, or the sprinkler system is seasonally drained
- Special assembly provides a seal at the main pipe to prevent water from entering the assembly until the sprinkler operates

K FACTOR	K=11.2 (161,3)
INLET THREAD CONNECTION	1" NPT (Standard Order) ISO 7-R1
APPROVALS	UL, C-UL, NYC
TEMPERATURE	135°F/57°C, 155°F/68°C, 175°F/79°C, 200°F/93°C, 286°F/141°C
ESCUTCHEON FINISH	Signal White, Chrome Plated, Brass Plated
SPRINKLER FINISH	Natural Brass, Chrome Plated, Signal White
SIN	TY5238
TECH DATA	TFP540



Sprinkler Wrench

W-TYPE 17 

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AUTOMATIC SPRINKLERS

DRY SPRINKLERS

DS-C

Concealed Pendent

- Standard coverage
- All hazard (standard response)
- Light hazard/ordinary hazard (quick response)
- 3 mm and 5 mm bulb
- Lengths to 48" (1220 mm)
- Designed for use in applications where sprinklers and/or connecting piping may be exposed to freezing conditions, or the sprinkler system is seasonally drained
- Special assembly provides a seal at the main pipe to prevent water from entering the sprinkler assembly until the sprinkler operates

K FACTOR	K=5.6 (80,6)
INLET THREAD CONNECTION	1" NPT (Standard Order) ISO 7-R1
APPROVALS	UL, C-UL, NYC
TEMPERATURE	155°F/68°C - Sprinkler 139°F/59°C - Cover Plate, 200°F/93°C - Sprinkler 165°F/74°C - Cover Plate
COVER PLATE FINISH	Grey White, Brass, Pure White, Signal White, Jet Black, Chrome, Custom
SIN	TY3535, TY3555
TECH DATA	TFP515



Sprinkler Wrench

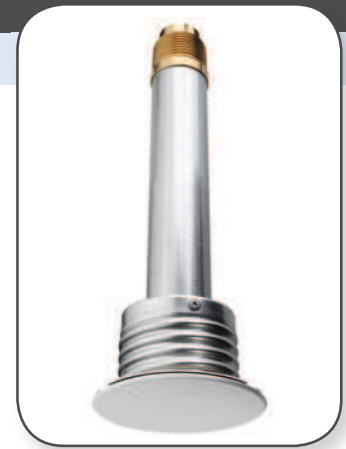


DS-ECC

Extended Coverage Concealed Pendent

- EC light hazard/EC ordinary hazard
- 3 mm bulb
- Lengths to 48" (1220 mm)
- Designed for use in applications where sprinklers and/or connecting piping may be exposed to freezing conditions, or the sprinkler system is seasonally drained
- Special assembly provides a seal at the main pipe to prevent water from entering the sprinkler assembly until the sprinkler operates

K FACTOR	K=5.6 (80,6)
INLET THREAD CONNECTION	1" NPT (Standard Order) ISO 7-R1
APPROVALS	UL, C-UL, NYC
TEMPERATURE	155°F/68°C - Sprinkler 139°F/59°C - Cover Plate, 200°F/93°C - Sprinkler 165°F/74°C - Cover Plate
COVER PLATE FINISH	Grey White, Brass, Pure White, Signal White, Jet Black, Chrome, Custom
SIN	TY3539
TECH DATA	TFP518



Sprinkler Wrench



Always refer to the product's Technical Data Sheet for a complete description of all Listing and Approval criteria, design parameters, installation instructions, care and maintenance guidelines, and our limited warranty.

AUTOMATIC SPRINKLERS

DRY SPRINKLERS

DS-3

Extended Coverage Horizontal Sidewall

- EC ordinary hazard
- 3 mm bulb
- Lengths to 48" (1220 mm)
- Designed for use in applications where sprinklers and/or connecting piping may be exposed to freezing conditions, or the sprinkler system is seasonally drained
- Ideal for Exterior Loading Docks and Covered Areas and can eliminate the need for dry or anti-freeze systems

K FACTOR	K=11.2 (161,3)
INLET THREAD CONNECTION	1" NPT (Standard Order) ISO 7-R1
APPROVALS	UL, C-UL
TEMPERATURE	155°F/68°C, 200°F/93°C
ESCUTCHEON FINISH	Signal White, Chrome Plated, Brass Plated
SPRINKLER FINISH	Natural Brass, Chrome Plated, Signal White
SIN	TY5339
TECH DATA	TFP550



Sprinkler Wrench



DSB-2

Dry Sprinkler Boot (For Use With TFP Dry Type Sprinklers)

- Helps to close the air gap created by the clearance hole through a wall or ceiling through which the dry type sprinkler has penetrated
- Helps to stop the air exchange between the inside and outside of the freezer (or any other type of similar construction) to help prevent transfer of moist air into the freezer space

INCLUDES	1 Boot, 2 Strap Ties, and 1/3 oz. of Adhesive <i>(quantity of adhesive is sufficient for installing 1 Boot)</i>
TECH DATA	TFP591

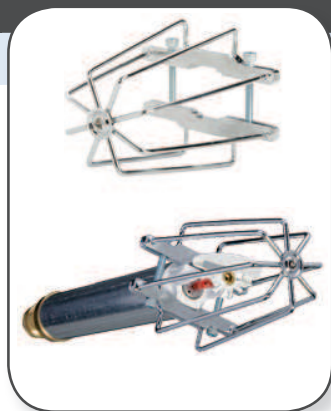


G5

DS-1 Dry Sprinkler Guards

- The TYCO Model G5 Sprinkler Guards are designed to be used in areas that make the sprinklers susceptible to mechanical or physical damage
- For use with Series DS-1 Dry Sprinklers standard, deep and no escutcheons

APPROVALS	UL
FINISH	Zinc Chromate
TECH DATA	TFP783



Always refer to the product's Technical Data Sheet for a complete description of all Listing and Approval criteria, design parameters, installation instructions, care and maintenance guidelines, and our limited warranty.

SPECIAL PURPOSE SPRINKLERS



**TYCO® ILLUSION™
CASINO SPRINKLERS**

The Tyco® ILLUSION™ 11.2 K-factor sprinkler is designed specifically for Las Vegas' standards. A fast response, extra large orifice concealed pendant sprinkler, the ILLUSION™ is perfect for casino atriums, exhibit halls and retail areas with over 25' ceilings heights; blending in so well they give the illusion they aren't even there.

Special Purpose Sprinklers are intended for use in specific applications, including the protection of combustibles concealed spaces and areas subject to corrosion. Also, these installations may need consideration for more water at lower pressures, or more water over a greater area.

APPLICATIONS:

- *Attic Spaces*
- *Retail Windows*
- *High Security Institutions*
- *Minimal Water Damage*
- *Conditions*
- *High Temperature Conditions*
- *Corrosive Conditions*

Always refer to the product's Technical Data Sheet for a complete description of all Listing and Approval criteria, design parameters, installation instructions, care and maintenance guidelines, and our limited warranty.

AUTOMATIC SPRINKLERS

SPECIAL PURPOSE SPRINKLERS

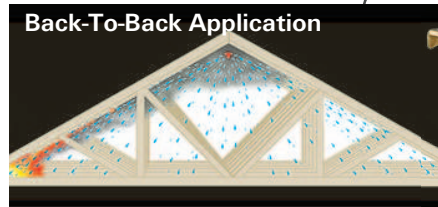
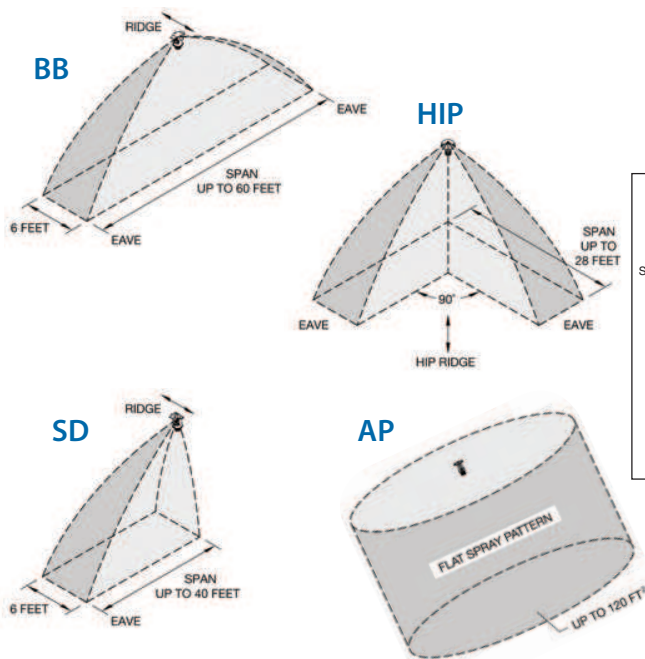
ATTIC

BB (Back-to-Back), SD (Single Directional), HIP, & AP (Attic Plus)

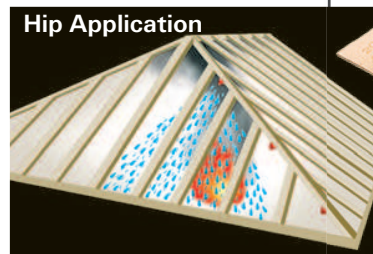
- "Specific Application Sprinklers for Protecting Attics"
- 3 mm bulb or solder type
- Wet or dry pipe systems
- Provides a tested method of protecting an attic
- Provides a specific cost advantage by reducing the amount of piping required
- Cover attics to 60'-0" wide with a single line of piping, eliminating the need for as many as five branch lines
- Saves up to 80% of the piping that would be required with standard sprinklers while providing a higher level of protection

K FACTOR	K=4.2 (60,5), K=5.6 (80,60), K=8.0 (115,2)
THREAD SIZE	1/2" NPT 3/4" NPT
APPROVALS	UL, ULC,
TEMPERATURE	200°F/93°C, 212°F/100°C
SPRINKLER FINISH	Natural Brass
SIN	TY4180, TY4181, TY4182 TY3180, TY3181, TY3182 TY2180, TY2181, TY2182 TY3183, TY3184, TY3185 TY3187, TY3190, TY2190
TECH DATA	TFP610

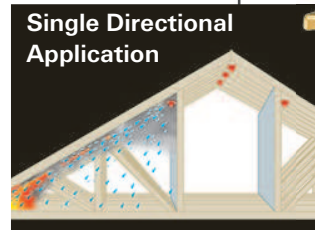
Spray Patterns



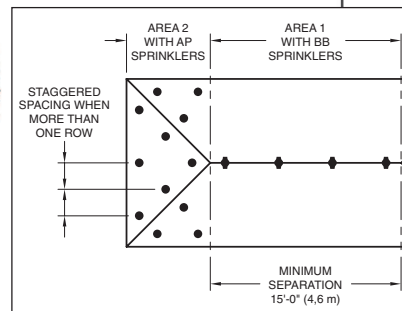
Back-To-Back



Hip



Single Directional



Attic Plus



Always refer to the product's Technical Data Sheet for a complete description of all Listing and Approval criteria, design parameters, installation instructions, care and maintenance guidelines, and our limited warranty.

AUTOMATIC SPRINKLERS

SPECIAL PURPOSE SPRINKLERS

CC1

Combustible Concealed Space Sprinklers™, Upright

- 3 mm bulb
- Specific application sprinklers
- Provides protection of light hazard combustible, as well as non-combustible, concealed spaces requiring sprinkler protection
- Meets NFPA® Requirements for Specialty Listed Sprinklers in Combustible Concealed Spaces
- Allows the use of BlazeMaster® CPVC pipe in combustible concealed areas with the benefit of superior sprinkler protection for Wood truss spaces

K FACTOR	K=2.8 (40,3)
THREAD SIZE	1/2" NPT
APPROVALS	UL, C-UL
TEMPERATURE	175°F/79°C
SPRINKLER FINISH	Natural Brass
SIN	TY1189
TECH DATA	TFP630



Sprinkler Wrench
W-TYPE 20

CC2

Combustible Concealed Space Sprinklers™, Upright

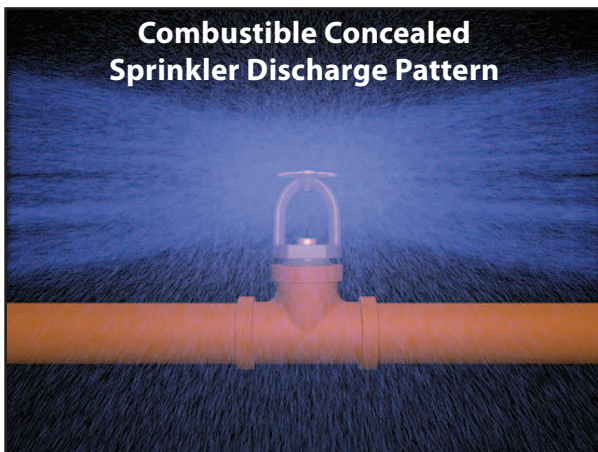
- 3 mm bulb
- Specific application sprinklers
- Provides protection of specific light hazard combustible, as well as non-combustible, concealed spaces requiring sprinkler protection
- The CC2 Sprinklers comply with the criterion for the protection of combustible concealed spaces as described in NFPA 13.
- Allows the use of BlazeMaster® CPVC pipe in combustible concealed areas with the benefit of superior sprinkler protection for Wood truss spaces
- Can be used on steel dry pipe sprinkler systems

K FACTOR	K=4.2 (60,5) K=5.6 (80,6)
THREAD SIZE	1/2" NPT
APPROVALS	UL
TEMPERATURE	175°F/79°C
SPRINKLER FINISH	Natural Brass
SIN	TY2189, TY3189
TECH DATA	TFP632

- Increased spacing from 10 ft. (3,1 m) to 12 ft. (3,7 m)
- Increased coverage area from 100 ft² (9,3 m²) to 144 ft² (13,4 m²)



Sprinkler Wrench
W-TYPE 6



Combustible Concealed Sprinkler Discharge Pattern



Standard Spray Sprinkler Discharge Pattern

Always refer to the product's Technical Data Sheet for a complete description of all Listing and Approval criteria, design parameters, installation instructions, care and maintenance guidelines, and our limited warranty.

AUTOMATIC SPRINKLERS

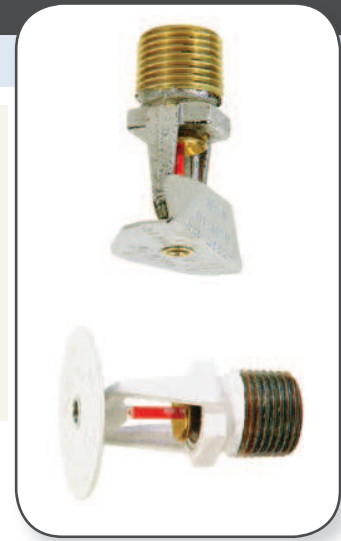
SPECIAL PURPOSE SPRINKLERS

WS™

Window Sprinklers, Horizontal & Pendent Vertical Sidewall

- 3 mm bulb
- Specific application sprinklers
- Only UL tested sprinklers that can protect glazing in a wall or window and allow it to maintain its mechanical equivalent rating up to two hours
- First sprinklers to be UL/C-UL Listed, ICC-ES, and ULC Listed & Approved for maintaining a rated assembly
- Pendent allows installation farther away from the glass than the sidewall
- Sidewall permits the window mullion to act as a baffle, allowing the sprinklers to be spaced closely together, if necessary
- Provides the only UL tested option when seeking wall fire ratings when using tempered or heat strengthened glass

K FACTOR	K=5.6 (80,6)
THREAD SIZE	1/2" NPT
APPROVALS	UL, C-UL, ULC, NYC, ICC
TEMPERATURE	155°F/68°C, 200°F/93°C
SPRINKLER FINISH	Signal White Polyester, Chrome Plated, Natural Brass
SIN	TY3388, TY3488
TECH DATA	TFP620



Sprinkler Wrench
W-TYPE 20

ILLUSION™

Concealed Standard Coverage Pendent Sprinklers

- Extra large orifice/Special hazard
- Coverage per NFPA 13
- Available with optional dust and air seal
- The ILLUSION is concealed in an enclosed escutcheon plate with flat cover for use in those applications where architecturally sensitive areas such as casinos, hotel lobbies, office buildings, churches and restaurants

K FACTOR	K=11.2 (161,3)
THREAD SIZE	3/4" NPT
APPROVALS	UL, C-UL
TEMPERATURE	160°F/71°C, - Sprinkler 139°F/59°C - Cover Plate, 212°F/100°C - Sprinkler 165°F/74°C - Cover Plate
COVER PLATE FINISH	Brush Chrome, Brass, Signal White, Grey White, Pure White, Custom
SIN	TY5521
TECH DATA	TFP184



Sprinkler Wrench
W-TYPE 18

ISSUE D QUARTZOID®

High Temperature, Upright & Pendent

- Standard coverage
- All hazard
- 11 mm bulb
- Extra-high and ultra-high temperature ratings and corrosion resistant coatings
- Temperature Ratings to 650°F (343°C) available

K FACTOR	K=5.6 (80,6) K=8.0 (115,2)
THREAD SIZE	1/2" NPT • 3/4" NPT
APPROVALS	UL, C-UL, FM
TEMPERATURE	400°F/204°C, 500°F/260°C, 650°F/343°C (K=5.6 only)
SPRINKLER FINISH	Natural Brass, Chrome Plated, Lead Coated
SIN	TY3191, TY3296, TY4191, TY4292
TECH DATA	TFP690



Sprinkler Wrench
W-TYPE 11

Always refer to the product's Technical Data Sheet for a complete description of all Listing and Approval criteria, design parameters, installation instructions, care and maintenance guidelines, and our limited warranty.

AUTOMATIC SPRINKLERS

SPECIAL PURPOSE SPRINKLERS

RAVEN

Institutional Pendent & Horizontal Sidewall

- Quick Response
- Standard and Extended Coverage
- Designed for use in areas such as correctional, detention, and mental health care facilities as well as other commercial buildings
- Both the pendent and horizontal sidewall styles are available for standard or extended coverage applications
- Tamper-resistant features
- 175 psi (12,1 bar)

K FACTOR	K=5.6 (80,6)
INLET THREAD CONNECTION	1/2" NPT
APPROVALS	UL, C-UL
TEMPERATURE	165°F/74°C
ESCUTCHEON MATERIAL	Carbon Steel, or Stainless Steel
ESCUTCHEON FINISH	Grey, Chrome, White, or Electropolished (SS only)
SPRINKLER FINISH	Grey or White
SIN	TY3281, TY3282, TY3381, TY3382
TECH DATA	TFP651



Sprinkler Wrench
W-TYPE 25

TY-B

Conventional (Old Style)

- Ordinary and Extra High Hazard
- 5 mm bulb
- These sprinklers are intended to be installed either pendent or upright, and in either position, they produce a spherical water discharge pattern with approximately 50% of the discharge directed upwards and approximately 50% of the discharge directed downwards.

K FACTOR	K=5.6 (80,6)
THREAD SIZE	1/2" NPT
APPROVALS	UL, VdS
TEMPERATURE	135°F/57°C, 155°F/68°C, 175°F/79°C, 200°F/93°C, 286°F/141°C, 360°F/182°C
SPRINKLER FINISH	Natural Brass, Chrome Plated, Pure White, Signal White
SIN	TY365
TECH DATA	TFP662



Sprinkler Wrench
W-TYPE 6

TY-FRB

Conventional (Old Style)

- Ordinary and Extra High Hazard
- 3 mm bulb
- These sprinklers are intended to be installed either pendent or upright, and in either position, they produce a spherical water discharge pattern with approximately 50% of the discharge directed upwards and approximately 50% of the discharge directed downwards.

K FACTOR	K=5.6 (80,6)
THREAD SIZE	1/2" NPT
APPROVALS	UL, VdS
TEMPERATURE	135°F/57°C, 155°F/68°C, 175°F/79°C, 200°F/93°C, 286°F/141°C
SPRINKLER FINISH	Natural Brass, Chrome Plated, Pure White, Signal White
SIN	TY363
TECH DATA	TFP667



Sprinkler Wrench
W-TYPE 6

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AUTOMATIC SPRINKLERS

SPECIAL PURPOSE SPRINKLERS

FTR-1

Fixed Temperature Release

- 3 mm bulb
- Fixed-temperature, heat detector intended for wet or dry pilot release service
- Can be used for pilot line service, instead of standard sprinklers, to activate deluge and preaction systems equipped with either wet or dry pilot line detection
- Corrosion resistant assembly option for outdoor applications (Teflon® coated)
- Maximum 40 ft. x 40 ft. spacing

K FACTOR	K=5.6 (80,6)
THREAD SIZE	1/2" NPT
APPROVALS	UL, C-UL
TEMPERATURE	135°F/57°C, 155°F/68°C, 175°F/79°C, 200°F/93°C
SPRINKLER FINISH	Natural Brass, White Polyester Coated, Gray Teflon® Coated
SIN	TY3030
TECH DATA	TFP1388



Sprinkler Wrench



TY-B & TY-FRB (ALTERNATE MATERIALS OF CONSTRUCTION)

Upright & Pendent Sprinklers

- TY-B: 5 mm diameter heat sensitive glass bulb, standard response
- TY-FRB: 3 mm diameter heat sensitive glass bulb, quick response
- Corrosion resistant, standard coverage spray sprinklers designed for use in commercial occupancies where corrosive atmospheres may exist
- Alternate materials of construction (Stainless Steel, SMO, or Titanium) are utilized to extend the life of a sprinkler beyond that which might be expected of copper alloy sprinklers exposed to corrosive atmospheres (SMO = stainless-molybdenum alloyed)

K FACTOR	K=5.6 (80,6) • K=8.0 (115,2)
THREAD SIZE	1/2" NPT • 3/4" NPT
APPROVALS	UL, C-UL, LPCB
TEMPERATURE	135°F/57°C, 155°F/68°C, 175°F/79°C, 200°F/93°C, 286°F/141°C, 360°F/182°C
ESCUTCHEON STYLE	Style 10 • Style 40
SPRINKLER FINISH	Stainless Steel, SMO, Titanium
SIN	Refer to Tech Data Sheet for SIN Numbers
TECH DATA	TFP680



3mm bulb shown

Sprinkler Wrenches



Vertical, Horizontal & Recessed Horizontal Sidewall Sprinklers

- TY-B: 5 mm diameter heat sensitive glass bulb, standard response
- TY-FRB: 3 mm diameter heat sensitive glass bulb, quick response
- Corrosion resistant, standard coverage spray sprinklers designed for use in commercial occupancies where corrosive atmospheres may exist
- Alternate materials of construction (Stainless Steel, SMO, or Titanium) are utilized to extend the life of a sprinkler beyond that which might be expected of copper alloy sprinklers exposed to corrosive atmospheres (SMO = stainless-molybdenum alloyed)

K FACTOR	K=5.6 (80,6)
THREAD SIZE	1/2" NPT
APPROVALS	UL, C-UL, LPCB
TEMPERATURE	135°F/57°C, 155°F/68°C, 175°F/79°C, 200°F/93°C, 286°F/141°C, 360°F/182°C
ESCUTCHEON STYLE	Style 10
SPRINKLER FINISH	Stainless Steel, SMO, Titanium
SIN	Refer to Tech Data Sheet for SIN Numbers
TECH DATA	TFP680



3mm bulb shown

Sprinkler Wrenches



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SPRINKLER ACCESSORIES



Sprinkler Accessories are for use with the sprinklers and nozzles described in this catalog. Escutcheons are referenced by a style number and are available in brass, chrome or white finish. Please refer to the technical data sheet for additional information and a listing of what finishes are available.

APPLICATIONS:

- **Improve Appearance**
- **Onsite Emergency Storage Supply**
- **Conceal Clearance Holes**
- **Protection from Mechanical or Physical Damage**

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AUTOMATIC SPRINKLERS

SPRINKLER ACCESSORIES

ESCUTCHEON PLATES

Recessed Escutcheons and Protective Paint Caps

- Styles 10, 15, 20, 30, 40, 50, & 70
- Consists of a mounting plate and closure for finished appearance in ceilings or soffits
- Intended for use in areas with finished ceilings or walls, and the adjustment provided by these escutcheons reduces the accuracy to which fixed piping to the sprinklers must be cut, while providing a decorative recessed sprinkler installation
- Primarily designed for use with standard spray, quick response sprinklers and the Designer residential sidewall sprinklers
- Maximum $\frac{1}{2}$ " to $\frac{3}{4}$ " NPT adjustment

THREAD SIZE	$\frac{1}{2}$ " NPT - Styles 10, 15, 20, & 50 $\frac{3}{8}$ " NPT - Styles 70 $\frac{3}{4}$ " NPT - Styles 30, & 40
FINISHES	Pure White, Signal White, Jet Black, Chrome Plated, Brass Plated, Plain
TECH DATA	TFP770



Style 65, One-Piece Flat Escutcheon Style 401, Two-Piece Adjustable Escutcheon

- Used to improve the overall appearance of the sprinkler installation by concealing the clearance holes required for wall or ceiling installation
- Deep, two-piece, adjustable
- Available for $\frac{1}{2}$ " and $\frac{3}{4}$ " NPT

THREAD SIZE	$\frac{1}{2}$ " NPT • $\frac{3}{4}$ " NPT
FINISHES	Chrome, White, or Brass
TECH DATA	TFP777



Style 65

Style 401

Style 60, Two-Piece Flush Escutcheon

- Used to improve the overall appearance of the sprinkler installation by concealing the clearance holes required for wall or ceiling installation
- Deep, two-piece, adjustable
- $\frac{3}{4}$ " NPT total adjustment

APPROVALS	UL, FM
THREAD SIZE	$\frac{3}{4}$ " NPT
FINISHES	Chrome, White, or Brass
TECH DATA	TFP778



Style 60

SPRINKLER HEAD CABINET

3, 6 or 12 Capacity

- Provides storage for spare sprinklers and sprinkler wrench
- Spare sprinklers facilitate the prompt replacement of operated or damaged sprinklers and return of fire protection system to service as soon as possible

THREAD SIZE	$\frac{1}{2}$ " NPT • $\frac{3}{4}$ " NPT • 1" NPT
TECH DATA	TFP785



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NOZZLES & ACCESSORIES



Nozzles & Nozzle Accessories are designed for use in a variety of special hazard applications. Their uses include, but are not limited to, exposure protection, fire control, fire extinguishment, and explosion prevention. Many types of nozzles may be required to provide a properly designed special hazard fire protection system.

APPLICATIONS:

- **Flammable Liquid Tanks & Operations**
- **Equipment or Processes that Require Special Designs**
- **Cable Trays**
- **Clean Rooms**
- **Computer Rooms**
- **Conveyors**
- **Cut-Off Rooms**
- **Engine Test Cells**
- **Flammable Liquid Storage**
- **Food Processing**
- **Fuel Storage**
- **Gas Turbines**
- **Historic Sites & Museums**
- **Industrial Process Equipment**
- **Machining Centers**
- **Ferries**
- **Offshore Platforms**
- **Telecom**
- **Transformers**
- **Vapor Suppression**

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AUTOMATIC SPRINKLERS NOZZLES AND ACCESSORIES

D3

Protectospray Directional Spray Nozzle

- Designed for use in water spray fixed systems for fire protection applications
- Open orifice design type for use in deluge systems
- Nozzles are external deflector types that discharge a uniformly filled cone of medium velocity water droplets
- Spray angles available: 65°, 80°, 95°, 110°, 125°, 140°, 160°, and 180°

K FACTOR	K=1.2 (17,3) • K=1.8 (25,9) K=2.3 (33,1) • K=3.0 (43,2) K=4.1 (59,0) • K=5.6 (80,6) K=7.2 (103,7)
THREAD SIZE	1/2" NPT
APPROVALS	UL, C-UL, FM
SPRINKLER FINISH	Bronze: Natural Finish, Teflon Coated, Lead Coated, Chrome Plated, or Natural Finish Stainless Steel
TECH DATA	TFP802



Sprinkler Wrench
W-TYPE 11

EA-1

Automatic Protectospray Directional Spray Nozzle

- Bulb type frangible element for use in closed head systems
- Discharges a filled cone of water droplets at relatively low velocity
- The Type EA-1 Nozzles are also especially effective for area coverage and are sometimes used in lieu of standard sprinklers where directional spray is considered more appropriate.
- Spray angles available: 65°, 80°, 95°, 110°, 125°, 140°, 160°, and 180°

K FACTOR	K=1.4 (20,2), K=2.8 (40,3) K=5.6 (80,6)
THREAD SIZE	1/2" NPT
APPROVALS	UL, C-UL, FM
TEMPERATURE	135°F/57°C, 175°F/79°C, 250°F/121°C, 325°F/163°C, 400°F/204°C, 500°F/260°C
SPRINKLER FINISH	Bronze: Natural Finish, Lead Coated, Chrome Plated, Corrosion proof Wax Coated Bronze
TECH DATA	TFP800



Sprinkler Wrench
W-TYPE 11

HV "HIGH VELOCITY"

Directional Spray Nozzle

- Open, directional spray nozzles
- Designed for use in fixed water spray fire protection systems where a high velocity water application is needed, such as the protection of flammable liquids, electrical transformers, circuit breakers, oil-fired boilers and lube oil systems
- Available in six different orifice sizes
- Produces a solid conical spray pattern
- Available in six angle spray patterns

K FACTOR	K=1.6 (23,0) • K=1.8 (25,9) K=2.8 (40,3) • K=4.6 (66,2) K=5.5 (79,2) • K=6.4 (92,2)
THREAD SIZE	1" NPT 1 1/4" (only K=6.4)
APPROVALS	UL, C-UL, FM
SPRINKLER FINISH	Natural Brass or Stainless Steel
TECH DATA	TFP815



Sprinkler Wrench
COMMON ADJUSTABLE WRENCH

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AUTOMATIC SPRINKLERS NOZZLES AND ACCESSORIES

B-1

Upright & Pendent Foam-Water Sprinkler

- Air aspirating foam-water nozzles
- Pendent & upright styles
- Open nozzle for use in NFPA 16 foam-water sprinkler systems

K FACTOR	K=3.0 (43,2)
THREAD SIZE	1/2" NPT
APPROVALS	UL, C-UL, Military
SPRINKLER FINISH	Natural Bronze
TECH DATA	TFP840



Sprinkler Wrench
COMMON
ADJUSTABLE
WRENCH

AM4 AQUAMIST

Non-Automatic Open Type

- Open, directional mist nozzles
- They are intermediate pressure nozzles which utilize a single fluid jet impinging on a diffuser to produce a spray having a range of water droplet sizes suitable for the extinguishment of Class B fires, as well as incidental Class A fires.
- Maximum utilization of water for flammable liquid fire protection

K FACTOR	K=0.24 (3,5)
THREAD SIZE	1/2" NPT
SPRINKLER FINISH	Natural Stainless Steel
TECH DATA	TFP2204



Sprinkler Wrench
W-TYPE 6

AM10 AND AM10B AQUAMIST

Non-Automatic Open Type

- Open mist nozzles
- Designed for use in water mist protection systems protecting flammable liquids and turbine bearings
- Minimal water demand, approximately 3.1 GPM/nozzle at 170psi (11,73 LPM at 11,6 bar)
- Mist represents latest in fire protection technology

K FACTOR	K=0.24 (3,5)
THREAD SIZE	1/2" NPT
SPRINKLER FINISH	Stainless Steel
TECH DATA	TFP2210

- For use in "low pressure" mist applications
- Minimum operating pressure is 170 psi (11,6 bar)



Sprinkler Wrench
W-TYPE 6

AM24 AQUAMIST

Automatic Type Mist Nozzle

- Listed and Approved for Marine Type Approved by Lloyds, USCG, DNV, American Bureau of Shipping, MCA, Germanischer Lloyd, Bureau Veritas
- Maximum Distance between nozzles (to plane of protection) - Vertical Clearance Nozzle Spacing
 - 1 m to 3.5 m nozzles - 4.0 meter spacing
 - 3.5 m to 5.0 m nozzles - 3.5 meter spacing
 - 5.0 m to 10.0 m nozzles - 3.0 meter spacing
- Intended Applications – IMO Mandated Local Application System for Protection of Class A Machinery Spaces

K FACTOR	4.7 lpm/bar 1/2, 0.33 gpm/psi 0.5
THREAD SIZE	1/2" NPT
APPROVALS	UL
TEMPERATURE	135°F/57°C, 155°F/68°C, 175°F/79°C, 200°F/93°C
SPRINKLER FINISH	Natural Brass, Chrome Plated, White Polyester
TECH DATA	Contact Tyco for details

- Nozzle pressure: 175-250 psi (12,1 to 17,2 bar)



Sprinkler Wrench
COMMON
ADJUSTABLE
WRENCH

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AUTOMATIC SPRINKLERS

NOZZLES AND ACCESSORIES

D4a

Directional Spray Nozzles, Open, Medium Velocity

- Nozzles are external deflector types that discharge a uniformly filled cone of medium velocity water droplets
- The Type D4a Nozzles feature a four arm body design that helps assist against mechanical or physical damage.
- Open orifice design type for use in deluge systems
- Spray angles available: 65°, 80°, 95°, 110°, 125°, 140°, 160°, and 180°

K FACTOR	K=1.2 (17,3) • K=1.8 (25,9) K=2.3 (33,1) • K=3.0 (43,2) K=4.1 (59,0) • K=5.6 (80,6) K=7.2 (103,7)
THREAD SIZE	1/2" NPT
APPROVALS	UL, C-UL, .
SPRINKLER FINISH	Natural Finish Bronze, Teflon Coated Bronze
TECH DATA	TFP806



Sprinkler Wrench
COMMON
ADJUSTABLE
WRENCH

F822 THRU F834 Mulsifyre®

Directional Spray Nozzles, Open, High Velocity

- Two configurations: basic Mulsifyre Nozzle & Mulsifyre Nozzle with Model F880 Dust Cap
- Available in six different models provide a wide range of orifice sizes and water distribution characteristics
- Air aspirating foam-water nozzles, for use with all types of foam (required for Non-AFFF type foams)
- Designed for use in water spray fixed systems for fire protection applications where a high velocity water application may be required

K FACTOR	K=2.0 (28,8) • K=2.3 (33,1) K=2.7 (38,9) • K=2.6 (37,4) K=4.6 (66,2) • K=5.1 (73,4)
THREAD SIZE	3/4" NPT
APPROVALS	UL, ULC, FM
SPRINKLER FINISH	Brass
TECH DATA	TFP810



Sprinkler Wrench
COMMON
ADJUSTABLE
WRENCH

- Pendent & upright designs
- Open nozzle for use on deluge systems

COOLING TOWER NOZZLE

Type 1 and 2

- Intended for use in fire protection systems for cross flow cooling towers with combustible fill sections
- Open nozzle design for use in water spray deluge system
- Installed under the distribution basin, they discharge water in a relatively narrow, elongated spray pattern

K FACTOR	K=2.9 (42,0)
THREAD SIZE	3/4" NPT
APPROVALS	UL, FM
SPRINKLER FINISH	Bronze or Stainless Steel
TECH DATA	TFP830



Sprinkler Wrench
W-TYPE 11

- Type 1 has a waterway designed for use in towers with diffusion decks, Type 2 for those without diffusion decks

BLOW-OFF PLUGS

Plugs for Protectospray® Nozzles or Open Sprinklers

- Intended for use in applications where protection is required against infestation or accumulation of debris within the orifice of an open Protectospray Nozzle or open sprinkler
- Blow-Off Plugs are designed for both indoor or outdoor use

K FACTOR	K=5.6 (80) • K=8.0 (115)
THREAD SIZE	1/2" NPT or 17/32" NPT
MATERIAL	EPDM
TECH DATA	TFP890



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