tyco
Fire Protection Products

FIRE PROTECTION

General Products Catalog







Safer. Smarter. Tyco.™

FIRE PROTECTION
General Products Catalog



Tyco Fire Protection Products is a leading manufacturer and distributor of water-based fire suppression systems and components, offering one of the broadest lines of fire protection system equipment worldwide.

Continually expanding its capabilities through aggressive research and product development, it provides its customers effective fire protection and construction solutions for residential, commercial, industrial, and institutional buildings. Tyco Fire Protection Products serves a diverse group of specifiers, including architects, engineers, contractors, and associated industries with a nationwide network of distribution and manufacturing facilities. Tyco takes pride in the introduction of new and innovative products, technologies and product application extensions.

With over 150 years in the industry, Tyco Fire Protection Products is uniquely qualified to provide and develop cost effective solutions customized to any building configuration and fire protection application. Our patented solutions provide significant performance advantages with lower installation and maintenance costs.

Tyco also offers the industry's most complete fire protection design software package through its SprinkCAD® programs.



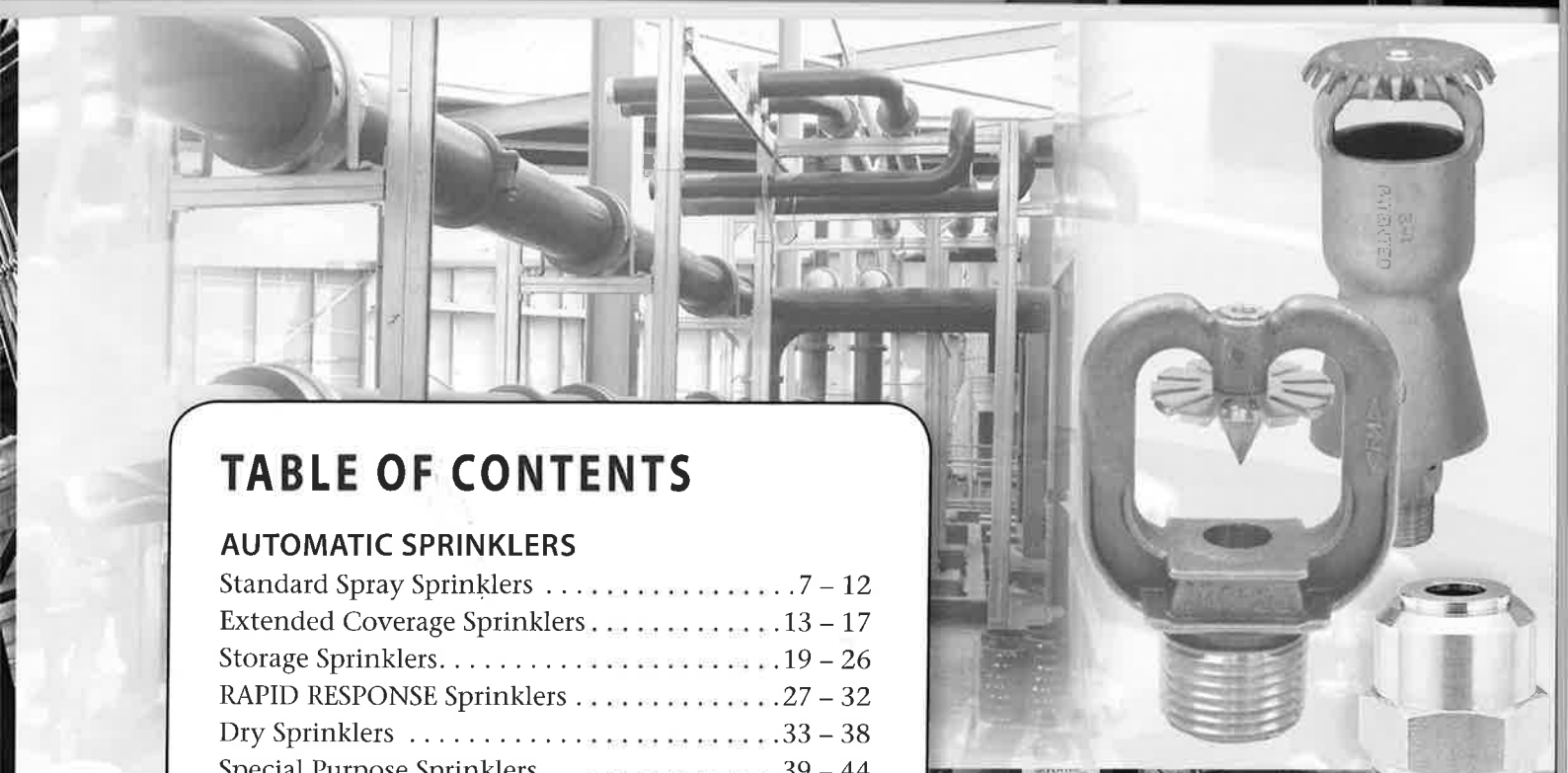


TABLE OF CONTENTS

AUTOMATIC SPRINKLERS

Standard Spray Sprinklers . . . . . 7 – 12
Extended Coverage Sprinklers . . . . . 13 – 17
Storage Sprinklers . . . . . 19 – 26
RAPID RESPONSE Sprinklers . . . . . 27 – 32
Dry Sprinklers . . . . . 33 – 38
Special Purpose Sprinklers . . . . . 39 – 44
Sprinkler Accessories . . . . . 45 – 46
Nozzles & Nozzle Accessories . . . . . 47 – 50

SYSTEM VALVES & DEVICES

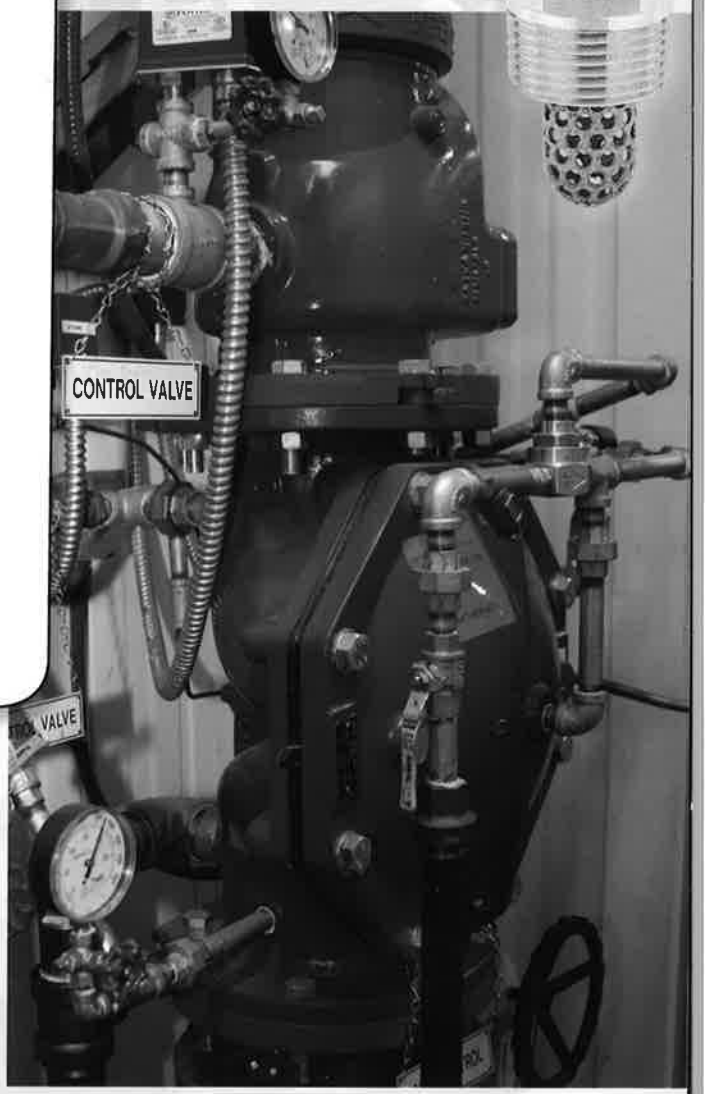
Wet System Valves & Devices . . . . . 51 – 54
Dry System Valves & Devices . . . . . 55 – 58
Deluge & Preaction Systems . . . . . 59 – 64
General Purpose Valves . . . . . 65 – 68
Specialty Items . . . . . 69 – 72

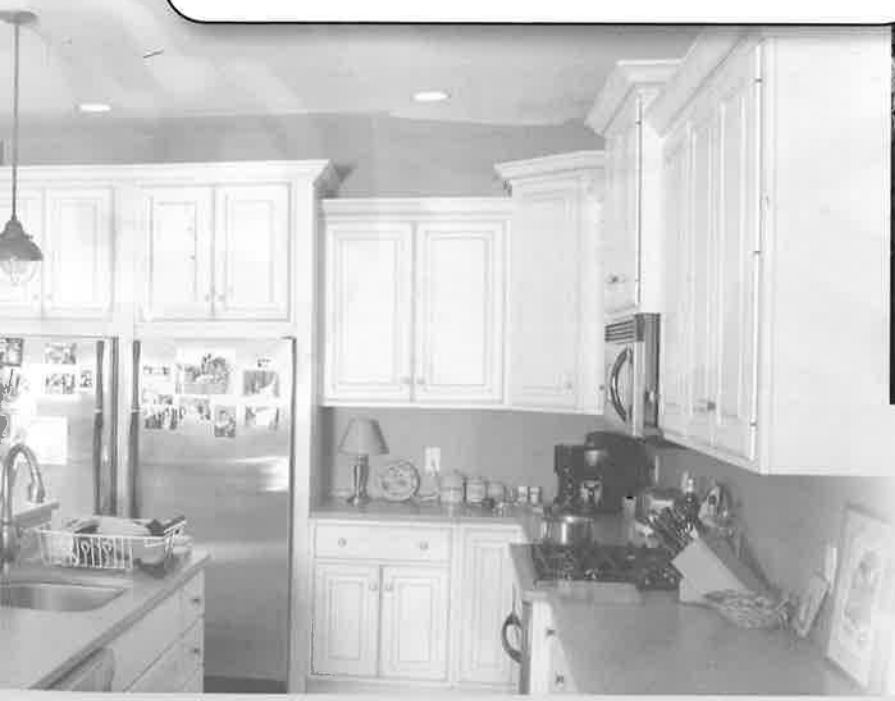
PIPING & ELECTRICAL PRODUCTS

Grooved Piping Products . . . . . 73 – 78
CPVC Pipe & Fittings . . . . . 79 – 80
Electrical Devices . . . . . 81 – 86

SPECIALTY SYSTEMS

Foam Systems . . . . . 87 – 92
AQUAMIST Systems . . . . . 93 – 96



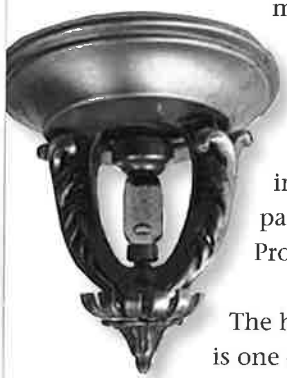


tyco
Fire Protection
Products

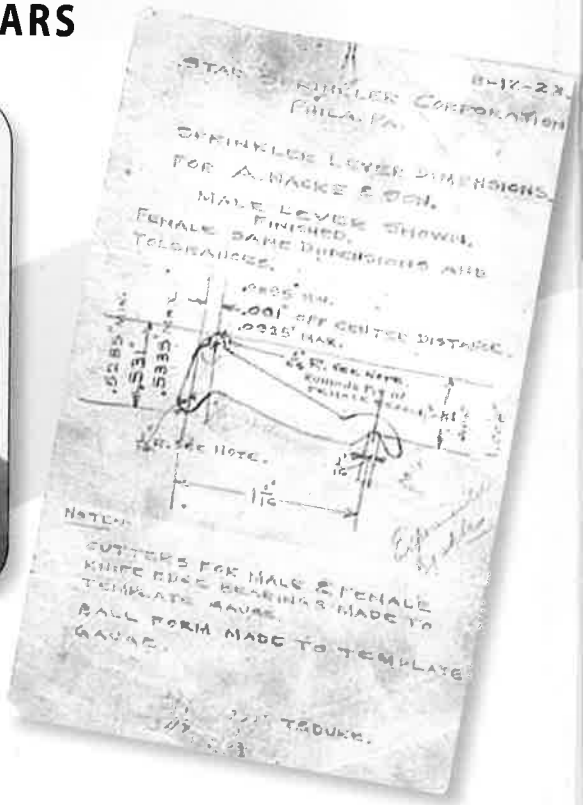
TYCO FIRE PROTECTION PRODUCTS

LEADING THE WAY FOR MORE THAN 150 YEARS

In 1881, industry pioneer Frederick Grinnell patented the first "sensitive" automatic fire sprinkler incorporating a number of features still found in modern day units. Since that time, many of the major advancements in fire sprinkler technology can be attributed to GRINNELL and other leading names in the industry that are now part of Tyco Fire Protection Products.







The history of our company is one of tremendous growth through organic development and acquisition with over 150 years in the industry, to create a single powerful global resource for owners, and those to whom they turn for engineering advice and support. Today our company is proud to be associated with our corporate and legacy brands that continue to operate on the cutting edge of fire protection innovation, mechanical applications and product performance.



10 YEAR LIMITED WARRANTY

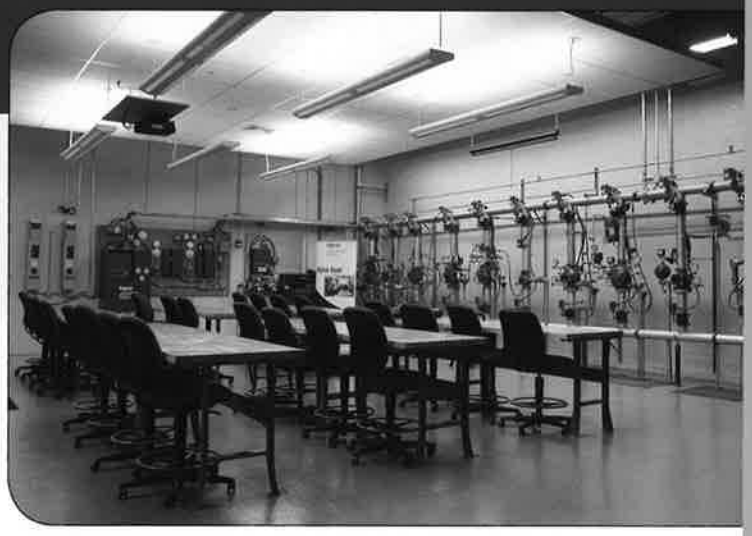
We stand behind every product we manufacture by offering the industry's only 10-year limited warranty*, that's up to ten times longer than our competitors' warranties.

(Full warranty details can be found on all of our current product technical data sheets, or at our website at www.tyco-fire.com.)

All metric measurements throughout this catalog are based on U.S. standard-to-metric conversions. Metric specifications may vary from country to country.

DESIGN SOLUTIONS SprinkCAD SINCE 1986
CENTRAL
STAR
Gem
Grinnell
rapidresponse® RESIDENTIAL FIRE SPRINKLER SYSTEM
AquaMist
CENTRAL SPRAYSAFE
BlazeMaster FIRE SPRINKLER SYSTEMS
ANSUL

THE INDUSTRY LEADER



Best-in-class solutions start with best-in-class technology, and only Tyco Fire Protection Products offers more of both. That's how we are able to simplify installation and improve the performance of fire protection and mechanical systems, providing the owner with the lowest installed cost. Here are just some of the industry-leading technologies we have developed:

- Storage Fire Protection Solutions such as K-14, K-25 and K-17 ESFR Technology. It was the first of the ESFR technology, and we pioneered it.
- Extended Coverage Ordinary and Light Hazard Fire Sprinkler Technology
- The First Residential Sprinklers for Life Safety Purposes
- Electronic Quick Opening Accelerator for Dry Sprinkler Systems
- Back-to-Back CPVC Fittings for Residential Fire Protection
- Sprinkler System Design Software (SprinkCAD) and Fluid Delivery Time Calculation Software



In addition, Tyco Fire Protection Products provides turnkey Engineered Systems' a choice of fully integrated solutions focused on specialty applications in Europe, the Middle East, the Americas, and Asia/Pacific, including:

- Pump/Valve Skid Packages
- Water Mist Systems for Fire Protection
- Valve Packages for Seawater and Harsh Environments

Tyco Fire Protection Products has made a commitment to the world-class performance of its products and, as a result, has received independent approvals and certifications from industry agencies globally.

Our state-of-the-art international manufacturing facilities have all been granted ISO 9000 approvals, and are routinely audited by independent testing agencies for quality and conformance. We also participate in more than 70 National Fire Protection Association committees and a number of international standards and code-making bodies.

Underwriters Laboratories Inc.

Underwriters Laboratories Inc. for use in Canada

Scientific Services Laboratory

Verband der Schadenversicherer

Factory Mutual Research Corporation

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.


00 DEAD IN HUB
IGHT CLUB FIRE
NEARLY 100 FEARED DEAD
IN WINECOFF HOTEL FIRE
Hotel Fire Death Toll At 139
As 12 Floors Yield Up Bodies









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.

APPLICATIONS:

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

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 or 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.

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.

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	½" NPT • ¾" 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	½" 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



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.

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	½" NPT • ¾" 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	½" 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



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 ½" (12,7 mm) of adjustment
- Available with optional dust and air seal

K FACTOR	K=5.6 (80,6)
THREAD SIZE	½" 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

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	½" NPT • ¾" 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 over Lead Coated, Wax Coated
SIN	TY3111, TY3211, TY4111 TY4211, TY4811, TY4911
TECH DATA	TFP110

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.

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
- They are designed for installation along a wall or the side of a beam and just beneath a smooth ceiling.

K FACTOR	K=5.6 (80,6)
THREAD SIZE	½" NPT
APPROVALS	UL, C-UL, FM
TEMPERATURE	165°F/74°C, 200°F/93°C, 212°F/100°C, 280°F/138°C, 286°F/141°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	½" NPT • ¾" 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	½" NPT - Style 20 ¾" 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	½" 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



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.

STANDARD SPRAY SPRINKLERS

TY-QRF

Flush Pendent

- Solder type
- They are designed for use in commercial light and ordinary hazard occupancies such as offices and restaurants
- Features separable escutcheon with 3/8" vertical adjustment
- When aesthetics is the major consideration, the TY-QRF should be your first choice

K FACTOR	K=5.6 (80,6)
THREAD SIZE	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	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

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.

EXTENDED COVERAGE SPRINKLERS



APPLICATIONS:

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

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.

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.

EXTENDED COVERAGE SPRINKLERS

EC-25

Upright

- CMDA and CMSA Applications and FM Approved for storage and non-storage applications
- Solder type
- The maximum coverage area per sprinkler is 196 ft.^{2} (18,2 m^2), 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, 212°F/100°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 400 ft^2 - 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
- Series EC-11 and EC-14 Sprinklers feature a UL and C-UL Listing that permits their use with unobstructed or non-combustible obstructed ceiling construction as defined and permitted by NFPA 13, as well as a specific application listing for use under concrete tees.

K FACTOR	K=11.2 (161,3), K=14.0 (201,6)
THREAD SIZE	¾" 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, Open
ESCUTCHEON	Style 30 • Style 40 Style 60
ESCUTCHEON FINISH	White Coated, Chrome Plated, Brass Plated
SPRINKLER FINISH	Natural Brass, Chrome Plated, Signal White, Jet Black, 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.
- The recessed version of the EC-8, intended for use in areas with a finished ceiling, uses either the two-piece Recessed Escutcheon.

K FACTOR	K=8.0 (115,2)
THREAD SIZE	¾" 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



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.

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	½" 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	½" 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

- 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 ¾" NPT (19,1 mm) of horizontal adjustment from the recessed sidewall position
- Quick & Standard Response (see tech data sheet)
- Decorative 3 mm glass bulb sprinklers designed for use in hydraulically calculated sprinkler systems in light hazard, commercial occupancies such as churches, restaurant seating areas, hotels, educational facilities, offices, etc.

K FACTOR	K=5.6 (80,6) K=8.0 (115,2)
THREAD SIZE	½" NPT • ¾" NPT
APPROVALS	5.6= UL, C-UL, FM, NYC, 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, Pure White, Signal White Polyester, Jet Black, Chrome Plated
SIN	TY3332, TY4332
TECH DATA	TFP296



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.

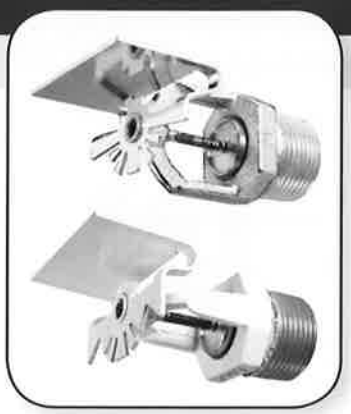
EXTENDED COVERAGE SPRINKLERS

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	¾" 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	½" NPT • ¾" 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

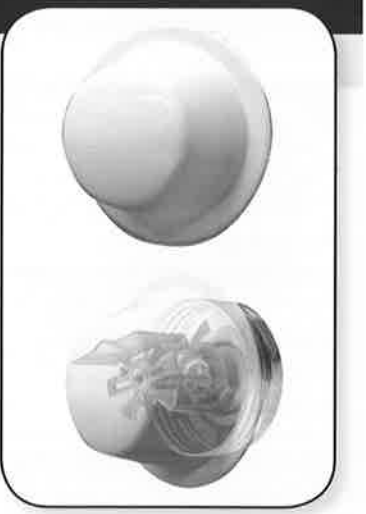


CHEC

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
- ½" 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	¾" 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



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.

ELOC

Concealed Pendent

- Light hazard
- Extra Large Orifice Concealed (ELOC) Pendent Sprinklers are decorative, fast response solder type sprinklers featuring a flat cover plate designed to conceal the sprinkler
- Covers 400 sq. ft. (37,2 m^2) using less pressure than a standard ½" (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	¾" 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 Pendent

- 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 ½" (12,7 mm) of adjustment

K FACTOR	K=5.6 (80.6)
THREAD SIZE	½" 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

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

Copyright © 2012 Tyco Fire Products LP. All Rights Reserved.
TFP2012002

tyco
Fire Protection
Products

STORAGE SPRINKLERS



APPLICATIONS:

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

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 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.

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, CE
TEMPERATURE	165°F/74°C, 212°F/100°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
- They are suppression mode sprinklers that are especially advantageous as a means of eliminating in-rack sprinklers when protecting high-piled storage.
- Model ESFR-17 Pendent Sprinklers are designed to operate at substantially lower-end head pressures, as compared to ESFR Sprinklers having a nominal K-factor of 14.0.

K FACTOR	K=16.8 (241,9)
THREAD SIZE	¾" NPT
APPROVALS	UL, C-UL, FM
TEMPERATURE	165°F/74°C, 212°F/100°C
SPRINKLER FINISH	Natural Brass
SIN	TY7223
TECH DATA	TFP317



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	¾" NPT
APPROVALS	FM, CE
TEMPERATURE	165°F/74°C, 212°F/100°C
SPRINKLER FINISH	Natural Brass
SIN	TY7126
TECH DATA	TFP316



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.

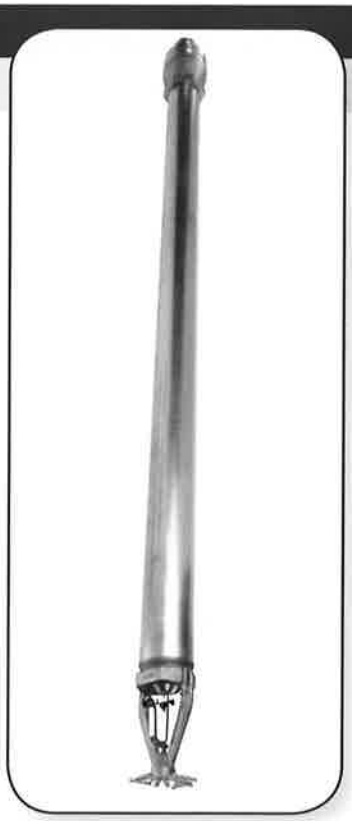
ESFR-17

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

K FACTOR	K=16.8 (241,9)
THREAD SIZE	1-¼" NPT or ISO 7-R 1-¼
APPROVALS	UL, FM
TEMPERATURE	165°F/74°C, 212°F/100°C
SPRINKLER FINISH	Natural Brass
SIN	TY7229
TECH DATA	TFP320

- The Model ESFR-17 Dry Type Pendent Sprinkler is FM Approved and has successfully undergone full-scale fire testing at FM Global, when used in conformance with applicable FM Global Property Loss Prevention Data Sheets
- Less costly to install and maintain than pre-action or antifreeze systems



Sprinkler 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	¾" NPT
APPROVALS	UL, C-UL, FM, NYC, LPCB, VdS
TEMPERATURE	165°F/74°C, 212°F/100°C
SPRINKLER FINISH	Natural Brass
SIN	TY6226
TECH DATA	TFP318



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.

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	¾" 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	¾" 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	¾" 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	½" NPT • ¾" 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.

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	¾" 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	½" NPT • ¾" 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	¾" 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



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.

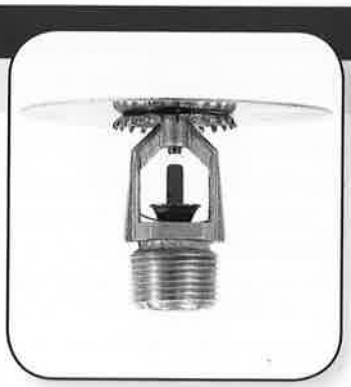
STORAGE SPRINKLERS

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
- Both the Pendent and Upright Sprinklers produce a hemispherical water distribution pattern below the deflector.

K FACTOR	K=5.6 (80,6) K=8.0 (115,2)
THREAD SIZE	½" NPT • ¾" 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 used in other applications such as beneath open gridded catwalks

K FACTOR	K=5.6 (80,6)
THREAD SIZE	½" 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	½" NPT • ¾" 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



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.

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 used in other applications such as beneath open gridded catwalks

K FACTOR	K=5.6 (80,6)
THREAD SIZE	½" 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



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	½" NPT • ¾" 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



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	½" NPT • ¾" 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



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.

SPRINKLER GUARDS

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

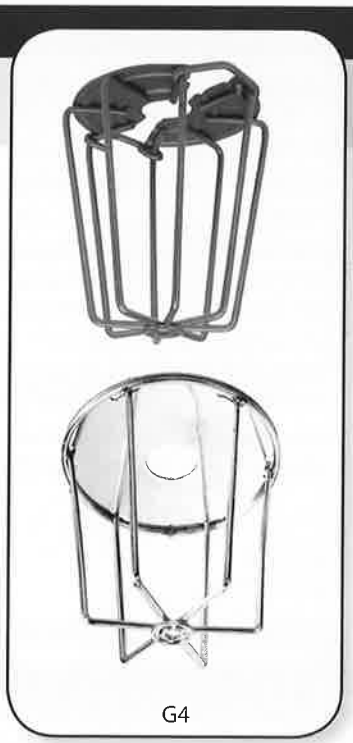
- Designed for use with specific types of Series TY-B, TY-FRB, TY-L, and TY-FRL Sprinklers that may be located in areas that make them susceptible to mechanical or physical damage
- Rugged guard design to minimize possible damage to sprinklers
- Shields are for use in storage racks or beneath grated mezzanine, or other areas requiring the sprinklers to be shielded from possible discharge from sprinklers above
- Can be used with either ½" or ¾" 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 ½" or ¾" NPT sprinklers

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


WSG-2 with Shield


G2


WS-2 Shield

RAPID RESPONSE® SPRINKLERS



APPLICATIONS:

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

rapid response®

RESIDENTIAL FIRE SPRINKLER SYSTEM

- 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.

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

rapid response®
RESIDENTIAL FIRE SPRINKLER SYSTEM

LFII

Pendent & Recessed Pendent

- 3 mm bulb type
- Intended for use in wet & dry pipe scenarios:
  - residential sprinkler systems for one/two-family dwellings and mobile homes per NFPA 13D
  - residential occupancies up to and including four stories in height per NFPA 13R
  - 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	½" NPT
APPROVALS	UL, C-UL, NSF/ANSI 61
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



Sprinkler Wrenches



Pendent & Recessed Pendent

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

K FACTOR	K=5.8 (83,5)
THREAD SIZE	½" NPT
APPROVALS	UL, C-UL, NSF/ANSI 61
TEMPERATURE	155°F/68°C, 175°F/79°C
ESCUTCHEON	Style 20
SPRINKLER FINISH	Signal White, Chrome Plated, Natural Brass, Jet Black
SIN	TY3934
TECH DATA	TFP401



Sprinkler Wrenches



Pendent & Recessed Pendent

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

K FACTOR	K=3.0 (43,2)
THREAD SIZE	½" NPT
APPROVALS	UL, C-UL, NSF/ANSI 61
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



Sprinkler Wrenches



Horizontal & Recessed Horizontal Sidewall

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

K FACTOR	K=4.4 (63,4)
THREAD SIZE	½" NPT
APPROVALS	UL, C-UL, NSF/ANSI 61
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



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.

rapidresponse®
RESIDENTIAL FIRE SPRINKLER SYSTEM

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	½" NPT
APPROVALS	UL, C-UL, NYC, NSF/ANSI 61
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 ¼" 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	½" NPT
APPROVALS	UL, C-UL, NYC, NSF/ANSI 61
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 ½" 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	½" NPT
APPROVALS	UL, C-UL, NSF/ANSI 61
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





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.

rapidresponse®
RESIDENTIAL FIRE SPRINKLER SYSTEM

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	½" 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	½" 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	½" 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.

rapidresponse®
RESIDENTIAL FIRE SPRINKLER SYSTEM

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, NSF/ANSI 61
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
- The Series LFII Dry Type Residential Horizontal Sidewall Sprinklers are typically used where sprinklers and/ or a portion of the connecting piping are exposed to freezing temperatures
- 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, NSF/ANSI 61
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

rapidresponse®
RESIDENTIAL FIRE SPRINKLER SYSTEM

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	¾" NPT
APPROVALS	UL, C-UL, FM, NYC, NSF/ANSI 61
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



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	½" NPT
APPROVALS	UL, C-UL, FM, NSF/ANSI 61
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



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	½" NPT
APPROVALS	UL, C-UL, NSF/ANSI 61
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



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.

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, CE Pendent & HSW= UL, C-UL, CE, 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, 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
W-TYPE 7

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	¾" or 1" NPT (Std. Order) ISO 7-R1
APPROVALS	¾"= 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
W-TYPE 7

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
W-TYPE 7

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
W-TYPE 7

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
W-TYPE 7

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

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

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.

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

RFII

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

RFII

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 *(quantity of adhesive is sufficient for installing 1 Boot)*
TECH DATA	TFP591

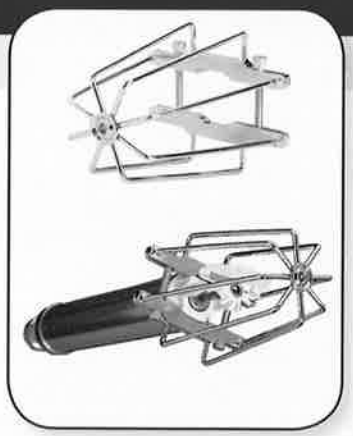


G5

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



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 combustible 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.

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	½" NPT ¾" 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



Back-To-Back



Hip



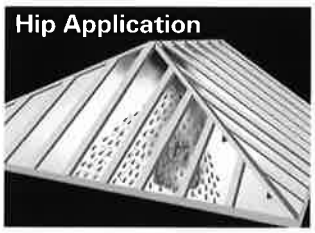
Single Directional



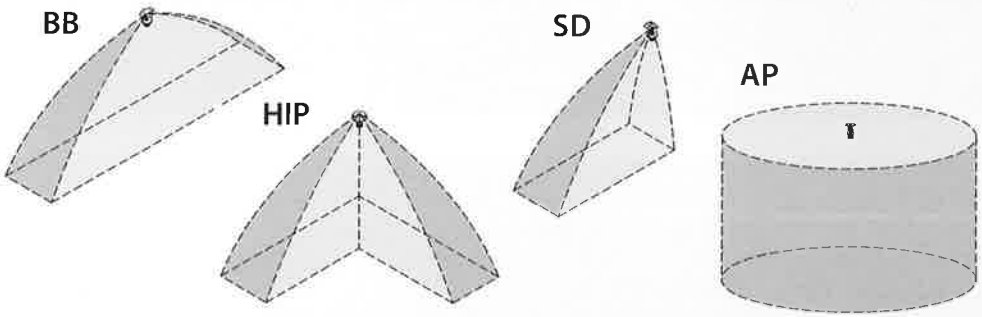
Attic Plus (AP)

Spray Patterns











RAVEN STUDIO SPRINKLER

Pendent & Horizontal Sidewall Sprinklers

- TYCO RAVEN Studio Sprinklers 5.6K Pendent and Horizontal Sidewall (HSW) Quick Response, Standard Coverage for Light and Ordinary Hazard applications and Extended Coverage for Light Hazard applications only, are intended for use in areas as designed per NFPA 13.
- The flush design is made aesthetically appealing by concealing the deflector and other operating parts behind the link assembly. The RAVEN Studio Sprinklers, with a heat sensitive solder type release element, are Listed as quick response sprinklers.

K FACTOR	K=5.6 (80,6)
THREAD SIZE	½" NPT
APPROVALS	UL, C-UL
TEMPERATURE	165°F/74°C
FINISH	White, Grey, Chrome, Primed, Customer or Electropolish
SIN	TY1281 - Pendent, TY1381 - HSW
TECH DATA	TFP658



Sprinkler Wrench
W-TYPE 25

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.

CC1

Combustible Concealed Space Sprinklers™, Upright

- 3 mm bulb
- Sprinklers are fast response, specific application sprinklers designed to provide protection of light hazard combustible, as well as non-combustible, concealed spaces.
- Meets NFPA® Requirements for Specialty Listed Sprinklers in Combustible Concealed Spaces
- Allows the use of BlazeMaster® CPVC pipe with the benefit of superior sprinkler protection for Wood truss spaces

K FACTOR	K=2.8 (40,3)
THREAD SIZE	½" NPT
APPROVALS	UL
TEMPERATURE	175°F/79°C
SPRINKLER FINISH	Natural Brass
SIN	TY1189
TECH DATA	TFP630



Sprinkler Wrench



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	½" 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 ft^2 (9,3 m^2) to 144 ft^2 (13,4 m^2)



Sprinkler Wrench



CC3

Combustible Concealed Space Sprinklers™, Upright

- 3 mm bulb
- The CC3 Combustible Concealed Sprinklers are quick response, upright, specific application sprinklers designed to provide protection of specific light hazard combustible, as well as non-combustible, concealed spaces requiring sprinkler protection.
- The Model CC3 Sprinklers comply with the criteria for the protection of combustible concealed spaces as described in NFPA 13.
- The Model CC3 Sprinklers are designed for installation on BlazeMaster CPVC wet pipe systems and steel wet pipe or dry pipe sprinkler systems.

K FACTOR	K=4.2 (60,5) K=5.6 (80,6)
THREAD SIZE	½" NPT
APPROVALS	UL
TEMPERATURE	200°F/93°C
SPRINKLER FINISH	Natural Brass
SIN	TY2199, TY3199
TECH DATA	TFP633



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.

SPECIAL PURPOSE SPRINKLERS

WS™

Window Sprinklers, Horizontal & Pendent Vertical Sidewall

- 3 mm bulb
- 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 heat strengthened, tempered, or ceramic glass

K FACTOR	K=5.6 (80,6)
THREAD SIZE	½" 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

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	½" NPT • ¾" NPT
APPROVALS	UL, C-UL, FM, LPCB
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

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	½" 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

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.

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	½" NPT
APPROVALS	UL, VdS, LPCB (TY3650 Only)
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, TY3650
TECH DATA	TFP662



Sprinkler Wrench



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=8.0 (115,2)
THREAD SIZE	¾" NPT
APPROVALS	UL, C-UL, LPCB, VdS, 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, Chrome Plated, Pure White, Signal White, Jet Black
SIN	TY4631
TECH DATA	TFP666



Sprinkler Wrench



TY-FRB

Conventional (Old Style)

- Ordinary and Extra High Hazard
- The TYCO Series TY-FRB, Conventional Sprinklers, are quick response, standard coverage, decorative 3 mm glass bulb type spray sprinklers.
- 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	½" NPT
APPROVALS	UL, C-UL, VdS, LPCB (TY3630 Only)
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, TY3630
TECH DATA	TFP667



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.

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	½" 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	½" NPT • ¾" NPT
APPROVALS	UL, C-UL, LPCB, Lloyds
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	½" 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



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.

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

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.

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 ½" to ¾" adjustment

THREAD SIZE	½" NPT - Styles 10, 15, 20, & 50 ⅜" NPT - Styles 70 ¾" 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 ½" and ¾" NPT

THREAD SIZE	½" NPT • ¾" NPT
FINISHES	Chrome, White, or Brass
TECH DATA	TFP777

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
- ¾" total adjustment

APPROVALS	UL, FM
THREAD SIZE	¾" NPT
FINISHES	Chrome, Signal White, or Brass
TECH DATA	TFP778

SPRINKLER HEAD CABINET

3, 6 or 12 Capacity

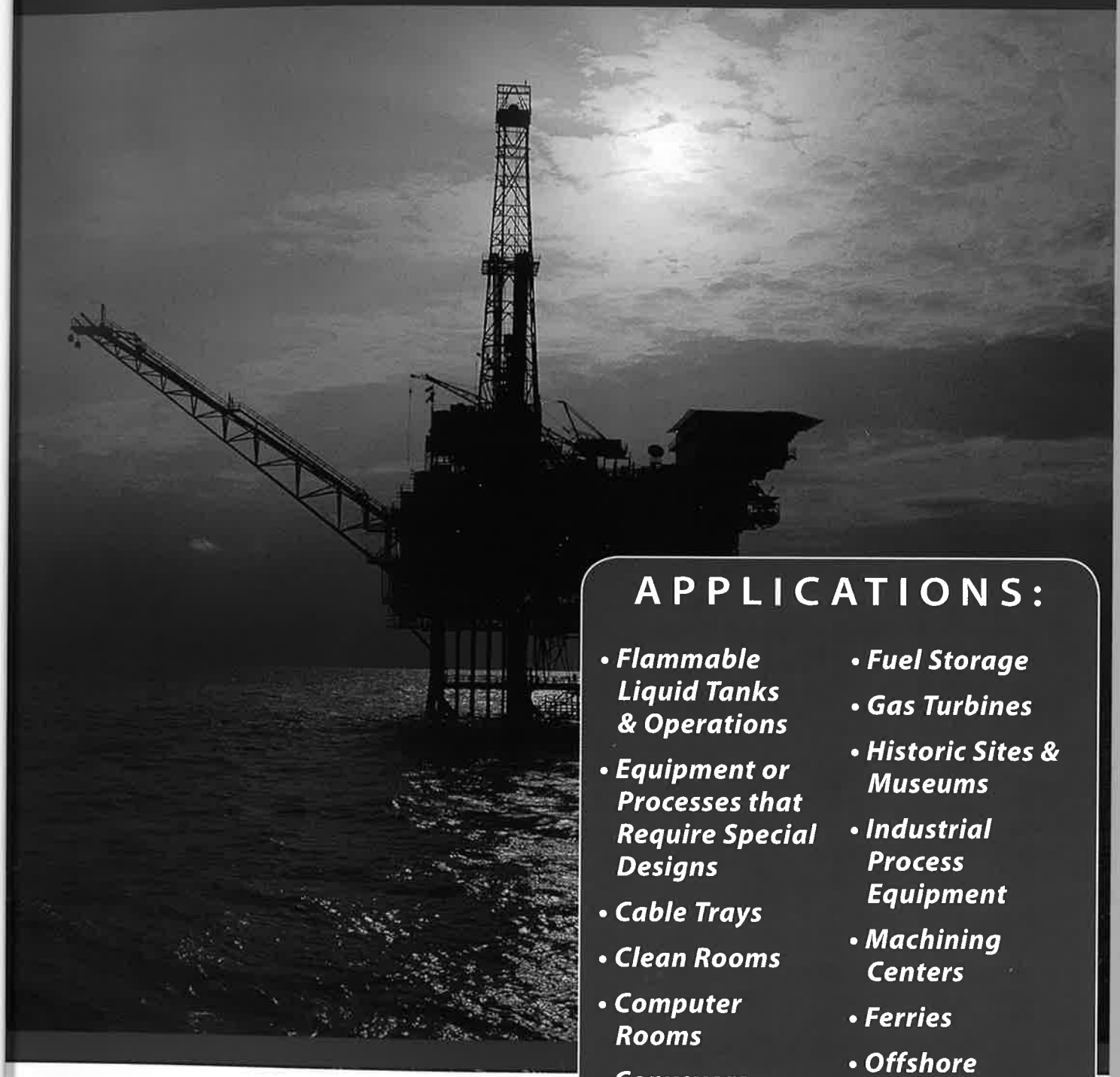


- Provides storage for spare sprinklers and sprinkler wrench
- Spare sprinklers facilitate the prompt replacement of operated or damaged sprinklers and return of fire protection system to service as soon as possible

THREAD SIZE	½" NPT • ¾" NPT • 1" NPT
TECH DATA	TFP785

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.

NOZZLES & ACCESSORIES



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

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.

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.

D3

Protectospray Directional Spray Nozzle

- Designed for use in water spray fixed systems for fire protection applications
- Open orifice 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°
- Blow-Off Plugs are available and designed for both indoor or outdoor use.

K FACTOR	K=1.2 (17,3) to 7.2 (103,7)
THREAD SIZE	½" NPT
APPROVALS	UL, C-UL, FM
SPRINKLER FINISH	Bronze: Natural Finish, Teflon Coated, Lead Coated, Chrome, or Natural Stainless Steel
TECH DATA	TFP802, Blow-off Plugs TFP890



Sprinkler Wrench



D3S

Protectospray Directional Spray Nozzle

- The D3S Nozzles that are typically used in non-NFPA installations feature an integral strainer for use when the Authority Having Jurisdiction requires the use of individual strainers.
- The D3S Nozzles are external deflector type nozzles that discharge a uniformly filled cone of medium velocity water droplets.

K FACTOR	K=1.1 (15,8) to 2.8 (40,3)
THREAD SIZE	½" NPT
APPROVALS	UL, C-UL, FM
SPRINKLER FINISH	Bronze
TECH DATA	TFP804



Sprinkler Wrench



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	½" 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, Lead Coated, Chrome, Corrosion proof Wax Coated Bronze
TECH DATA	TFP800



Sprinkler Wrench



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 and six angle spray patterns
- Produces a solid conical spray pattern

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 1¼" (only K=6.4)
APPROVALS	UL, C-UL, FM
SPRINKLER FINISH	Natural Brass or Stainless Steel
TECH DATA	TFP815



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.

TN-25

Horizontal Spray Nozzle, Open

- The TYCO Model TN-25 Horizontal Spray Nozzle is a specialized open nozzle for use in tunnel fire protection deluge systems, providing an improved alternative to traditional designs.
- Model TN-25 Nozzle allows for a single pipe to run the length of a tunnel, compared to traditional designs that use multiple pipes in order to provide sufficient coverage.
- Provides protection of coverage areas up to 16' - 4" x 24' -7" (5,0 m x 7,5 m)

K FACTOR	K=25.2 (362,9)
THREAD SIZE	1" NPT (ISO 7-R1)
APPROVALS	UL, C-UL
SPRINKLER FINISH	Natural Brass
TECH DATA	TFP850



Sprinkler 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	½" NPT
SPRINKLER FINISH	Natural Stainless Steel
TECH DATA	TFP2204



Sprinkler Wrench



AM10 AND AM10B AQUAMIST

Non-Automatic Open Type

- Open mist nozzles
- Designed for use in water "low pressure" mist protection systems protecting flammable liquids and turbine bearings
- Minimal water demand
- Min. operating pressure is 170 psi (11,6 bar)

K FACTOR	K=0.24 (3,5)
THREAD SIZE	½" NPT
SPRINKLER FINISH	Stainless Steel
TECH DATA	TFP2210



Sprinkler Wrench



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
- Intended Applications – IMO Mandated Local Application System for Protection of Class A Machinery Spaces
- Nozzle pressure: 175-250 psi (12,1 to 17,2 bar)

K FACTOR	4.7 lpm/bar 1/2, 0.33 gpm/psi 0.5
THREAD SIZE	½" 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



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.

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	½" NPT
APPROVALS	UL, C-UL, .
SPRINKLER FINISH	Natural Finish Bronze, Teflon Coated Bronze
TECH DATA	TFP806



Sprinkler 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	¾" NPT
APPROVALS	UL, ULC, FM
SPRINKLER FINISH	Brass
TECH DATA	TFP810

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



Sprinkler Wrench



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	¾" NPT
APPROVALS	UL, FM
SPRINKLER FINISH	Bronze or Stainless Steel
TECH DATA	TFP830

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



Sprinkler Wrench



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	½" NPT
APPROVALS	UL, C-UL, Military
SPRINKLER FINISH	Natural Bronze
TECH DATA	TFP840

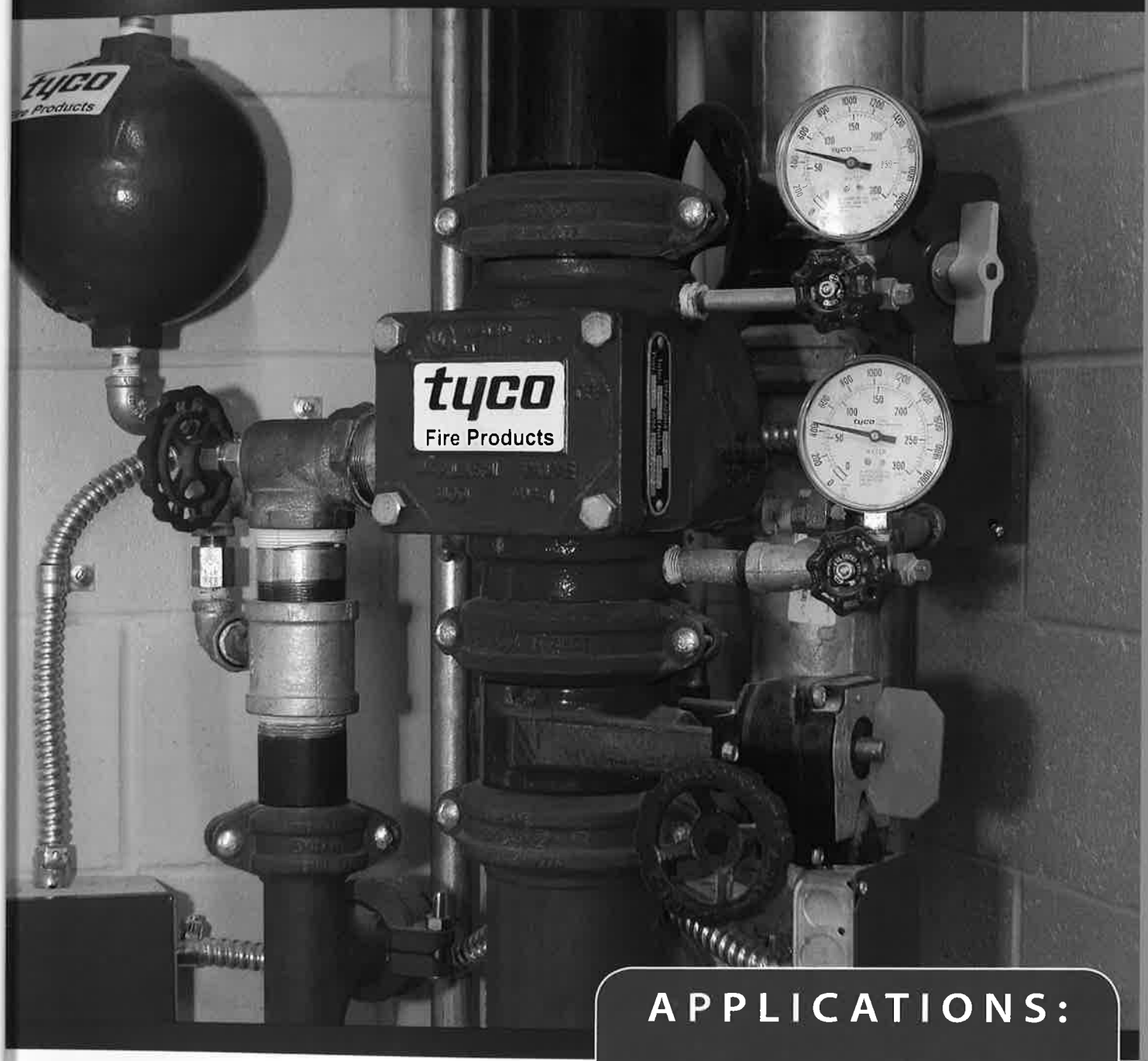


Sprinkler Wrench



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.

WET SYSTEM VALVES & DEVICES



Wet Pipe Sprinkler Systems are designed for use in applications where the temperature is maintained above freezing. In such systems, the entire piping network is fully pressurized so that water is discharged from a sprinkler head immediately after actuation.

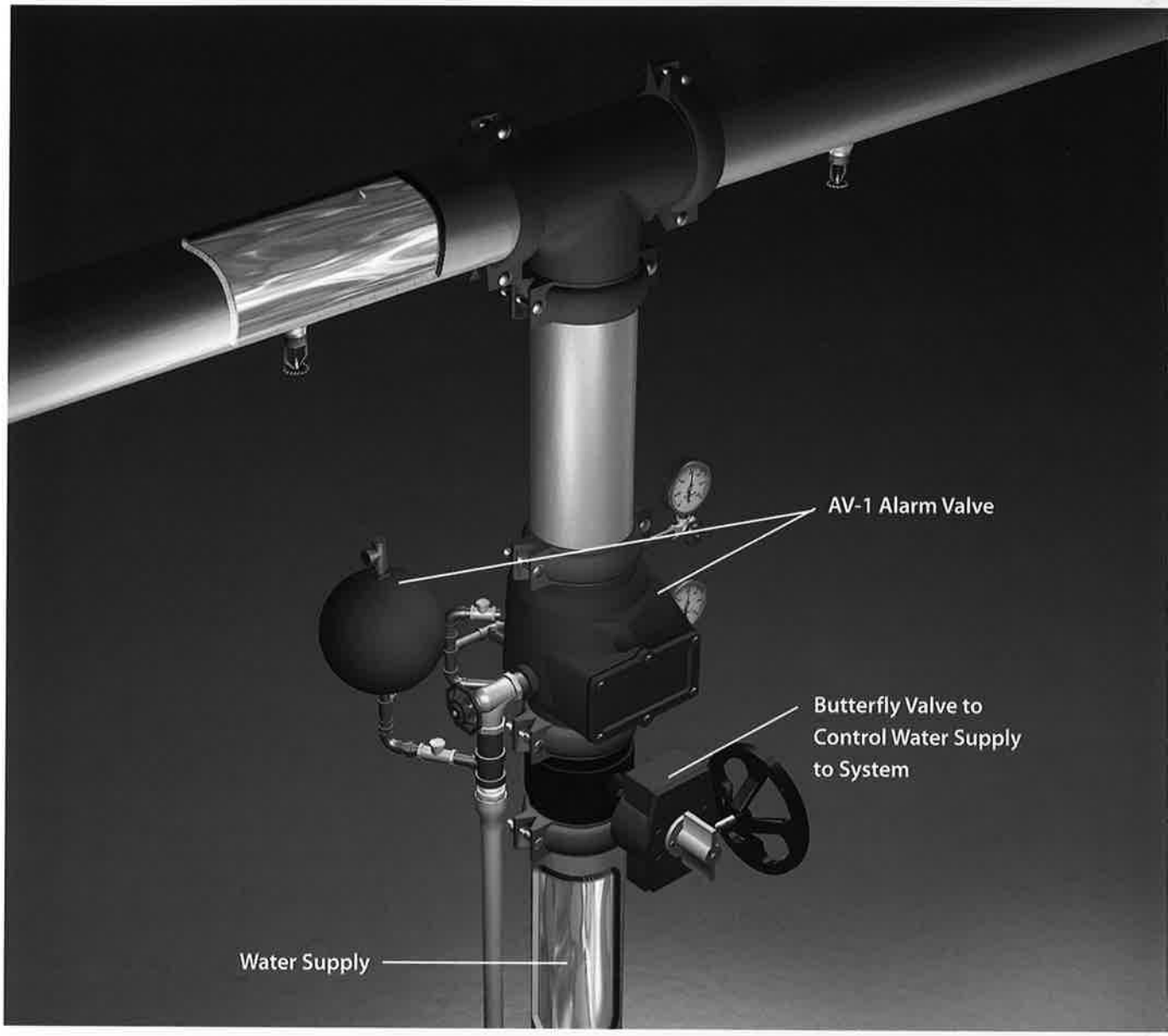
Alarm check valves or water flow detectors are used to actuate local and remote alarms. Applications include heated warehouses, factories, hospitals, stores, shopping centers and residential settings such as apartment or condominium complexes, and single family residences.

APPLICATIONS:

- ***Heated Warehouses***
- ***Factories***
- ***Hospitals***
- ***Stores***
- ***Shopping Centers***
- ***Apartment or Condominium Complexes***
- ***Single Family Residences***

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.

WET SYSTEM VALVES & DEVICES



AV-1-300

Alarm Valve



- Sizes 2½" thru 8" (DN65 thru DN200)
- AV-1 Alarm Valves may be installed vertically or horizontally
- Groove x Groove, Flange x Flange, Flange x Groove Alarm Valves are divided seat ring, rubber-faced clapper, check type, water flow alarm valves
- For use in wet pipe (automatic sprinkler) fire protection systems
- Automatically actuates electrically and/or hydraulically operated alarms when there is a steady flow equivalent to the discharge rate for one or more sprinklers

TECH DATA TFP910

- Optional Retard Chamber used in installations subject to variable pressure (generally associated with public water supplies) to help prevent false alarms
- Available pre-assembled with modular trim to provide a quick and convenient method for trimming valve risers. Contact TFP for details
- Working water pressure range is 20 to 300 psi (1,4 to 20,7 bar)
- Listings and Approvals: UL, C-UL, & FM

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.

RC-1

Retard Chamber



- The Model RC-1 Retard Chamber is required in installations that will be subject to pressure variations, as are generally associated with public water supplies, in order to help prevent false alarms
- Intended for use in a wet type automatic sprinkler system riser
- Maximum rated working pressure is 300 psi (20,7 bar)

TECH DATA TFP920

- Listings and Approvals:
  UL, ULC, & FM for use with: Model AV-1-300 Alarm Check Valves
  UL, ULC, FM, VdS, & LPCB for use with the following Alarm Check Valves: Model AV-1-175, Gem Model F20/F200/F2001, Gem Model A, Star Model S30/S300/S3001

CV-1FR

Riser Check Valve



- Sizes 2" (DN50) through 12" (DN300)
- Intended for use in a wet type automatic sprinkler system riser
- Furnished with grooved ends that are compatible with grooved pipe and couplings
- Can be installed using GRINNELL Grooved Couplings or GRINNELL Figure 71 Flange Adapters
- Designed with a removable cover for ease of field maintenance

TECH DATA TFP950

- Standard seal is grade "E" EPDM
- Maximum rated working pressure is 300 psi (20,7 bar)
- Listings and Approvals:
  UL, C-UL, & FM

RISER MANIFOLDS

513D (13D), 513D/R (13D/R) and 513 (13)



- Available in different configurations and variety of sizes allowing a cost effective and easy transition to check valves, control valves, and system piping
- May be installed either horizontally (flow switch on top) or vertically (flow going up)
- 513D (13D) and 513D/R (13D/R):
  - Available sizes: 1", 1-$^1/_2$", and 2" (DN25, DN40, and DN50)
  - Provides the necessary water flow alarm, pressure gauge, and drain equipment in a single assembly for use in NFPA 13D or 13R residential sprinkler systems

TECH DATA TFP960 & TFP962

- 513 (13):
  - Available sizes: 1-$^1/_2$" thru 6" (DN40 thru DN150)
  - Provides the necessary water flow alarm, pressure gauge, alarm test orifice, drain, and sight glass equipment in a single assembly for use in NFPA 13 sprinkler systems
- Maximum rated working pressure is 175 psi (12,1 bar)
- Listings and Approvals:
  UL, C-UL, & FM

WET SYSTEM VALVES & DEVICES

RSV-1

Residential Shutoff Valve

- 1" (DN25) size is designed for NFPA 13D system needs. The 2" (DN50) is designed for either NFPA 13D or NFPA 13R.
- During the design of a residential sprinkler system, domestic water use should be taken into consideration unless the domestic supply can be stopped when a sprinkler operates
- When a sprinkler operates, water supply is automatically diverted from the domestic system to the sprinkler system
- Eliminates the need for pumps, pressurized storage tanks, or electrically operated domestic shutoff valves

TECH DATA TFP980

- Valve automatically resets after the fire protection system is returned to normal service
- Maximum rated working pressure is 175 psi (12,1 bar)
- Listings and Approvals: UL, C-UL, & NSF-61



RESI-RISER

Residential

- Sizes 1"- 2" (25-50 mm)
- Compact, pre-assembled, ready to install sprinkler riser
- Brass construction for use in potable water supply
- Integral test and drain assembly, flow switch with retard mechanism, 300 psi gauge, and check valve
- Compact size allows for easy installation between 2" x 4" (50-100 mm) studs

TECH DATA Contact Tyco for details

- Molded mounting points allow for fast and easy left or right hand installation
- Available with or without pressure relief valve or flow switch retard mechanism features
- Maximum rated working pressure is 175 psi (12,1 bar)



WMA-1

Water Motor Alarm

- Hydraulically operated outdoor alarm for use with appropriate fire protection system valves (alarm, dry, deluge)
- Supplied by dedicated outlet in valve trim line or retard chamber
- Uses energy-efficient lightweight impeller design capable of producing very high sound level
- Corrosion-resistant aluminum alloy gong, gong-mount, and water motor housing
- Polymer bearings do not require lubrication
- Must be mounted to a rigid wall surface

TECH DATA TFP921

- Can accommodate range of wall thicknesses from 2" to 18" (50 to 450 mm)
- Furnished with approved ¾" (20 mm) Y-strainer for use in alarm line
- Maximum rated working pressure is 300 psi (20,7 bar)
- Listings and Approvals: UL, ULC, FM, VdS, & LPCB



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 SYSTEM VALVES & DEVICES



APPLICATIONS:

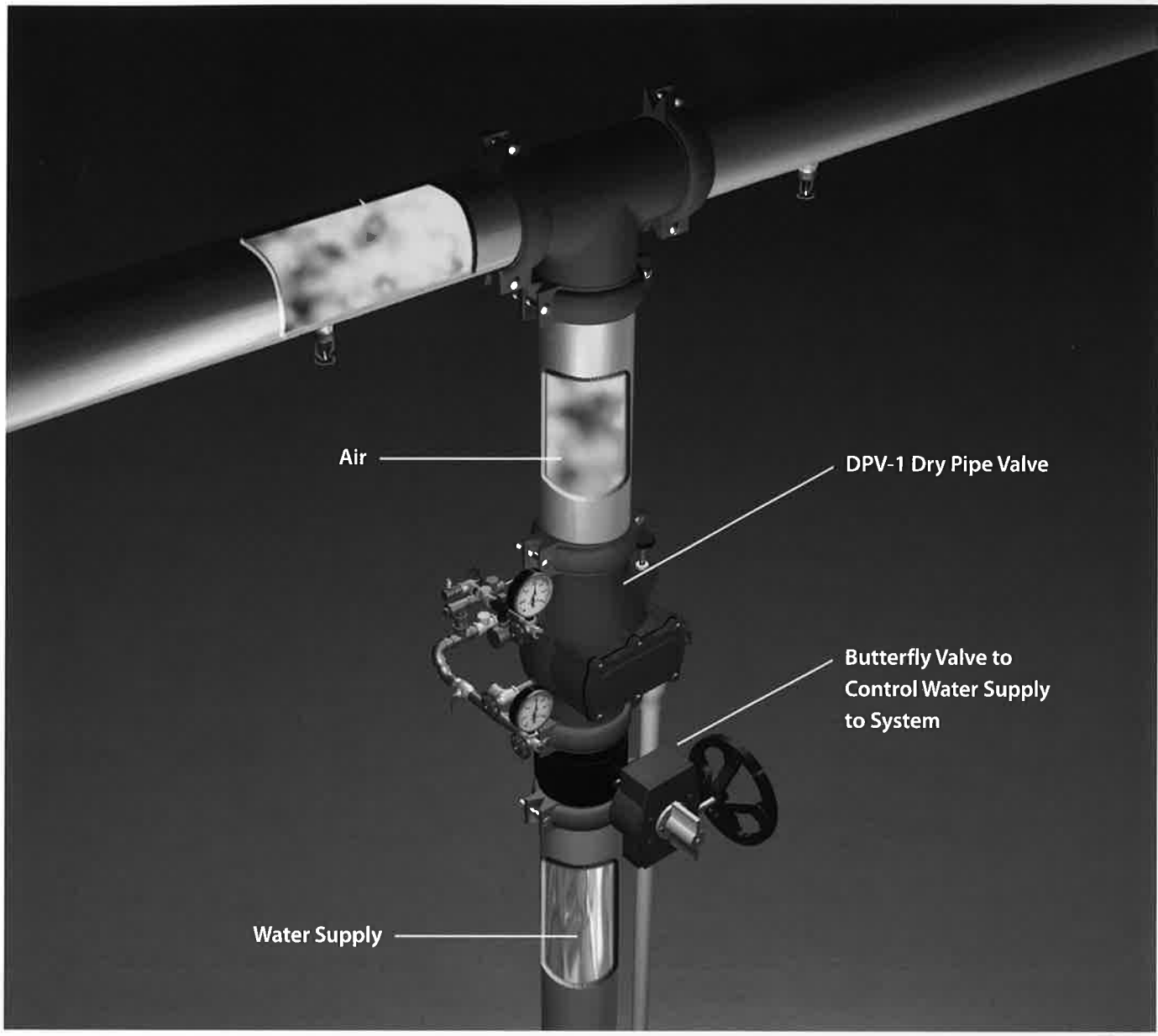
- *Unheated Warehouses*
- *Parking Garages*
- *Store Windows*
- *Attic Spaces*
- *Loading Docks, & Other Areas Exposed To Freezing Temperatures*

Dry Pipe Sprinkler Systems are designed for applications where piping and sprinklers are subjected to freezing temperatures, such as unheated warehouses, parking garages, store windows, attic spaces, or loading docks. Valves for the system, however, must be installed in areas not subject to freezing, as this portion of the system does contain water. Pipe lines to the sprinklers are usually pressurized with air, but nitrogen can be used. When pressure in the system is lost by actuation of a sprinkler head, the dry pipe valve trips, activates alarms, and releases water into the system. The system may be equipped with automatic or manual air supply controls and air supervisory devices with appropriate trouble alarms.

Accessory items, such as dry pipe valve accelerators that increase the speed of system operation, and pressure switches used to activate electric alarms, may be used to enhance the system.

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 SYSTEM VALVES & DEVICES



DPV-1

Dry Pipe Valve – 2½" thru 6"



- Available sizes: 2½" (DN65), 3" (DN80), 4" (DN100) and 6" (DN150)
- External reset differential dry pipe valves
- Available as Flange x Flange, Flange x Groove, or Groove x Groove
  (Flanged connections are available and drilled per ANSI, ISO, AS, and JIS specifications)
- Unique, offset clapper design minimizes valve size and weight
- Used to supply sprinkler installations in which sprinklers are subjected to freezing conditions (40°F / 4°C or less)

TECH DATA TFP1020

- Rated for use at a maximum service pressure of 250 psi (17,2 bar)
- Listings and Approvals:
  UL, C-UL, FM, and NYC under MEA 172-02-E (4 and 6 inch)

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 SYSTEM VALVES & DEVICES

ACC-1

Dry Pipe Valve Accelerator



- Designed for use with Model DPV-1 dry pipe valves
- Speeds operation of the dry pipe valve upon loss of air pressure
- Automatically adjusts to small or slow changes in system pressure but trips upon a rapid and steady drop in pressure
- Designed to trip when system air pressure drops at a rate exceeding approximately 1 psi/minute (0.07 bar/min)
- Upon tripping, it transmits system air pressure to the intermediate chamber of the dry pipe valve, which neutralizes the differential pressure holding the valve closed and opens the waterway clapper

TECH DATA TFP1112

- Rated for use at a maximum water supply pressure of 250 psi (17,2 bar) and a maximum system air (or nitrogen) pressure of 70 psi (4,8 bar)
- Listings and Approvals: UL, ULC, FM, and LPCB

QRS

Electronic Accelerator



- Maximum working air pressure 70 psi (4,8 bar)
- Quick opening device intended to reduce the time for dry pipe valve operation following the operation of one or more automatic sprinklers
- Automatically adjusts to both small and slow changes in system pressure, but trips with a steady drop in pressure (as in the case of sprinkler operation)
- Can be used to retro-fit existing mechanical accelerators
- Fully assembled package includes switch, solenoid, control panel, and accelerator trim pipe and fittings
- Built-in low and high pressure alarm supervision

TECH DATA TFP1100

- Operation of the dry pipe valve within four seconds -independent of various combinations of system initial air pressures, system volumes, or sprinkler K Factors
- Proven electronic release technology as used for electrically operated deluge and preaction systems
- Battery back-up in the event of primary power failure
- Eliminates re-setting problems often incurred with traditional mechanical accelerators
- Listings and Approvals: UL and FM

VIZOR

Electronic Dry Pipe Accelerator



- Direct mounting to the riser
- Installation consistent with the installation of mechanical devices
- Easy test-and-reset function, as compared to mechanical accelerators
- Operation of a dry pipe valve within four seconds — over a wide range of system volumes, system initial air pressures, and sprinkler K-factors
- Electronically self-supervising technology, similar to that used in typical alarm panels for alarm and detection systems

TECH DATA TFP1105

- Built-in low-pressure and high pressure alarm supervision
- Maximum water pressure 300 psi (20,7 bar)
- Battery back-up in the event of primary power failure
- Air pressure 10 psi (0,7 bar) to 65 psi (4,5 bar)
- Listings and Approvals: UL, ULC, & FM

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 SYSTEM VALVES & DEVICES

RCP-1

Residential Control Panel



- Model RCP-1 Residential Control Panel is an integrated valve manifold, air pressure, and electronic control package for controlling the release of water into residential dry pipe sprinkler systems
- For use in one- and two- family dwellings and mobile homes per NFPA 13D when used with residential sprinklers that have been listed for use in residential dry pipe sprinkler systems
- Pre-wired assembly containing pre-programmed control panel, system performance gauges, and an enclosed compressor
- Supervised system valve system
- Pre-engineered riser design

TECH DATA TFP480

- 48-hour battery backup
- Listings and Approvals:
  UL Listed for use in residential dry pipe sprinkler systems installed in one and two-family dwellings and mobile homes per NFPA 13D

AMD-1

Air Maintenance Device, Pressure Reducing Type



- Field adjustable
- Used in systems where compressed air source is available
- Used in systems in which the air supply is at a higher pressure than is desired for a sprinkler system or dry pilot line system

TECH DATA TFP1221

- Listings and Approvals:
  UL, C-UL, & FM Approved & NYC Approved under MEA 206-02-E

AMD-2

Air Maintenance Device, Compressor Control Type



- Field adjustable
- Used in conjunction with a small, non-tank-mounted air compressor
- Monitors sprinkler system or dry pilot line detection for deluge system air pressure and automatically cycles the compressor to maintain system pressure within preset limits

TECH DATA TFP1231

- Listings and Approvals:
  UL, C-UL, FM Approved & NYC Approved under MEA 206-02-E

AMD-3

Nitrogen Maintenance Device, High Pressure (Cylinder) Reducing Type



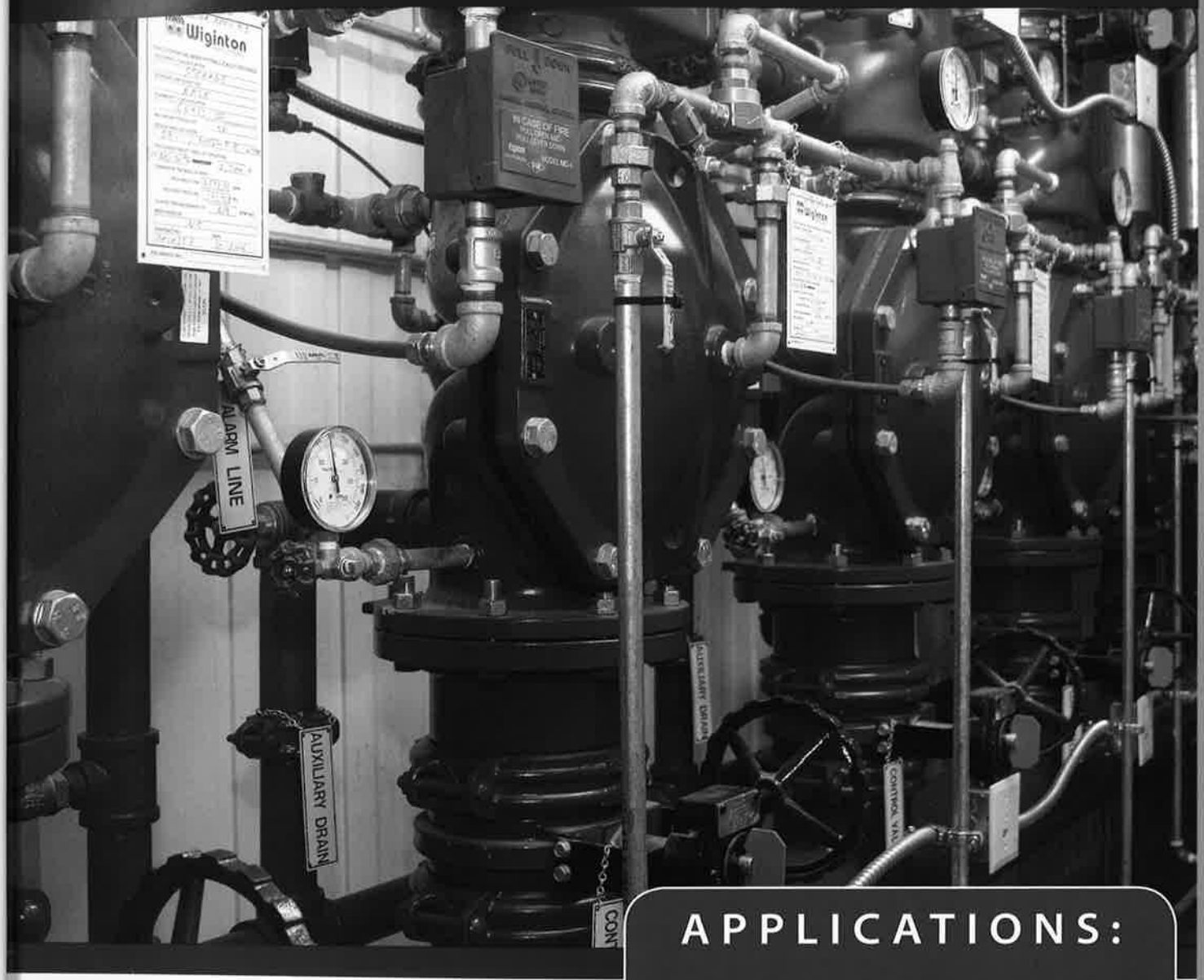
- Field adjustable
- Used in conjunction with a cylinder of high pressure nitrogen to control the nitrogen pressure in a sprinkler system or a dry pilot line detection for deluge systems

TECH DATA TFP1241

- Listings and Approvals:
  UL, C-UL, & FM Approved & NYC Approved under MEA 206-02-E

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

DELUGE & PREACTION SYSTEMS



Deluge Systems are normally used in special hazard installations where water must be applied to an entire area for protection. They use open sprinklers or spray nozzles attached to a piping system connected to a water supply through the deluge valve. The deluge valve is used to control water flow into deluge, preaction, and special types of fire protection systems in response to a fire. This valve is opened by a fire detection system installed in the same areas.

Preaction Systems are used to protect areas where water damage from damaged sprinklers or piping must be avoided. A prealarm of a possible fire allows time for alternate fire extinguishment prior to a sprinkler discharge. They are designed for applications such as refrigerated areas that require maximum protection against inadvertent operation of the sprinkler system.

APPLICATIONS:

- *Flammable Liquid Handling*
- *Storage Areas for Valuable Artifacts*
- *Aircraft Hangars*
- *High-Hazard Installations Using Water as Extinguishing Agent*
- *Computer Rooms*
- *Libraries*
- *Archives*
- *Refrigerated Areas*

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.

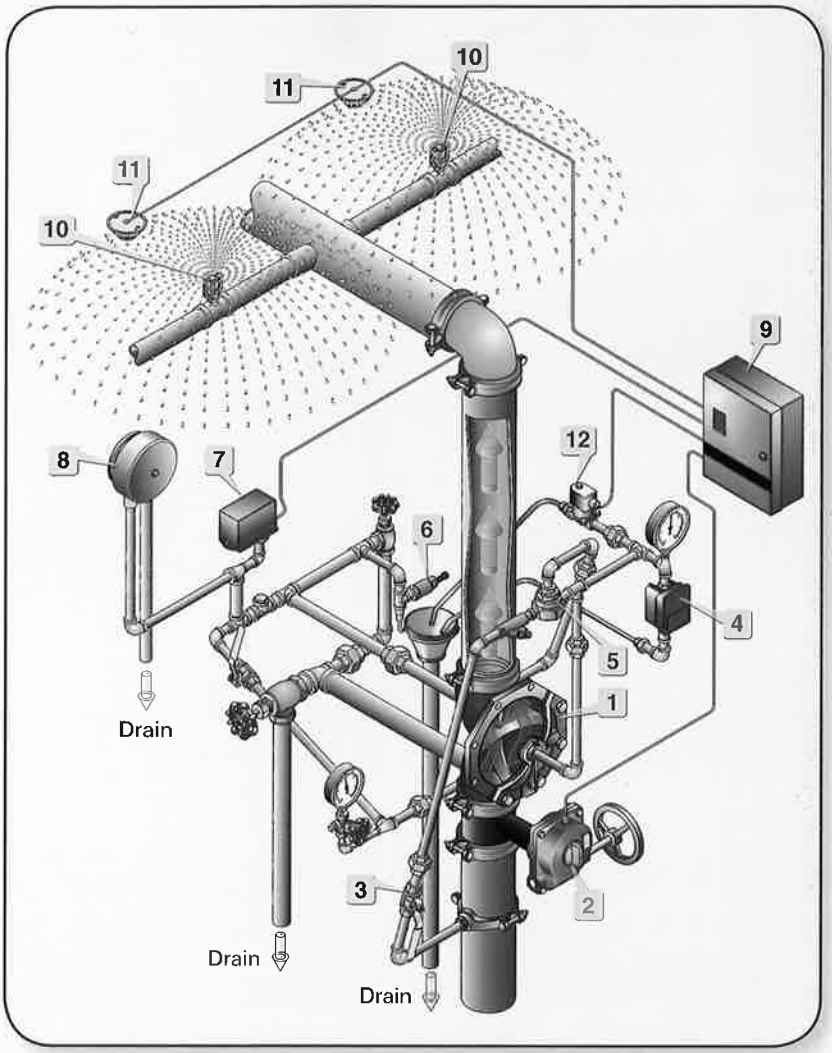
DELUGE SYSTEMS

Wet Pilot, Dry Pilot, or Electric Actuation

Deluge fire protection systems are normally used in special hazard installations where an entire area application of water or foam is required for protection. Applications may include flammable liquid handling and storage areas, aircraft hangars, and other high-hazard installations where water is the most effective extinguishing agent. Deluge systems employ open sprinklers or spray nozzles attached to a piping system. The system is connected to a water supply through the deluge valve. This valve is opened by the operation of a fire detection system installed in the same areas as the open sprinklers or nozzles. Deluge systems may be activated by wet or dry pilot sprinklers, or electric detectors. When the deluge valve opens, water flows into the piping system and discharges from all open sprinklers and nozzles. (Electric Actuation system shown here.)

- Listings and Approvals: UL, ULC, & FM

TECH DATA	TFP1310 – Wet Pilot Actuation
TECH DATA	TFP1315 – Dry Pilot Actuation
TECH DATA	TFP1320 – Electric Actuation
TECH DATA	TFP1331 – Deluge Valve with Remote-Resetting Trim
TECH DATA	TFP1332 – Deluge Valve with Remote-Resetting Pressure-Reducing Trim
TECH DATA	TFP1302 – Remote-Resetting, Pressure-Reducing Deluge Valve, Limited Space Cabinet



Legend:

1	Deluge Valve (DV-5)	**7**	Pressure Switch
2	Isolation Valve	**8**	Water Motor Gong
3	Diaphragm Supply Valve	**9**	Releasing Panel
4	Manual Control Station	**10**	Spray Nozzle
5	Automatic Shut-off Valve	**11**	Smoke/Heat Detector
6	Automatic Drain Valve	**12**	Solenoid Valve

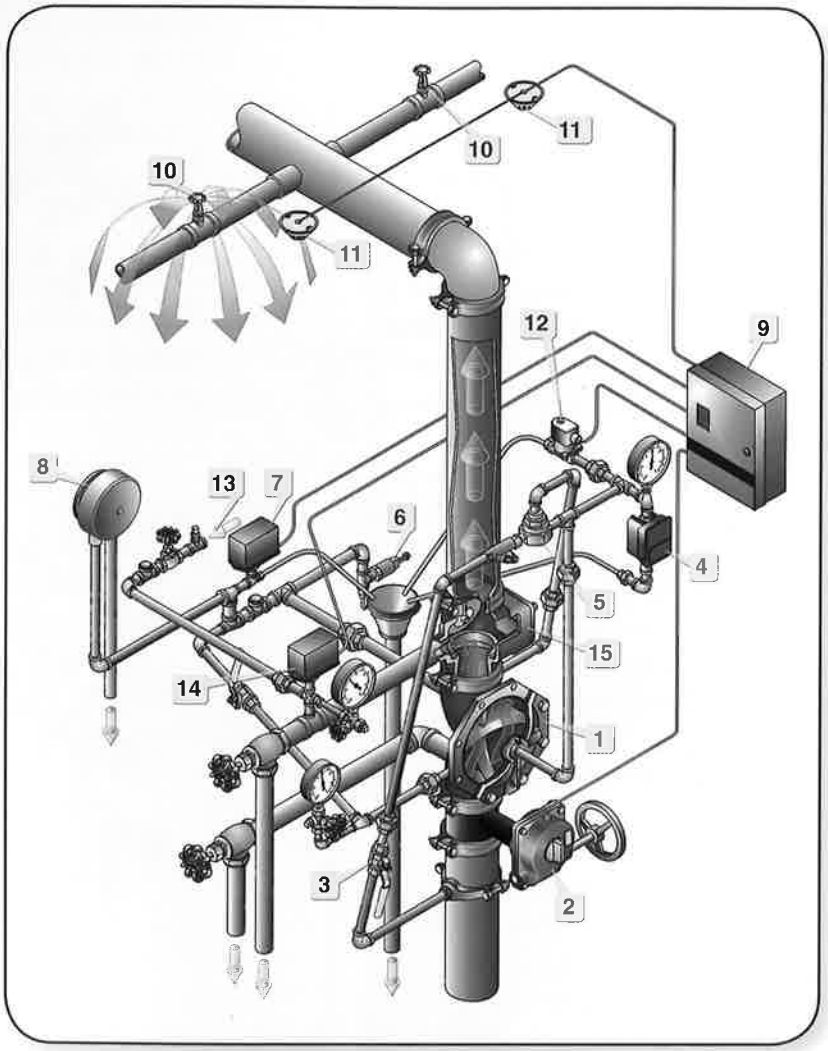
SINGLE INTERLOCK PREACTION SYSTEMS

Wet Pilot, Dry Pilot or Electric Actuation

The DV-5 Supervised single interlock preaction systems are used to protect areas where there is danger of serious water damage that might result from damaged automatic sprinklers or piping. Typically, such areas include computer rooms, storage areas for valuable artifacts, libraries and archives. Also, preaction systems are effectively used to protect properties where a prealarm of a possible fire condition may allow time for fire extinguishment by alternate suppression means, prior to a sprinkler discharge. In the event the fire cannot be extinguished, the preaction sprinkler system will then perform as the primary fire protection system.

Single interlock preaction systems employ automatic sprinklers attached to a piping system containing 10 psi (0,7 bar) supervisory pressure, with a supplemental electric fire detection system installed in the same area as the sprinklers. Preaction systems with 10 psi (0,7 bar) supervisory pressure may also be activated by either wet or dry pilot sprinklers instead of electric detectors. Actuation of the fire detection system from a fire opens the deluge valve, allowing water to flow into the sprinkler piping system and to be discharged only from those sprinklers that have been operated by heat over the fire. Loss of supervisory pressure from the system piping as a result of damaged sprinklers or broken piping will activate a trouble alarm to indicate impairment of the system. The deluge valve will not open due to loss of supervisory pressure.

- Listings and Approvals:
  UL, ULC, & FM (TFP1420 Only)



Legend:

1	Deluge Valve (DV-5)	**9**	Releasing Panel
2	Isolation Valve	**10**	Sprinkler
3	Diaphragm Supply Valve	**11**	Smoke/Heat Detector
4	Manual Control Station	**12**	Solenoid Valve
5	Automatic Shut-off Valve	**13**	Air Supply Inlet
6	Automatic Drain Valve	**14**	Pressure Switch (Air)
7	Pressure Switch Water	**15**	Check Valve
8	Water Motor Gong		

TECH DATA	TFP1410 – Wet Pilot Actuation
TECH DATA	TFP1415 – Dry Pilot Actuation
TECH DATA	TFP1420 – Electric Actuation

DOUBLE INTERLOCK PREACTION SYSTEMS

Electric/Pneumatic or Electric/Electric Actuation

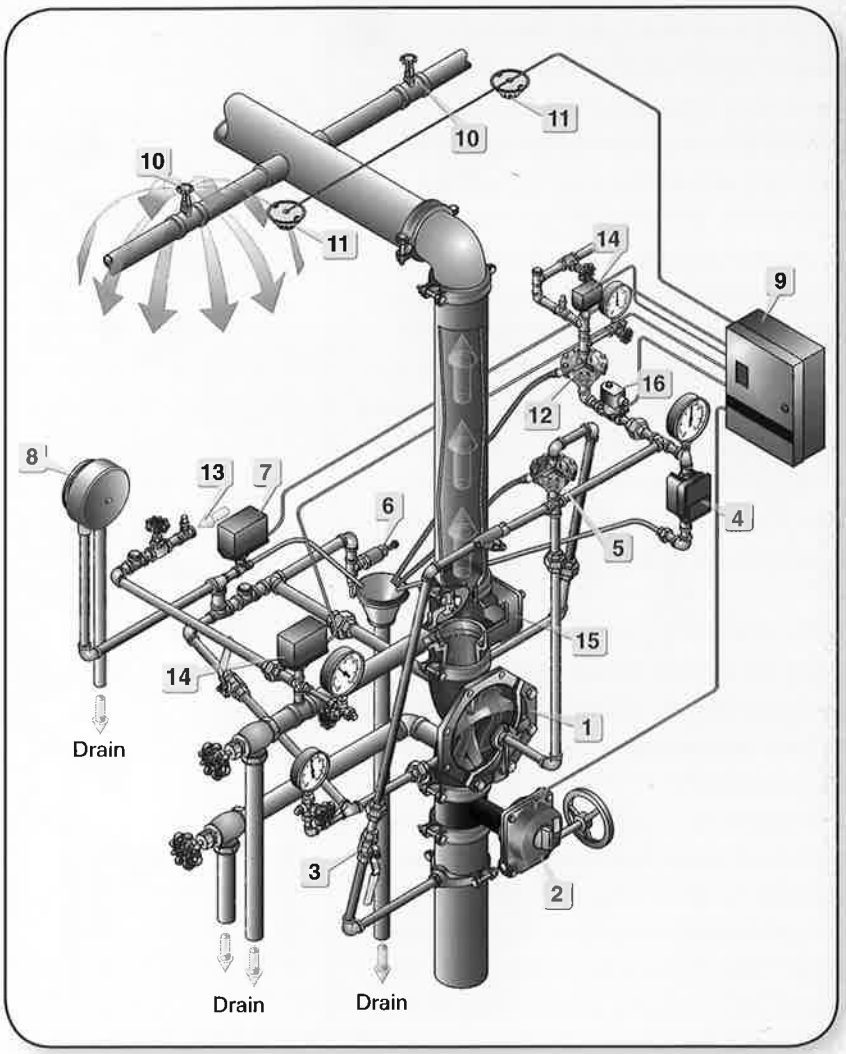
The DV-5 Double Interlock Preaction Systems are designed for applications such as refrigerated areas that require the maximum degree of protection against inadvertent flooding of the sprinkler system piping.

The double interlock system consists of a deluge valve and swing check valve with releasing trim featuring both a solenoid valve and a dry pilot actuator in a series configuration. The swing check valve isolates the body of the deluge valve from the system air or nitrogen pressure that holds the dry pilot actuator closed. The solenoid valve remains closed until it is electrically energized by a deluge releasing panel that responds to the operation of a fire detection device.

In order to actuate the double interlock preaction system, two independent events, caused by a fire condition, must occur. The sprinkler system piping must lose air or nitrogen pressure due to the operation of one or more sprinklers, and the deluge releasing panel must energize and open the solenoid valve upon the operation of a fire detection device.

The double interlock system will operate only when both the dry pilot actuator and the solenoid valve are open at the same time. Opening of the dry pilot actuator only (for example: a forklift truck accidentally dislodges a sprinkler) or of the solenoid valve only (for example: accidental operation of an electric manual pull station) will cause an alarm, and will not trip the system or flood the sprinkler system piping.

- Listings and Approvals: UL, ULC, & FM



Legend:

1	Deluge Valve (DV-5)	**9**	Releasing Panel
2	Isolation Valve	**10**	Sprinkler
3	Diaphragm Supply Valve	**11**	Smoke/Heat Detector
4	Manual Control Station	**12**	Pneumatic Actuator
5	FSV (Fail-Safe Valve)	**13**	Air Supply Inlet
6	Automatic Drain Valve	**14**	Pressure Switch (Air)
7	Pressure Switch Water	**15**	Check Valve
8	Water Motor Gong	**16**	Solenoid Valve

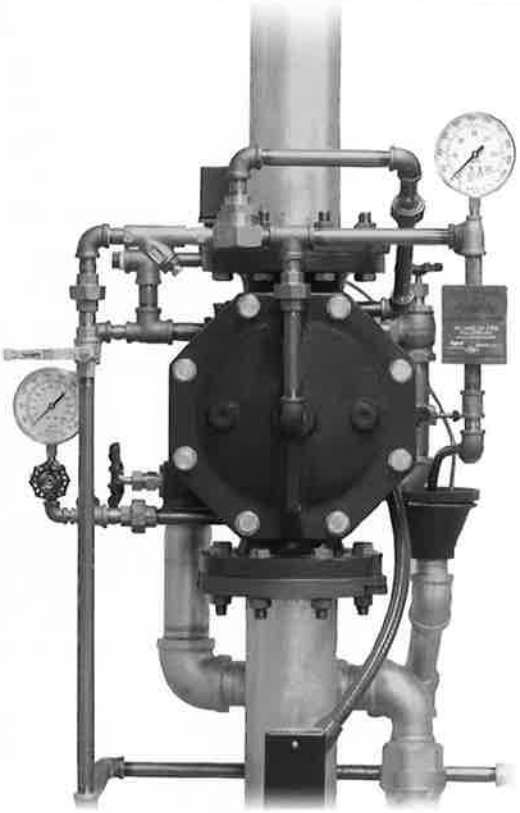
TECH DATA	TFP1460 – Electric/Pneumatic Actuation
TECH DATA	TFP1465 – Electric/Electric Actuation

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.

DV-5

Deluge Valve, External Resetting Diaphragm Style – 1 1/2" thru 8"

Model DV-5 Deluge Valves are diaphragm type valves designed for vertical or horizontal installation for fire protection system service. They are used as "automatic water control valves" in deluge, preaction, and special types of fire protection systems such as foam-water systems. When properly trimmed, the DV-5 Valves provide actuation of fire alarms upon system operation.



The unique diaphragm style design of the DV-5 Valve allows external resetting. Deluge or preaction systems can be reset without having to open a valve handhole cover and manually reposition a clapper or latch mechanism. Simply repressurizing the diaphragm chamber resets the valve.

The one-piece, diaphragm style design of the DV-5 allows standard internal and external coating of the valve to provide corrosion resistance. The internal corrosion resistance offered by the Rilsan coating makes the DV-5 suitable for most seawater and brackish water supplies when utilized in deluge systems. The external corrosion resistance of the Rilsan coating permits the use of the DV-5 in corrosive atmospheres associated with many types of industrial processing plants and outdoor installations.



- Available sizes:
  1 1/2" (DN40), 2" (DN50), 3" (DN80), 4" (DN100), 6" (DN150), and 8" (DN200)
- Vertical or horizontal installation
- One internal working part
- No linkage or clapper assembly
- Light weight ductile iron body
- Available with deluge and single & double interlock preaction trim
- Internally & externally coated
- Features external resetting
- Diaphragm operation
- For most seawater & brackish water supplies
- For deluge, preaction & foam systems
- Available as Flange x Flange, Flange x Groove, or Groove x Groove body styles
- Rated for 250 psi service
- Listings and Approvals:
  UL, C-UL, & FM



TECH DATA	TFP1305
TECH DATA	TFP1305A – Aluminum Bronze Alternative Materials of Construction

RED-E-CABINET®

Integrated Fire Protection Packages

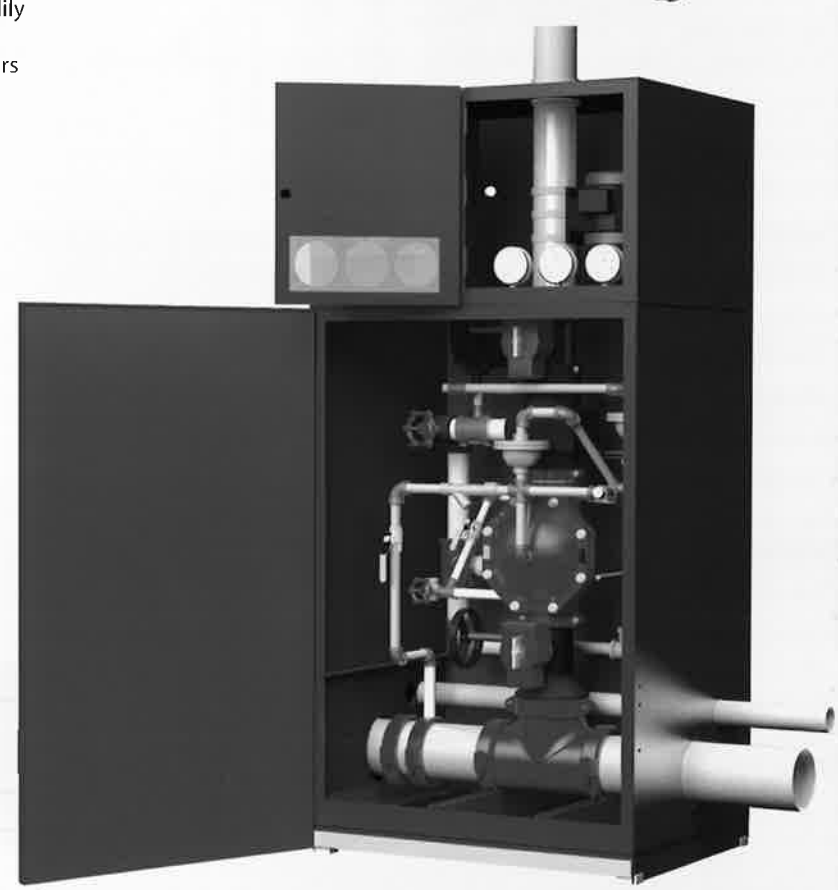


The Red-E-Cabinet is a pre-assembled fire protection valve package enclosed within a free-standing cabinet designed to occupy minimal floor space and to provide an aesthetically pleasing enclosure for a fire protection valve riser. The entire package is pre-wired and the water inlet and outlets to the valve riser are grooved to provide minimal installation time. The valve package includes the system (manual) shut-off control valve, automatic water control valve, as well as water flow and supervisory switches. When dry pilot actuation is utilized, a built-in air compressor with associated controls provides an automatic air supply for as either supervision or automatic water control valve actuation.

Integral to the DV-5 Red-E Cabinet is a control panel and back-up batteries for providing electrical alarm, supervisory, and trouble functions. All switches within the cabinet are pre-wired to the control panel, making the electrical connections for power, detection circuits, and alarms the only remaining connections to complete the system.

In addition to the control panel being integral to the DV-5 Red-E Cabinet, windows have been provided in the door for viewing the releasing panel functions and essential system pressure gauges. A lock for the control panel access door is standard, and a lock for the cabinet door is optional.

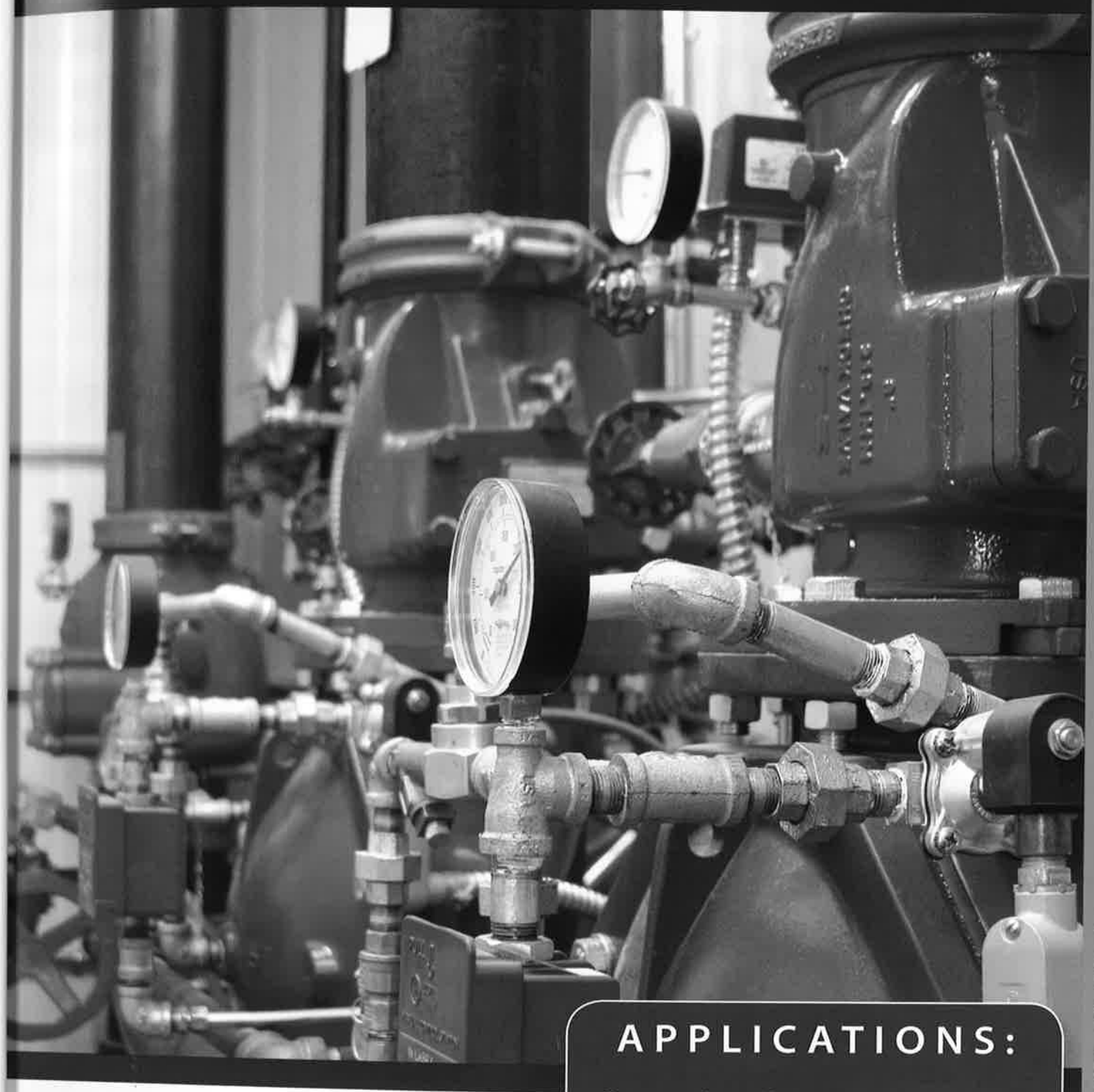
- The Red-E-Cabinet has been designed to readily incorporate 1½" (DN40), 2" (DN50), 3" (DN80), 4" (DN100), 6" (DN200) & 8" (DN200) valve risers for the following types of deluge systems:
  - Electric Actuation
  - Dry Pilot Actuation
  - Wet Pilot Actuation
  - Wet Pilot Actuation Double Interlock Preaction System
  - Electric/Electric Actuation
  - Electric/Pneumatic Actuation
- Aesthetically pleasing appearance
- Professionally assembled
- Minimal installation time
- Internally wired
- Custom manufactured
- Model DV-5 deluge valve (standard)
- All gauges and panel display are externally visible
- Listings and Approvals: UL, C-UL Listed, FM Approved



TECH DATA	TFP1300 – Deluge Systems
TECH DATA	TFP1302 – Remote-Resetting, Pressure-Reducing Deluge Valve, Limited Space Cabinet
TECH DATA	TFP1400 – Preaction Systems

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.

GENERAL PURPOSE VALVES



APPLICATIONS:

- *Prevention of Reverse Flow*
- *System Shut-Off or Sectional Control*
- *Closure of Fire Protection After Operation*
- *Facilitation of Testing*

General Purpose Valves are for use in fire protection service applications where it is necessary to prevent reverse flow, or where system shut-off or sectional control is desired for closing a fire protection system after operation, or to facilitate testing.

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.

WWW.TYCO-FIRE.COM

GENERAL PURPOSE VALVES

PRV-1

Pressure Regulating Valve – 2" thru 8" (DN50 thru DN200)



- The PRV-1 is intended to automatically maintain the outlet "set pressure" (static and residual) within a close range, regardless of fluctuations in the higher pressure inlet line or varying flow rates.
- Can be installed either vertically or horizontally
- Available with threaded, flanged, and cut groove inlet and outlet connections
- One piece, one moving part diaphragm
- In-line service (for maintenance)

TECH DATA TFP1580

- Pilot valve provides for any outlet "set pressure", i.e., 80 to 225 psi (5,5 to 15,5 bar)
- Rated for use at a maximum pressure of 250 psi (17,2 bar)
- Factory outlet "set pressure" of 125 psi (8,6 bar)
- Field outlet "set pressure" range of 80 to 225 psi (5,5 to 15,5 bar)
- Listings and Approvals: UL, C-UL, & FM

RV-1

Pressure Relief Valve – 2" thru 8" (DN50 thru DN200)



- Globe or angle pattern
- Installation in any orientation
- One-piece, one-moving-part diaphragm
- Ceramic enamel-coated interior
- Standard nylon-coated exterior
- Accurate pressure control
- In-line service
- No need to bleed trapped air from the diaphragm chamber

TECH DATA TFP1585

- Temperature Range: 50°F to 175°F (10°C to 80°C)
- Rated for use at a Maximum Inlet Pressure of 250 psi (17,2 bar)
- Field relief "set pressure" range of 30 to 250 psi (2,1 to 17,2 bar)
- Listings and Approvals: UL & FM

RESILIENT-SEATED GATE VALVES

Outside Screw and Yoke – 2½" thru 12" (DN65 thru DN300)



- Used in Fire Protection Systems for on/off operation
- Its design features and material selection criteria fulfill the need for a dependable, long life and easy to operate gate valve
- End connection configurations including Flange by Flange, Flange by Groove, and Groove by Groove

TECH DATA TFP1540

- The fully encapsulated EPDM ductile iron Wedge ensures bubble-tight sealing
- Rated for maximum working pressure
  UL - 300 psi (20,7 bar)
  FM - 232 psi (16,0 bar)
- Listings and Approvals: UL & FM

Vertical or Cross Wall Post Indicator – 4" thru 12" (DN100 thru DN300)



- Used in Fire Protection Systems for on/off operation
- Its design features and material selection criteria fulfill the need for a dependable, long life and easy to operate gate valve
- End connection configurations including Flange by Flange, Flange by Groove, and Groove by Groove

TECH DATA TFP1545

- The fully encapsulated EPDM ductile iron wedge ensures drop-tight sealing
- Rated for maximum working pressure
  UL - 300 psi (20,7 bar)
  FM - 232 psi (16,0 bar)
- Listings and Approvals: UL & FM

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.

CV-1F

Grooved Check Valve – 2" thru 10" (DN50 thru DN250)



- Can be installed either vertically or horizontally
- Cut groove inlet and outlet connections
- Suitable for use with grooved pipe couplings that are listed or approved for fire protection service

TECH DATA TFP1550

- Rated for use at a maximum pressure of 300 psi (20,7 bar)
- Listings and Approvals: UL, C-UL, FM, & VdS

BFV-300

Grooved Butterfly Valve – 2½" thru 10" (DN65 thru DN250)



- BFV-300 (Normally Open) and BFV-300C (Normally Closed)
- Indicating type valves provide visual indication of whether the valve is open or closed
- Suitable for use with grooved pipe couplings that are listed or approved for fire protection service

TECH DATA TFP1511

- 100% Silicone Free
- Rated for use at a maximum pressure of 300 psi (20,7 bar), or 175 psi (12,0 bar) for the 10" model
- Listings and Approvals: UL, FM, CE

Wafer Style Butterfly Valve – 2½" thru 10" (DN65 thru DN250)



- Suitable for use installation between ANSI Class 125 or 150 flanges or PN10/16 flanges without the need for flange gaskets
- Indicating type valves provide visual indication of whether the valve is open or closed
- 100% Silicone Free

TECH DATA TFP1516

- Rated for use at a maximum pressure of 300 psi (20,7 bar)
- Listings and Approvals: UL, FM, CE

BFV-N

Grooved Butterfly Valve – 2½" thru 10" (DN65 thru DN250)

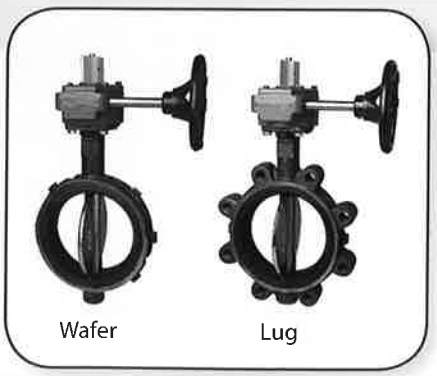


- Indicating type valves provide visual indication of whether the valve is open or closed
- Cut groove inlet and outlet connections
- Suitable for use with grooved pipe couplings that are listed or approved for fire protection service

TECH DATA TFP1510

- Rated for use at a maximum pressure of 300 psi (20,7 bar), or 175 psi (12,0 bar) for the 10" model
- Listings and Approvals: UL, C-UL, FM, Calif. State Fire Marshall

Wafer or Lug Butterfly Valve – 2" thru 12" (DN50 thru DN300)



- Indicating type valves provide visual indication of whether the valve is open or closed
- Suitable for use installation between ANSI Class 125 or 150 flanges without the need for flange gaskets
- Rated for use at a maximum pressure of 250 psi (17,2 bar).

TECH DATA TFP1515 - Wafer
TFP1520 - Lug

- Listings and Approvals: UL, C-UL, FM, Calif. State Fire Marshall

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.

GENERAL PURPOSE VALVES

LANSDALE POWERBALL 300 VALVE



- Bronze body butterfly valves are designed specifically for fire protection applications
- Models are available from 1" - 2½" NPT and from 1¼" - 2½" Grooved
- Feature slow closure that substantially minimizes water hammer
- May be used as sectional or small system control valves where a distinct visual indication of the valve status is required

TECH DATA Contact Tyco for details

- Complete with Position Indicator and Integral Tamper Switch
- Rated for use at a maximum service pressure of 300psi (20.7bar)
- Listings and Approvals: UL, and FM

TRIM VALVES



- Designed for general service such as shut-off, throttling, or drain valves
- Provide positive shut-off under normal operating conditions

TECH DATA Contact Tyco for details

DP-1

Dry Pilot Actuator



- Dry Pilot Actuator is an auxiliary releasing device
- When the Model DP-1 actuates, it permits water pressure to be released from the deluge or preaction valve differential chamber, thereby allowing the deluge or preaction valve to open
- Designed for Preaction Valves having double interlock electric/pneumatic release

TECH DATA TFP1380

- Rated for use at a maximum water supply pressure of 250 psi (17,2 bar) and a maximum system air (or nitrogen) pressure of 50 psi (3,4 bar)
- Listings and Approvals: UL, ULC, FM, and LPCB

ASV-1

Automatic Shut-Off Valve, Trim Component



- Intended for use with the DV-5 Deluge Valve in deluge and preaction systems
- Prevents inadvertent resetting of the DV-5 Valve after the DV-5 Valve initial operation
- Provided as part of the DV-5 Valve trim arrangements, it is installed in the diaphragm chamber supply connections

TECH DATA TFP1384

- Maximum Working Water Pressure: 250 psi (17,2 bar)
- Listings and Approvals: UL, C-UL, & FM

FSV-1

Fail-Safe Valve, Trim Component



- Intended for use with the Model DV-5 Deluge Valve in certain types of trim arrangements for deluge and preaction systems
- Prevents inadvertent resetting of the DV-5 after initial operation of the DV-5 Valve

TECH DATA TFP1386

- Maximum Working Water Pressure: 250 psi (17,2 bar)
- Listings and Approvals: UL, C-UL, & FM

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.

SPECIALTY ITEMS



Specialty Items complement the components used in fire protection systems. These special items help create the ideal configuration for any protection usage.

FEATURES:

- ***Automatic Quarterly Flow Switch Tests Per NFPA 25***
- ***Automatic Actuation of Electric &/ or Hydraulic Alarms***
- ***Reduce Accidental Manual Shut-Off & Unnecessary Fire Dept. Dispatch***
- ***Eliminate Expelled Water***

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.

SPECIALTY ITEMS

DD-1 (DRUM DRIP)

Wiliag™ Condensate Drain

- Ready to install
- No power machine for repair
- No power machine required for cutting pipe and making fittings
- Eliminates potential leaks
- Eliminates labor of fabrication
- Classic look of a professional job

TECH DATA Contact Tyco for details

- Net weight only 6.25 lbs.
- Overall length 24" (615 mm)
- Turning radius 2.5" (64 mm)



MODEL FL-1

Fusible Links – 50 lb. Continuous Load

- Heat-activated releasing device designed for installation in mechanically operated systems requiring a positive acting release mechanism
- Used extensively as releasing devices in restaurants and industrial fire protection systems, as well as in heat-activated counterbalanced systems such as fire doors, dampers and kitchen chemical systems
- Consists of fusible alloy sealed in the center of a bronze tube by a stainless steel ball

TECH DATA TFP1610

- When the alloy melts, the fusible assembly compresses, allowing it to eject from between the two-piece strut, strut assembly separates, activating the intended fire protection system or device
- Continuous load rating: 5 to 50 lbs (2,3 to 22,7kg)
- Listings and Approvals: UL, C-UL, & FM



MODEL A & B-1

Pipe Line Strainers

- Model A available sizes:
  - 3" (DN80), 4" (DN100), 6" (DN150), 8" (DN200) and 10" (DN250)
- Model B-1 available sizes:
  - 3" (DN80), 4" (DN100), 6" (DN150), and 8" (DN200)
- Available sizes:
  - 6" x 6" (150 mm x 150 mm)
  - 8" x 8" (200 mm x 200 mm)
  - 8" with 2 - 6" outlets (200 mm with 2 - 150 mm outlets)
  - 10" x 8" with 2 - 8" outlets (250 mm with 2 - 200 mm outlets)

TECH DATA TFP1640 & TFP1642

- Compact, lightweight, welded assembly with flanged inlet, outlet and flushing connection
- Corrosion resistant Type 304 stainless steel screen especially designed for low pressure loss
- Rated for use in services up to 175 psi (12,1 bar)
- Listings and Approvals: UL, C-UL and FM



Model A shown

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.

MODEL C

Pipe Line Strainer



- Available sizes:
  - 6" x 6" (DN150 x DN150)
  - 8" x 8" (DN200 x DN200)
  - 8" (DN200) with 2 - 6" outlets (2 - 150 mm)
  - 10" (DN250) x 8" (DN200) with 2 - 8" outlets (2 - 200 mm)
- Compact lightweight welded hot dipped galvanized assembly with flanged inlet, outlet and flushing connection

TECH DATA TFP1644

- Corrosion resistant Type 304 stainless steel screen especially designed for low pressure loss
- Rated for use in services up to 250 psi (17.2 bar)
- Listings and Approvals: UL, C-UL and FM

MODEL MC-1

Manual Control Station



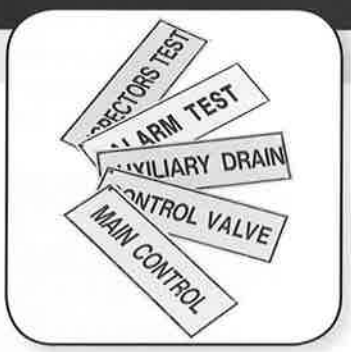
- Provides a tamper resistant means for emergency release
- Interconnection with the valves may be direct via hydraulic (wet) pilot line or indirect via pneumatic (dry) pilot line to a Model DP-1 Dry Pilot Actuator
- Rated for use in services up to 250 psi (17.2 bar)

TECH DATA TFP1382

- Listings and Approvals: UL, C-UL and FM

SIGNS

Identification Signs



- Designed to provide information to the end user about the sprinkler system and its components
- Available with a variety of wording combinations to meet the signage requirements of NFPA 13

TECH DATA TFP1615

SF-1

Sight Flow Connection



- Designed for use in fi re protection systems as a means for visibly checking that water is flowing and filling the pipe at that point
- May be installed vertically or horizontally
- Maximum Working Pressure: 175 psi (12,1 bar)
- Listings and Approvals: UL & FM

TECH DATA TFP1635

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.

SPECIALTY ITEMS

FIRE DEPARTMENT CONNECTIONS

Straight & 90° Fire Department Connections

- Designed for fire department use to increase water pressure and volume to automatic sprinkler system or standard-pipe system
- Available in both 90° side outlet pattern and the straight through siamese pattern

TECH DATA Contact Tyco for details



AD-1

Automatic Drain Valve

- Designed for use with Tyco Dry Pipe, Deluge, and Preaction Valves
- Provided as a trim component for these valves, the Model AD-1 Automatic Drain Valve is used to automatically drain the normally dry alarm lines
- Maximum Pressure 250 psi (17,2 bar)

TECH DATA TFP1630

- Listings and Approvals: UL, C-UL, FM, NYC under MEA 172-02-E



AD-2

Automatic Drain Valve

- Designed to automatically drain water from fire protection equipment supply connections that are to be maintained normally dry
- Installed vertically and utilized with an open drain
- Maximum Working Pressure: 175 psi (12,1 bar)

TECH DATA TFP1632

- Listings and Approvals: UL & FM



HANGERS

Pipe Hangers

- A full-line of pipe hangers for every fire protection need
- Manufactured to meet the quality standards that the industry demands
- Meet the requirements of NFPA 13

TECH DATA Contact Tyco for details



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.

GROOVED PIPING PRODUCTS



Grooved Piping Products are designed for use in fire protection systems and eliminate the need for screwed, welded, or flanged connections. They provide several economic advantages for connecting pipe and fittings when compared to welded or flanged systems. Grooved Piping Products also make field modifications easy, as couplings and fittings can be rotated, added, changed, or eliminated as necessary. Available in a wide range of sizes and configurations. Tyco makes a full line of grooved domestic and import products for fire protection.

FEATURES:

- ***Easy Field Modifications***
- ***Quickly Joining Steel Pipe without Welding***
- ***Rigid Connections for Long Runs & Risers***
- ***Retro-fitting & System Repair***
- ***Dampening Noise & Vibration Transmission***

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.

GROOVED PIPING PRODUCTS

FIGURE 577

Rigid Coupling



- Available sizes: 1" (DN25) through 12" (DN300)
- For use in fire protection systems, the GRINNELL G-FIRE Figure 577 Grooved Rigid Coupling provides a rigid joint by firmly gripping along the full circumference of the pipe grooves. Figure 577 Grooved Rigid Couplings are a proven dependable method of joining pipe and are an economical alternative to welding, threading, or using flanges.
- Listings and Approvals: UL, ULC, FM, VdS, & LPCB

TECH DATA TFP1854

- It is capable of pressures up to 350 psi (24, 1 bar) depending on pipe size and wall thickness when used in fire protection services
- Standard Grade "A" EPDM pre-lubricated gasket, -30°F to 150°F (-34°C to 66°C)
- Also available with tri-seal Grade "E" EPDM gasket for dry pipe fire protection systems, vacuum systems, and freezer applications

FIGURE 705

Grooved Flexible Coupling



- Available sizes: 1" (DN25) through 12" (DN300)
- The GRINNELL G-FIRE Figure 705 Flexible Coupling is capable of pressures up to 300 psi (20,7 bar) depending on pipe size and wall thickness when used in fire protection services. It provides a dependable method of joining pipe and is suitable for use in a variety of applications.
- Listings and Approvals: UL, ULC, FM, VdS, & LPCB

TECH DATA TFP1820

- Provides the needed flexibility to accommodate differential movement
- ••Standard Grade "A" EPDM pre-lubricated gasket, -30°F to 150°F (-34°C to 66°C)
- Also available with tri-seal Grade E EPDM gasket for dry pipe fire protection systems, vacuum systems, and freezer applications

FIGURE 716

Flexible Reducing Coupling



- Available sizes: 2" x 1½" (DN50 x DN40) through 8" x 6" (DN200 x DN150)
- Allows easy transition between two different pipe sizes and replaces two couplings and a reducing fitting
- It is capable of pressures up to 350 psi (24,1 bar) depending on pipe size and wall thickness. A flexible reducing coupling is not recommended for low-temperature applications.
- Listings and Approvals: UL, ULC, FM, VdS, & LPCB

TECH DATA TFP1830

- Faster and easier than threading, welding or using flanges
- Standard Grade "E" EPDM gasket, -30°F to 230°F (-34°C to 110°C)

FIGURE 707

Flexible Coupling



- Available sizes: 1¼" x 12" (DN32 x DN300)
- Provides a dependable method of joining pipe and is suitable for use in a variety of applications
- Capable of pressures up to 500 psig (34,5 bar) depending on pipe size and wall thickness
- Listings and Approvals: UL, ULC, FM, VdS, & LPCB

TECH DATA TFP1840

- Standard Grade "E" EPDM gasket, -30°F to 230°F (-34°C to 110°C)
- Also available with tri-seal Grade "E" EPDM gasket for dry pipe fire protection systems, vacuum systems, and freezer applications

FIGURE 71

Flange Adapter



- Available sizes: 2" (DN50) through 12" (DN300)
- Allows a direct transition from flanged components to a grooved piping system
- Bolt patterns conform to ANSI Class 125 and 150, or PN16 standards
- Listings and Approvals: UL, ULC, FM, VdS, & LPCB

TECH DATA TFP1880

- Capable of pressures up to 250 psig (17,2 bar) depending on pipe size and wall thickness
- Grade "E" EPDM gasket, -30°F to 230°F (-34°C to 110°C)

FIGURE 702

Mechanical Outlet Coupling



- The Grinnell Figure 702 Mechanical Outlet Coupling has the combined features of a coupling and a reducing outlet. The Grinnell Figure 702 is a pipe joining coupling with an integral reducing outlet, eliminating the need for a mechanical tee or a reducing tee and associated couplings.
- Run sizes from 1½" to 6" (DN40 to DN150)
- Maximum Pressure 500 psi (34,5 bar)

TECH DATA G220

- The Figure 702 is available with grooved, male threaded, or female threaded outlets.
- The Figure 702 can be used for vacuum service up to 10 inHg (254 mmHg) that can occur when the system is drained
- Grade "E" EPDM gasket, -30°F to 230°F (-34°C to 110°C)

FIGURE 730

Mechanical Tees & Crosses

- Threaded or grooved outlet
- May be used for any tee connection where a threaded or grooved outlet is needed
- It can be used in place of a tee, a cross connection, or a welded outlet where a threaded or grooved outlet is needed.
- The Mechanical Tee is ideal for use in retrofit or equipment hookup installations as it can be positioned along the pipe at the proper location in the field, ensuring exact lineup of the branch outlet connection.
- Listings and Approvals: UL, ULC, FM, VdS, & LPCB

TECH DATA TFP1860

- Run sizes in 2" to 8" outlets (DN50 to DN200)
- Branch sizes in ½" to 4" outlets (DN15 to DN100)
- Grade "E" EPDM gasket, -30°F to 230°F (-34°C to 110°C)



Grooved and Threaded Combination Crosses



Grooved Tees and Crosses



Female Threaded Tees and Crosses

GROOVED FITTINGS

Elbows, Tees, Caps and Crosses



- Provide an economical and efficient method of changing direction, adding an outlet, reducing or capping grooved piping systems
- Cast grooved fittings provide full flow characteristics
- Full back stop behind the groove to ensure proper coupling engagement and rigidity
- Wide range of grooved fabricated fittings also available

TECH DATA TFP1815

- 300 psi pressure rated
- 90° elbows and tees are also available in the "short pattern" style
- Available painted or galvanized finish
- Listings and Approvals: UL, ULC, FM, VdS, & LPCB



Figure 510S
Short Pattern 90° Cast Elbows
Sizes 2" thru 8" (DN50 – DN200)



Figure 510
90° Cast Elbows
Sizes 1-¼" thru 8" (DN32 – DN200)



Figure 510DE
90° Drain Elbows
Sizes 2" thru 8" (DN50 – DN200)



Figure 501
45° Cast Elbows
Sizes 2" thru 8" (DN50 – DN200)



Figures 512 & 312
22½° Elbows
Sizes 1-¼" thru 12" (DN32 – DN300)



Figures 511 & 311
11¼° Elbows
Sizes 1-¼" thru 12" (DN32 – DN300)



Figure 519S
Short Pattern Tee
Sizes 2" thru 8" (DN50 – DN200)



Figure 519
Tees
Sizes 1-¼" thru 8" (DN32 – DN200)



Figure 320
Groove x Groove x Male Thread Reducing Tees
Sizes 1-¼" thru 12" (DN32 – DN300)



Figures 221 & 321
Reducing Tees
Sizes 1-¼" thru 12" (DN32 – DN300)



Figure 323
Groove x Groove x Male Thread Reducing Tees
Sizes 2" thru 12" (DN50 – DN300)



Figures 391, 392, & 393
Adaptor Nipples
Sizes 1-¼" thru 12" (DN32 – DN300)



Figure 372
Reducers, Small End Threaded (Male)
Sizes 1-½" thru 6" (DN40 – DN125)



Figures 550 & 350
Concentric Reducers
Sizes 1-½" thru 12" (DN40 – DN300)



Figures 327 Fabricated
Crosses
Sizes 1-¼" thru 12" (DN32 – DN300)



Figures 260 & 360
End Caps
Sizes 1" thru 12" (DN25 – DN300)



Figure 341 & 342
Flange Adaptors
Sizes 1-¼" thru 12" (DN32 – DN300)

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.

40-5 STRAP

- The Figure 40-5 Strap is an economical alternative to welded pipe outlets on steel pipe.
- The Figure 40-5 Strap can be used with full lengths of pipe and eliminates threading and welding, decreasing waste and installation time.
- The Figure 40-5 Strap can be used in wet, dry pipe, and deluge systems
- Listings and Approvals: UL, ULC, & FM

TECH DATA TFP1720

- Maximum Pressure 175 psi (12,1 bar)
- Run sizes in 1¼" to 2½" outlets (DN32 to DN65)
- Grade "E" EPDM gasket, -30°F to 230°F (-34°C to 110°C)



ADACAP®

- Used to install the last sprinkler on grooved branch line piping or as a drain fitting
- End-of-the-line sprinkler fittings eliminate the need for an end cap and female outlet
- Can be turned down for end of line drain
- Available sizes: 1½" through 2½" (DN40 to DN65)

TECH DATA TFP1815

- Available in ½", ¾" and 1" outlets
- Listings and Approvals: UL, ULC, FM, VdS, & LPCB

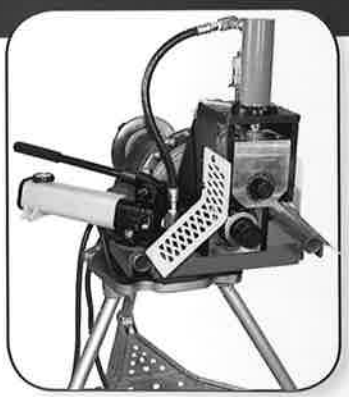


ROLL GROOVERS

- Automatic, portable, and field portable roll groovers for 1" through 24" pipe
- Model 1039-66 field portable groover can be operated with its own hand ratchet so that no other tools are required. Can also be mounted quickly and easily on a Ridgid® Model 300 unit.*
- Portable Roll Groovers are available with a electric motor or machines that can be mounted quickly and easily on a Ridgid® Model 300 unit.*.
- The Automated Roll Grooving Machines are designed for use in the shop. The machines have a self-contained hydraulic system that produces consistent quality roll grooves in high production runs.
- Large assortment of additional size rolls are available

TECH DATA Contact Tyco for details





* Ridgid is a registered trademark of Ridgid Tool Company

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.

CPVC PIPE & FITTINGS



APPLICATIONS:

- ***Light Hazard & Residential Occupancies***
- ***Unfinished Basements***
- ***Underground Water Pressure Service***
- ***Connections to Copper & Steel Piping***
- ***Resistance of Sweating, Condensation & MIC***

BlazeMaster®
FIRE SPRINKLER SYSTEMS

Tyco CPVC Pipe & Fittings manufactured with Lubrizol's BlazeMaster® compound are listed by Underwriters Laboratories, Inc. for use in:

- Light hazard occupancies as defined in the *Standard for Installation of Fire Sprinkler Systems, NFPA 13*
- Residential occupancies as defined in the *Standard for Installation of Fire Sprinkler Systems in Residential Occupancies up to Four Stories in Height, NFPA 13R*
- Residential occupancies as defined in the *Standard for Fire Sprinkler Systems In One- and Two-Family Dwellings and Manufactured Homes, NFPA 13D*
- Air plenums, as defined by the *Installation of Air Conditioning and Ventilating Systems, NFPA 90A and model mechanical codes*
- Underground water pressure service, NFPA 24
- Tyco Blazemaster® CPVC Piping Systems are UL and cUL listed, FM approved, and exceed ASTM standards and are for use in the widest range of applications for any CPVC fire sprinkler systems
- Pipe available in sizes ¾" through 3" in 10' and 15' lengths (Tech Data: IH-1900)
- Elbows, tees, crosses, couplings, sprinkler head adapters (SHA's), reducing tees, reducing bushings, CPVC to grooved couplings in sizes ¾" through 3"

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.

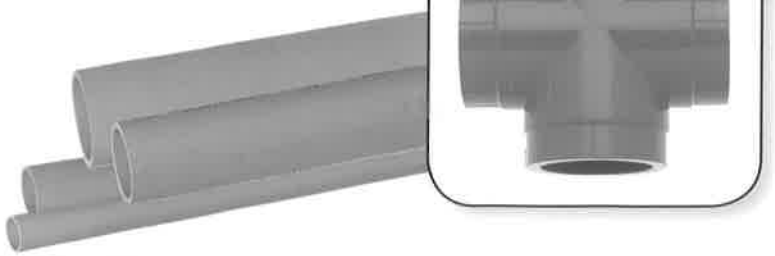
CPVC PIPE & THREADED FITTINGS

BlazeMaster FIRE SPRINKLER SYSTEMS

CPVC PIPE & FITTINGS

- Pipe available in sizes ¾" through 3" in 10' and 15' lengths
- Manufactured with Lubrizol's BLAZEMASTER® compound
- Fittings available in a wide range of designs and sizes ¾" through 3"
- Listings and Approvals: UL, ULC, FM, NSF, MEA, & LPCB

TECH DATA TFP1915 and Installation - IH-1900



BACK-TO-BACK FITTINGS

- Included in the Tyco line of BLAZEMASTER® CPVC products
- Allows two sidewall sprinklers to be piped from one fitting
- Ideal when the CPVC piping is located in a 3½" (2" x 4") vertical wall, eliminating the need for extra nipples, fittings and sprinkler head adapters typically associated with supplying two rooms with the same pipe

TECH DATA TFP1915 Installation - IH-1900

- Specially designed and dimensioned to enable the sidewall sprinklers to be recessed with ½" or ⅝" sheet-rock wall covering
- Listings and Approvals: UL, ULC, FM, NSF, MEA, & LPCB



CPVC TO COPPER FITTING

- Available sizes: ¾" through 2"
- Transition to BLAZEMASTER pipe from traditional copper tube for plumbing services
- Transition to steel or BLAZEMASTER CPVC Fire Sprinkler System piping from traditional copper tube for plumbing services is fast, easy, and readily available in the most complete fire sprinkler package in the industry

TECH DATA TFP1915 Installation - IH-1900

- Listings and Approvals: UL, ULC, FM, NSF, MEA, & LPCB



CPVC HANGERS & SUPPLIES

- "No Block Hanger" is a two hole strap that eliminates blocking to the beam when hanging CPVC pipe
- Positions the face of the pipe 1½" off the face of the joist
- Headset hanger is designed to hang CPVC pipe and for the proper placement of the sprinkler before the ceiling is installed
- Provides vertical restraint, eliminating need for additional hangers
- BLAZEMASTER Caulk and Walk® Firestop

TECH DATA .....Hangers - TFP1920, ... Installation - IH-1900

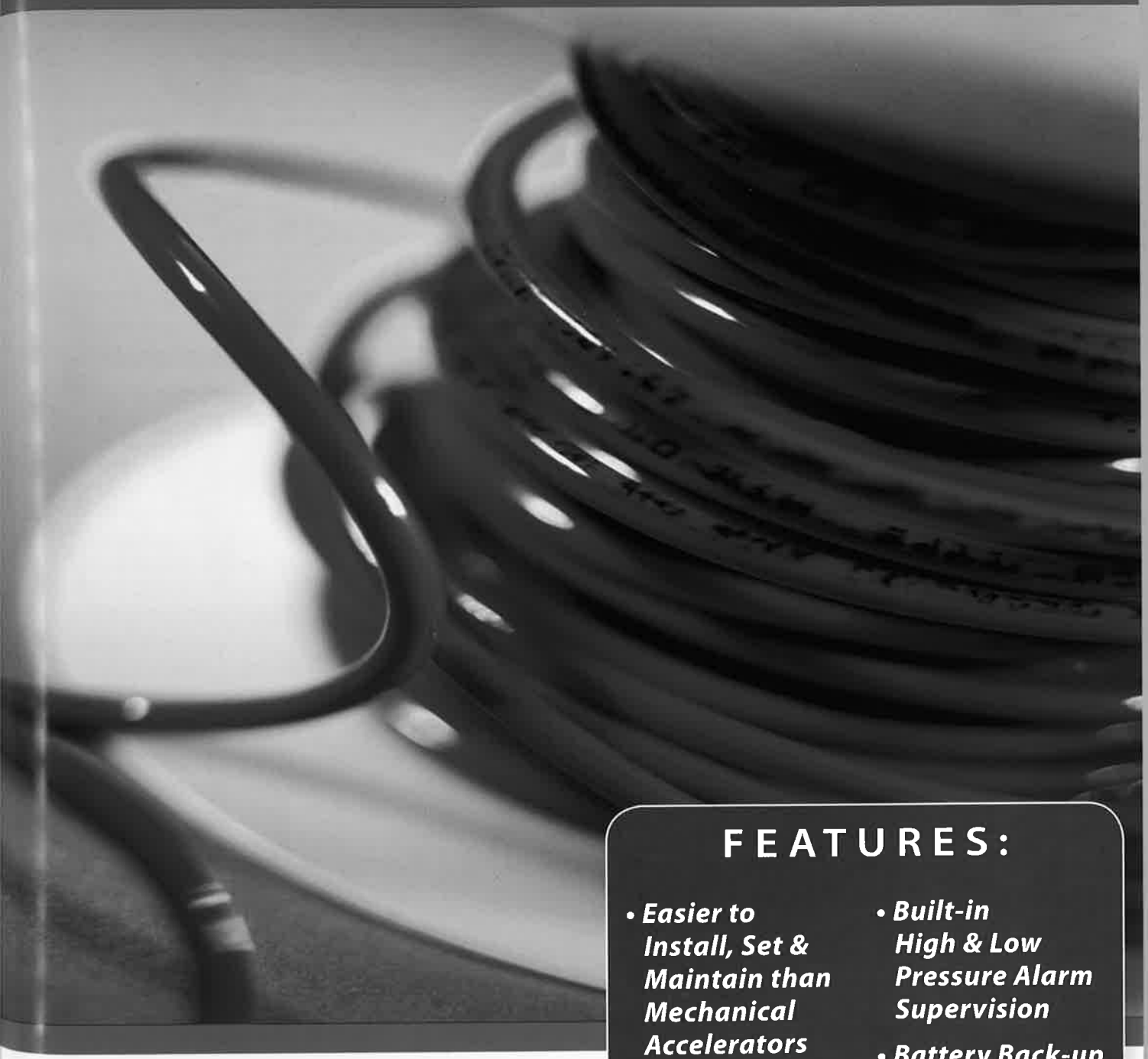
CEMENT MSDS TFP1990 & TFP1992,

- One-Step CPVC Cement specifically formulated for use with BlazeMaster pipe and fittings
- Hangers - Listings and Approvals: UL



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.

ELECTRICAL DEVICES



FEATURES:

- ***Easier to Install, Set & Maintain than Mechanical Accelerators***
- ***Operation of the Dry Pipe Valve within Four Seconds***
- ***Proven Electric Release Technology***
- ***Built-in High & Low Pressure Alarm Supervision***
- ***Battery Back-up in the Event of Primary Power Failure***

Electrical Devices (alarm and supervisory) allow sprinkler and other fire protection systems to be interfaced with hydraulic or electronic alarm systems so that upon activation of the system, an electrical or mechanical signal activates an audible or visible alarm or computerized notification device.

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.

ELECTRICAL DEVICES

VSR WATERFLOW ALARM SWITCH

Flow & Pressure Switch

- Available sizes: 2" (DN50) through 8" (DN200)
- Vane type waterflow switch for use on wet sprinkler systems
- Actuated with a minimum flow of 10 gallons per minute

TECH DATA Contact Tyco for details

- Retard delay is an adjustable feature that can be set from 0 to 90 seconds
- Flow condition must exist for the period of time necessary to overcome the selected delay period



VSR WATERFLOW ALARM SWITCH FOR SMALL PIPE

Flow & Pressure Switch

- Available pipe sizes: 1" (DN25), 1¼" (DN32), 1½" (DN40) or 2" (DN50)
- Vane type waterflow switch for use on wet sprinkler systems
- May also be used as a sectional water flow detector on large systems
- Installs directly into a threaded tee

TECH DATA Contact Tyco for details



MODEL PS10/PS40 PRESSURE ALARM SWITCH

Flow & Pressure Switch

- Designed to detect a pressure increase or decrease in fire sprinkler systems
- PS40 switches are primarily used to monitor low air pressure conditions in dry systems
- PS10 switch is appropriate for water flow detection

TECH DATA Contact Tyco for details



BALL VALVE WITH SUPERVISORY SWITCH

Ball Valve with Tamper & Alarm Switch

- Utilizes a ½" ball valve in combination with a switch assembly
- Switch assembly enclosed in a tamper resistant NEMA 4 (water resistant) enclosure

TECH DATA Contact Tyco for details



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.

PCVS CONTROL VALVE SUPERVISORY SWITCH

Tamper & Alarm Switch

- Weather proof and tamper resistant switch for monitoring the open position of post indicator, butterfly and other types of fire sprinkler/control valves

TECH DATA Contact Tyco for details



SOLENOID VALVE

For Releasing Service – ½" (DN15)

- Used in conjunction with an electric releasing panel that is listed or approved (as appropriate) for fire protection releasing service, and where the releasing panel is operated by listed or approved (as appropriate) electric fire detectors
- Available in a variety of voltages for both normal and hazardous locations

TECH DATA TFP2180



OSY-SU

Tamper & Alarm Switch

- Used to monitor the open position of an OS&Y (outside screw and yoke) type gate valve
- Mounts conveniently to most OS&Y valves ranging in size from 2" (DN50) to 12" (DN300)
- Can be used on some valves as small as ½"
- Circulates single sprinkler flow and allows testing of flow switch without external discharge of water - replaces traditional Inspector's test procedure

TECH DATA Contact Tyco for details



4410-RC

Releasing Panel

- Provides the interface between detection system, deluge or single or double interlocked preaction valve, and signaling circuit and devices in electrically actuated fire protection systems
- Separate supervisory zone provided for electronic supervision of valve position, low pressure, and other critical fire protection functions

TECH DATA Contact Tyco for details

- Can be used in single zone, cross zone, sequential or cross/sequential electric deduction systems
- Has programming capability
- Listings and Approvals: UL and FM



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.

ELECTRICAL DEVICES

TANK MOUNTED AIR COMPRESSOR

For Dry Pipe Sprinkler Systems

- Designed for the same high-performance as base mounted units
- Compressor is mounted on an air tank to offer further ease of installation and availability
- Automatic and safety features are built into the unit, reducing installation costs

TECH DATA Contact Tyco for details

- Multiple dry systems may be supplied from a single compressor tank that is a constant source of air
- This is the recommended air supply method for all dry pipe sprinkler systems



BASE MOUNTED AIR COMPRESSOR

For Dry Pipe Sprinkler Systems

- Designed for high volume (cubic feet of air per minute) at the moderate pressures required for the system
- Sized properly, these will fill the system to 40 PSIG of air pressure in approximately 30 minutes as required in NFPA 13

TECH DATA Contact Tyco for details



RISER MOUNTED AIR COMPRESSOR

Fully Automatic

- Fully automatic and are designed for easy installation
- Special mounting kits with U-bolts are available to facilitate riser mounting
- Sized properly, these compressors will fill a system to 40 PSIG within 30 minutes as required in NFPA 13

TECH DATA Contact Tyco for details



MODEL G16AC812

Automatic Supervisory Air Supply

- Supplies and maintains air in single interlock preaction fire protection systems having a nominal supervisory air pressure of 10 psi (0.7 bar)
- Can be mounted on the floor, on a wall, or to the system riser using optional brackets

TECH DATA TFP1620

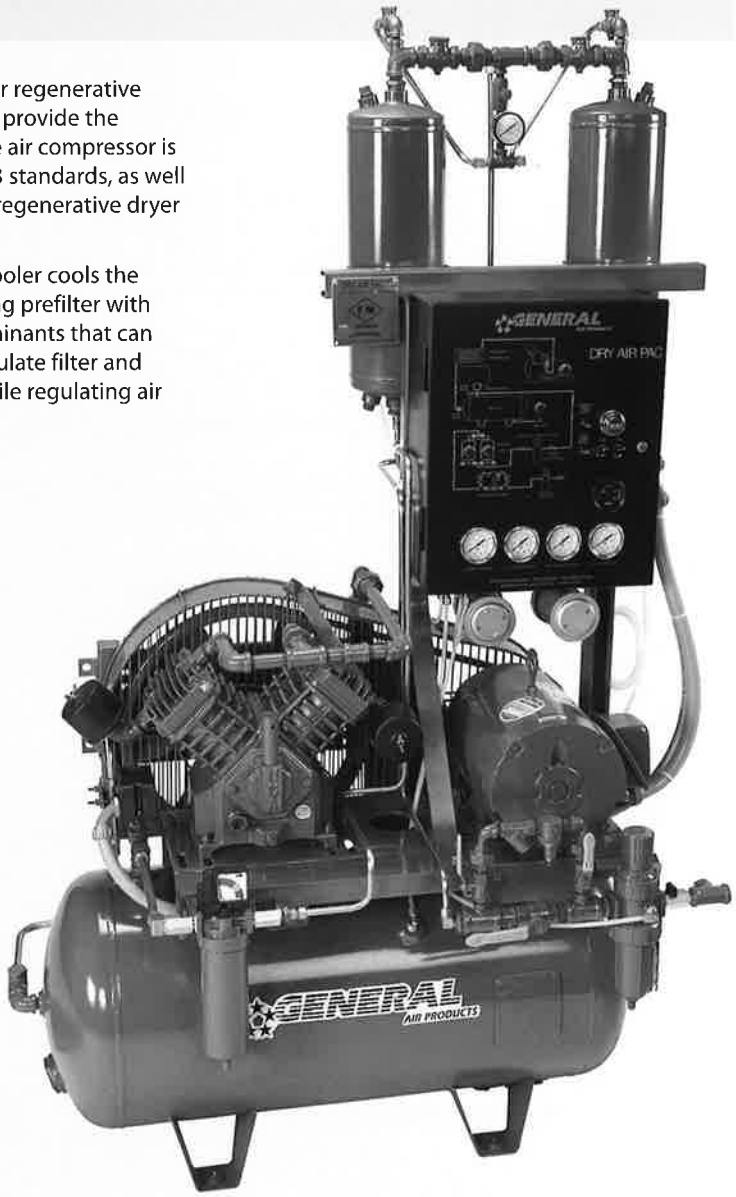
- Listings and Approvals: UL, CSA



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.

DAP SERIES

Dry Air Pac™



General's DAP Series Dry Air Pac™ is an FM Approved, twin tower regenerative dryer / compressor package. This turnkey system is designed to provide the sprinkler system with moisture free air to a -40°F Dew Point. The air compressor is designed to fill the sprinkler system in accordance with NFPA 13 standards, as well as provide the higher pressure needed to allow the twin tower regenerative dryer to function properly.

Prior to entering the regenerative air dryer, an air cooled aftercooler cools the compressor's hot discharge air to a maximum 100°F. A coalescing prefilter with differential pressure gauge removes oil vapor and other contaminants that can destroy the desiccant in the dryer towers. A combination particulate filter and regulator prevents downstream migration of desiccant dust while regulating air pressure to the sprinkler system.

The Dry Air Pac™ is controlled by one integrated control panel complete with flow diagram display, 120 volt control circuit with indicating lights for tower drying, drain valve activation and compressor operation, along with panel mounted hour meter, separate drain valve duration and interval controls, drain valve on/off switch and panel control on/off switch. Four panel-mounted pressure gauges are provided for receiver, outlet and drying tower pressures. Purge set pressure gauge is separately mounted and conveniently located at the purge valve for ease of setting the purge flow.

All components are pre-piped, pre-tested, and pre-wired for ease of mechanical and electrical installation on site. Each unit includes a UL Listed, FM Approved Air Maintenance Device. -100°F dew point is achievable - consult factory for details.

Applications for the Dry Air Pac™ include, but are not limited to Freezer Rooms, Cold Storage Warehouses, Attic Spaces and Parking Garages.

- Combination after filter and regulator
- A separate port is provided for attachment of a dewpoint-monitoring device
- Oversized mufflers
- Fully integrated control panel
- Compact air cooled after cooler
- Prefilter with differential pressure
- Vibration pads
- The Dry Air Pac™ comes fully charged with desiccant so that no on-site desiccant installation is required at startup
- Separate desiccant fill and drain ports are provided to allow re-charging of the dryer tanks without disassembly of the dryer component piping
- A coalescing filter, with integral differential pressure gauge, removes oil and water droplets prior to entry to into the desiccant dryer
- The single stage compressor allows for maximum efficiency. Standard equipment includes intercooler, oil fill/breather, oil sight glass and easily removable drain plug
- UL, C-UL Listed, FM Approved

TECH DATA	Contact Tyco for details

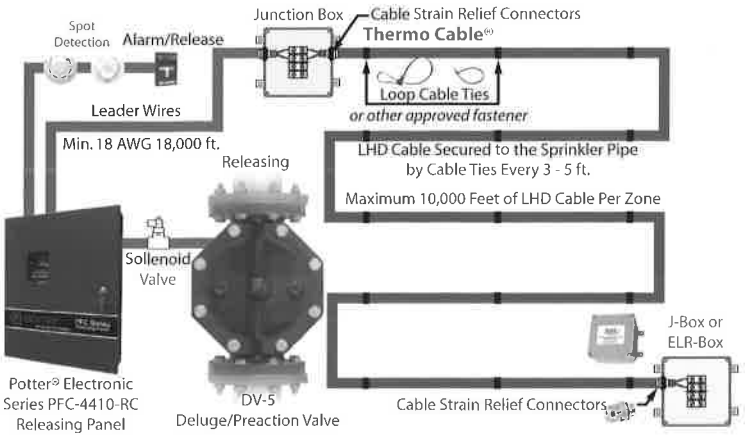
LHD

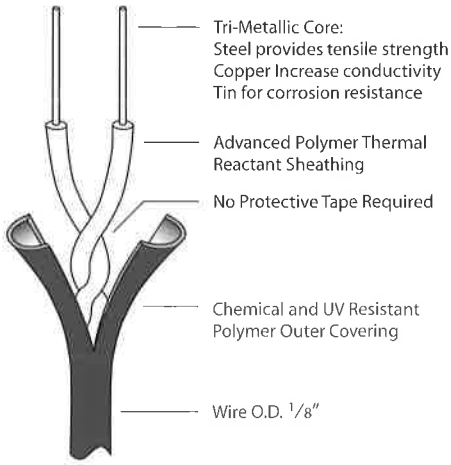
Linear Heat Detection Cable

The Linear Heat Detection (LHD) cable is a combination of advanced polymer and digital technologies which can be used on any panel, and can detect heat anywhere along its entire length.



At the core of the LHD cable is a twisted pair of extremely low resistance, tri-metallic conductors, sheathed in new advanced thermal polymers. These polymers are chemically engineered to break down at specific fixed temperatures allowing the twisted conductors to make contact and initiate an alarm. The polymer used for the protective outer coating of LHD cable is chemical resistant and UV protected. This allows the LHD cable be used in a wide variety of installations and special hazard applications.

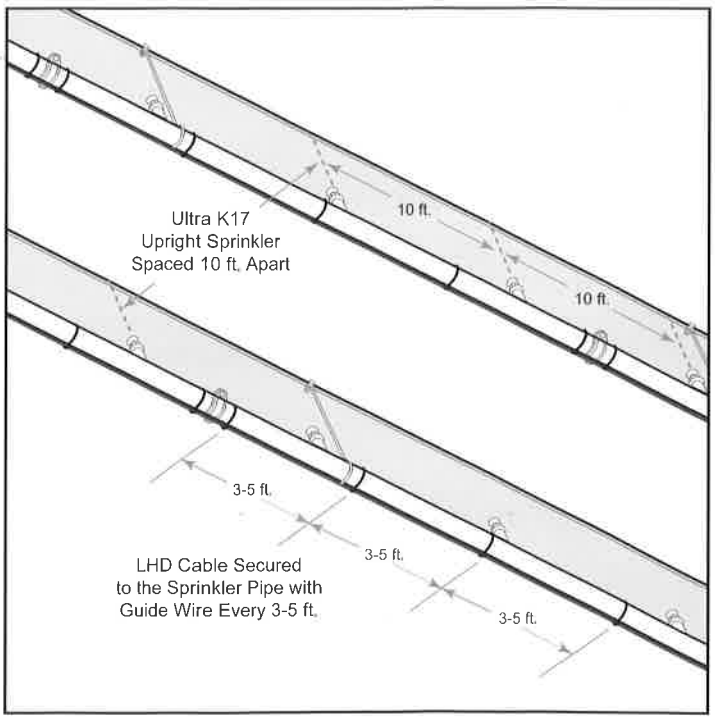




Linear Heat Detection Cable allows a Quell designed fire sprinkler system to be more efficient by quickly recognizing the fire, and conveying the information back to the fire alarm panel.

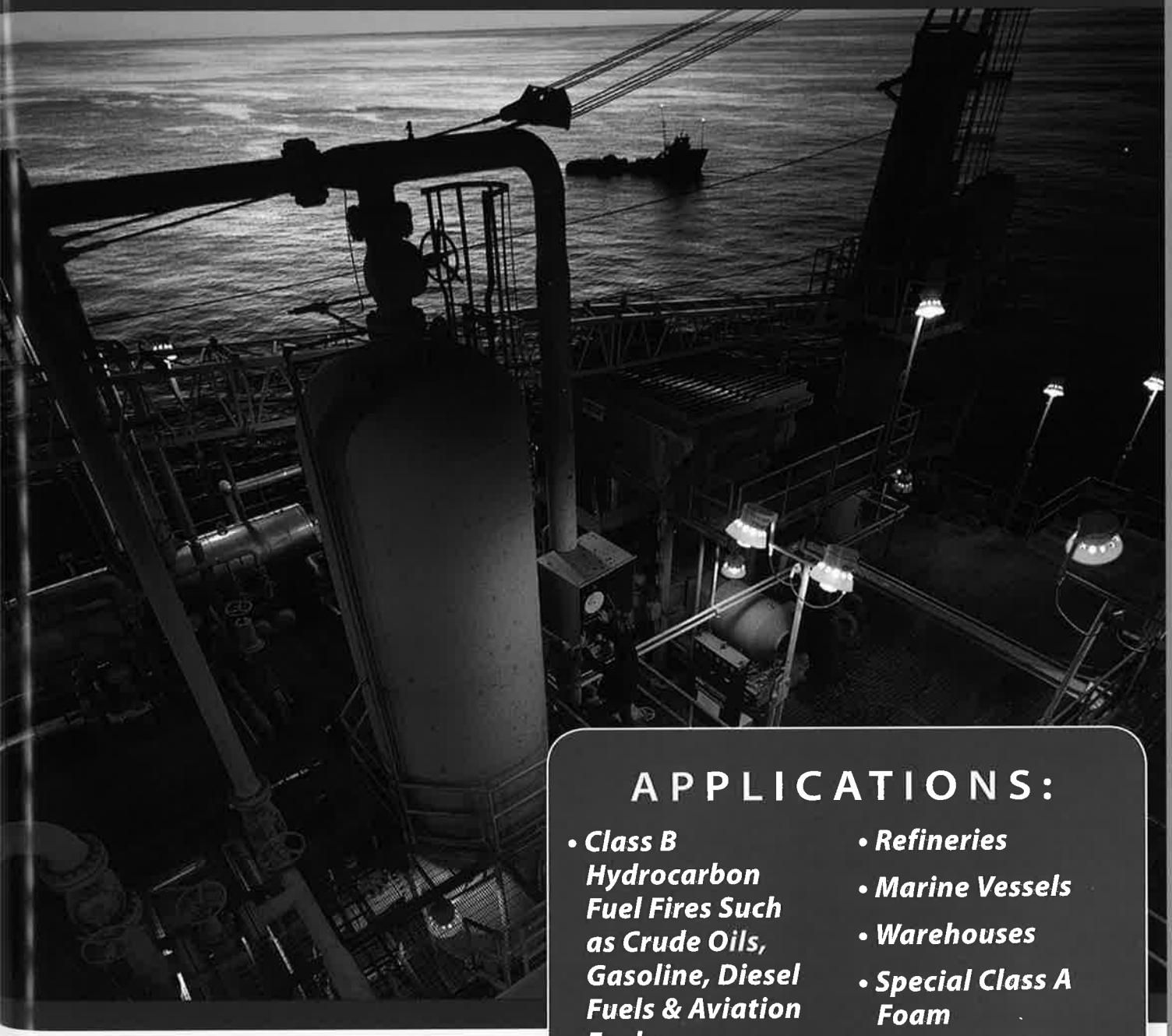
- Ideal for double interlock preaction detection
- Install up to 10,000 linear feet per zone
- Compatible with any conventional releasing panel listed for fire
- Can detect heat anywhere along the entire length of cable
- Multiple alarm temperatures can be incorporated in the same zone
- Easy to add a module
- Lower material & installation cost
- UL, C-UL Listed, FM Approved

TEMPERATURE RANGE	155° F (68°C) (typical temperature) 172° F (78°C), 190° F (88°C) 220° F (105°C)
AVAILABLE JACKET MATERIAL	Polyproplene, PVC, Nylon
RESISTANCE	.05 ohms/ft resistance per twisted pair
RF TESTED	Up to 10,000 linear ft.
TECH DATA	Contact Tyco for details



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.

FOAM SYSTEMS



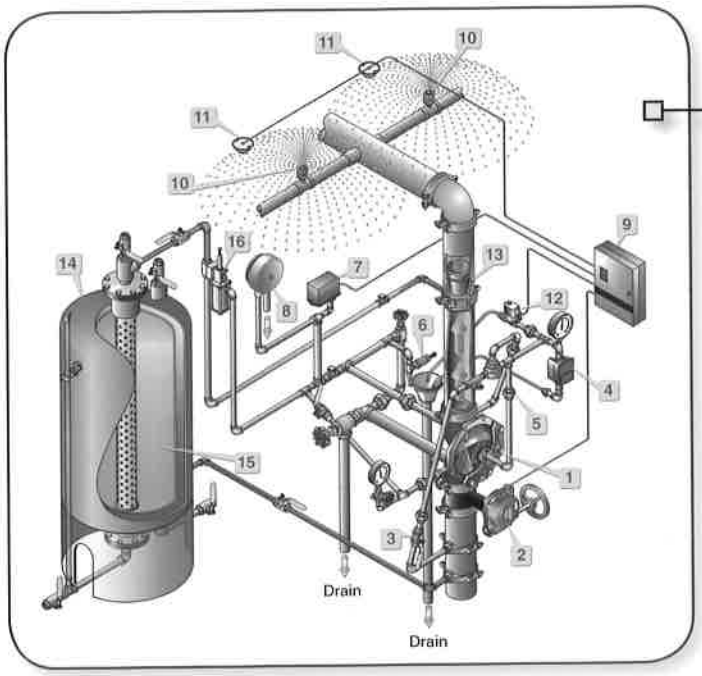
APPLICATIONS:

- ***Class B Hydrocarbon Fuel Fires Such as Crude Oils, Gasoline, Diesel Fuels & Aviation Fuels***
- ***Class B Polar Solvent Fuel fires such as Methyl Alcohol, Acetone & Ethyl Alcohol***
- ***Loading Racks***
- ***Aircraft Hangars***
- ***Refineries***
- ***Marine Vessels***
- ***Warehouses***
- ***Special Class A Foam Concentrates for Use with Municipal and Forest Firefighting Hardware & Apparatus***

Foam-Water Systems most commonly use the balanced pressure proportioning method for flammable liquid fire protection applications. They are designed to accurately control the flow of a foam liquid concentrate into a water stream over a wide range of flow rates and pressures. Two basic types, bladder tanks and pump systems, require the foam concentrate pressure to be balanced with the water pressure at the proportioner which meters the proper amount of foam concentrate into the water stream. The resulting foam solution is piped to discharge devices protecting the hazard area.

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.

FOAM SYSTEMS



Legend:

1 Deluge Valve (DV-5)
2 Isolation Valve
3 Diaphragm Supply Valve
4 Manual Control Station
5 Automatic Shut-off Valve
6 Automatic Drain Valve
7 Pressure Switch
8 Water Motor Gong
9 Releasing Panel
10 Spray Nozzle
11 Smoke/Heat Detector
12 Solenoid Valve
13 Foam Proportioner
14 Foam Bladder Tank
15 Foam Concentrate
16 Hydraulic Ball Valve

BLADDER TANKS

Foam Bladder Tanks

- Elastomeric bladder stores foam liquid concentrate discharged by incoming water applying pressure to the bladder
- Both vertical and horizontal models are available
- Internal tank perforated center tube provides improved agent discharge
- Foam concentrate capacities from 50 to 1500 gal (190 to 5678 L)
- Red standard system paint or coated with an epoxy "CR" red finish for use in marine or corrosive environments
- Standard or pre-piped tanks with proportioner for ease of installation



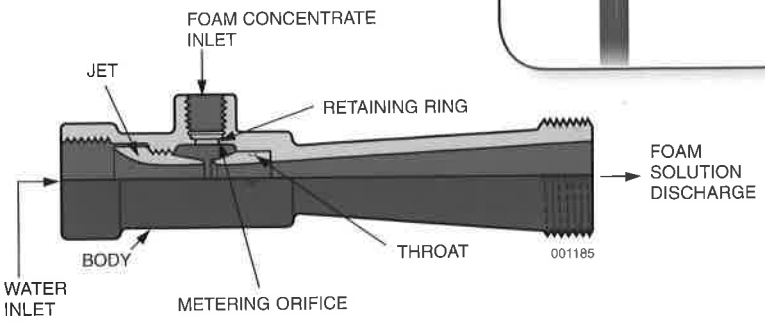
300 gal (1136 L) Horizontal Tank Shown

PROPORTIONER

2" and 2½" In-Line Proportioner

- Each proportioner consists of a body, inlet nozzle, and metering orifice, all of which are corrosion-resistant brass
- The proportioner body is designed with a female NPT threaded inlet and a male NPT threaded outlet in sizes of 2" or 2½"
- Clearly marked on the proportioner body are the flow direction arrow, as well as the type and percentage of concentrate for which the proportioner was designed
- The inlet nozzle is secured by a stainless steel retaining ring
- The metering orifice is sized according to the type and percentage of concentrate used and is also secured with a stainless steel retaining ring)





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.

IN-LINE PROPORTIONER

In-Line Proportioner Pump System



- Maintains an equal pressure in the foam concentrate and water inlets to the proportioner. This allows the proportioner to be used over a wide range of flows and pressures. It responds quickly and accurately to changes in the water inlet pressures and flow rates
- Spool valve design ensures accurate pressure regulation and rapid response to changes in flow demand
- Six standard sizes
- Brass foam concentrate piping with stainless steel trim accessories
- Standard for use in marine applications and other corrosive environments
- Nameplates for valve identification
- Choice of unpainted brass or standard red paint finish
- Used with an atmospheric foam concentrate tank and a positive displacement foam concentrate pump

FOAM AGENTS

ANSULITE® 1% AFFF Concentrate



- For use on Class B hydrocarbon fuel fires such as crude oils, gasoline, diesel fuels and aviation fuels. Aspirated or nonaspirated discharge devices. 1% solution in fresh, salt or hard water. 1% premix in fresh or potable water. UL Listed.

ANSULITE® 1% Freeze-Protected AFFF Concentrate



- For use on Class B hydrocarbon fuel fires such as crude oils, gasoline, diesel fuels and aviation fuels. Aspirated or nonaspirated discharge devices. 1% solution in fresh, salt or hard water. 1% premix in fresh or potable water. Concentrate is freeze protected to –20 °F (–29 °C). UL Listed.

ANSULITE® 3% AFFF Concentrate (AFC-3-A)



- For use on Class B hydrocarbon fuel fires such as crude oils, gasoline, diesel fuels, and aviation fuels. Aspirated or nonaspirated discharge devices. 3% solution in fresh, salt or hard water. 3% premix in fresh or potable water. UL Listed.

ANSULITE® PREMIUM 3% AFFF Concentrate MIL SPEC (AFC-5-A)



- For use on Class B hydrocarbon fuel fires such as crude oils, gasoline, diesel fuels and aviation fuels. Aspirated or nonaspirated discharge devices. 3% solution in fresh, salt or hard water. 3% premix in fresh or potable water. UL Listed. On QPL under U.S. Military Specification MILF- 24385F.

ANSULITE® 3% Freeze-Protected AFFF Concentrate



- For use on Class B hydrocarbon fuel fires such as crude oils, gasoline, diesel fuels and aviation fuels. Aspirated or nonaspirated discharge devices. 3% solution in fresh, salt or hard water. 3% premix in fresh or potable water. Concentrate is freeze protected to –20 °F (–29 °C). UL Listed.

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.

FOAM AGENTS (CONT.)

ANSULITE® 6% AFFF Concentrate (AFC-3)



- For use on Class B hydrocarbon fuel fires such as crude oils, gasoline, diesel fuels and aviation fuels. Aspirated or nonaspirated discharge devices. 6% solution in fresh, salt or hard water. 6% premix in fresh or potable water. UL Listed.

ANSULITE® PREMIUM 6% AFFF Concentrate MIL SPEC (AFC-5)



- For use on Class B hydrocarbon fuel fires such as crude oils, gasoline, diesel fuels and aviation fuels. Aspirated or nonaspirated discharge devices. 6% solution in fresh, salt or hard water. 6% premix in fresh or potable water. UL Listed. On QPL under U.S. Military Specification MILF- 24385F.

ANSULITE® 3X3 Low Viscosity Alcohol-Resistant AFFF Concentrate



- Superior firefighting performance on Class B fuel fires. Used as 3% concentrate on BOTH hydrocarbon fuels such as gasoline, fuel oil, etc., and polar solvent (water miscible) fuels such as methyl alcohol, acetone, MTBE, etc. Low viscosity formula enhances performance with in-line eductors, balanced pressure systems and built-in systems on firefighting vehicles. Aspirated or nonaspirated discharge devices. 3% solution in fresh, salt or hard water. 3% premix in fresh water. UL Listed, FM and USCG Approved.

ANSULITE® ARC Alcohol-Resistant 3%/6% AFFF Concentrate



- For use on Class B fuel fires: 3% concentrate on hydrocarbon fuels such as gasoline, fuel oil, etc. and 6% on polar solvent (water miscible) fuels such as methyl alcohol, acetone, MTBE, etc. Aspirated or nonaspirated discharge devices. 3%/6% solution in fresh, salt or hard water. 3%/6% premix in fresh or potable water. UL Listed and FM Approved.

ANSULITE® ARC 3 or 6 Freeze Protected



- Freeze Protected ANSULITE® ARC is intended for use as a 3% or 6% proportioned solution, depending on the type of fuel hazard. Fresh or salt water can be used to create the foam water solution. The foam concentrate may be stored at temperatures down to 0 °F (–18 °C) without freezing. If stored below the minimum use temperature, freezing may occur. If freezing does occur, thaw and remix the concentrate prior to use.

3% Regular Protein Foam Concentrate



- For use on Class B hydrocarbon fuel fires such as crude oils, gasoline, diesel fuels and aviation fuels. Must be used with air aspirating type discharge devices. 3% solution in fresh, salt or hard water. UL Listed.

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.

FOAM AGENTS (CONT.)

3% Fluoroprotein Foam Concentrate



- For use on Class B hydrocarbon fuel fires such as crude oils, gasoline, diesel fuels and aviation fuels. Must be used with air aspirating type discharge devices. 3% solution in fresh, salt or hard water. UL Listed.

SILV-EX® "Class A" Fire Control Concentrate



- Makes water at least five times more effective on many Class A deep-seated applications including wild fires and fires found in structures, paper, tires, and coal. Proportioned from 0.1% to 1% in fresh brackish or sea water; as a premix in fresh or potable water for long-term storage. Delivered using aspirating and nonaspirating discharge devices, compressed air foam systems or dropped from fixed or rotary wing aircraft. Approved by U.S. Forest Service.

ANSUL-A™ Municipal "Class A" Fire Control Concentrate



- ANSUL-A foam concentrate is formulated using fluorine-free surfactants to perform on Class A combustible materials. ANSUL-A is compatible for use in compressed air foam systems (CAFS) over the use range of 0.1% to 1.0%. The minimum storage temperature for this concentrate is 20 °F (–6.7 °C).

TARGET-7™ Vapor Mitigation & Neutralizing Agent



- For use on highly toxic chemicals like chlorine dioxide and titanium tetrachloride. Mitigates dangerous vapor releases and simultaneously neutralizes (with the addition of an acidic or caustic agent, depending on the application) the spilled material without causing additional vapor release.

HIGH-EXPANSION FOAM PRODUCTS

JET-X® High-Expansion Foam Generators



- Water-powered. Designed to deliver JET-X® high expansion foam with a maximum output capacity of 24,000 cfm (680 cu. m/min.) The generators are of steel construction with a water powered motor and stainless steel foam screen
- No electrical power is required
- The generators come in various sizes and are used for both portable and fixed-system applications

JET-X® 2 ¾% High-Expansion Foam Concentrate



- For use on Class A, B and LNG fires. Capable of total flooding large rooms and enclosures when used with JET-X high expansion generators at 200:1 to 1000:1 expansion ratios (2 ¾% concentration). Also used with medium-expansion equipment at 50:1 to 200:1 expansion ratios (2% concentration). Used only with air aspirating foam discharge devices. UL Listed and FM Approved.

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.

FOAM SYSTEMS

APPROVED DISCHARGE DEVICES FOR USE WITH FOAM CONCENTRATES

Foam liquid concentrates are suitable for use on fires involving ordinary hydrocarbon petroleum products, and some foam liquid concentrates may also be suitable for use on fires involving polar solvent fuels. The fire protection system designer first identifies the fuel load and selects the foam liquid concentrate according to its ability to be used for a given fuel load. Upon selecting the foam liquid concentrate, the designer then selects equipment, including discharge devices, based on listing/approval compatibility of the equipment with the concentrate.

TECH DATA TFP2005

Discharge devices fall into one of four categories:

- Foam-water sprinklers
- Foam-water spray nozzles
- Non-aspirating spray nozzles
- Standard sprinklers

D3

Protectospray™ Nozzle

TECH DATA TFP802
ADDITIONAL INFO Page 48

B-1

½" Foam-Water Sprinkler

TECH DATA TFP840
ADDITIONAL INFO Page 49

EA-1

Automatic Protectospray™ Nozzle

TECH DATA TFP800
ADDITIONAL INFO Page 48

TY-B

Upright & Pendent

TECH DATA TFP151
ADDITIONAL INFO Page 8

TY-FRB

Upright & Pendent

TECH DATA TFP171
ADDITIONAL INFO Page 9

ELO-231B

Pendent & Upright

TECH DATA TFP342
ADDITIONAL INFO Page 22

ELO-231 FRB

Pendent & Upright

TECH DATA TFP344
ADDITIONAL INFO Page 23

ELO-231

Pendent & Upright

TECH DATA TFP340
ADDITIONAL INFO Page 23

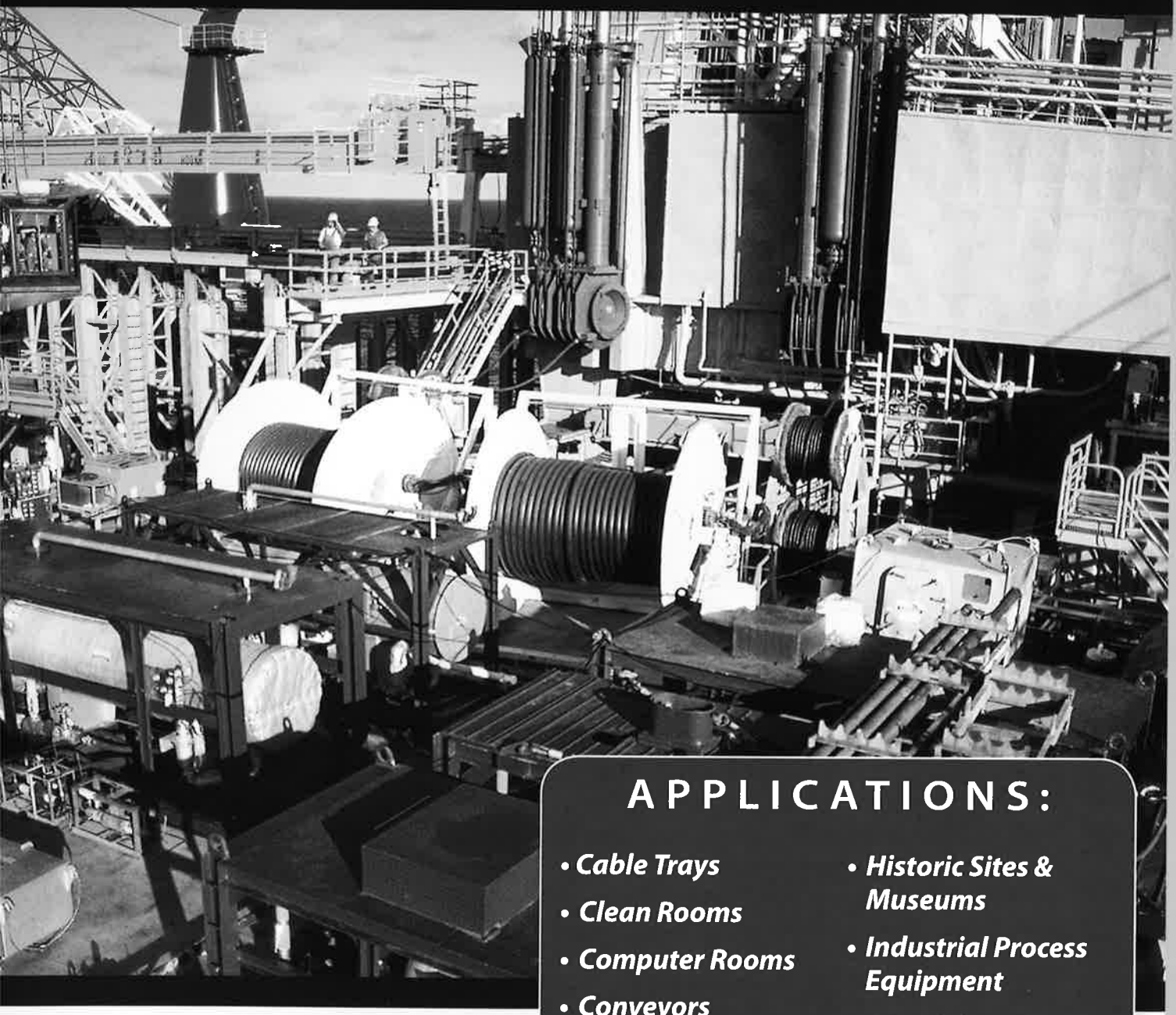
TY-FRL

Upright & Pendent

TECH DATA TFP130
ADDITIONAL INFO Page 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.

AQUAMIST SYSTEMS



APPLICATIONS:

- *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*
- *Telecommunications*
- *Transformers*
- *Vapor Suppression*

AquaMist

AQUAMIST Systems utilize the newest and most unique nozzles developed and approved for fire protection. They offer an alternative to gaseous, foam, and heavy density sprinkler systems. By utilizing a higher pressure than a normal sprinkler system, but a 50-80% lower water flow, the AQUAMIST Systems use less water more effectively, reduce pipe sizes and labor costs, and minimize cleanup and water damage.

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.

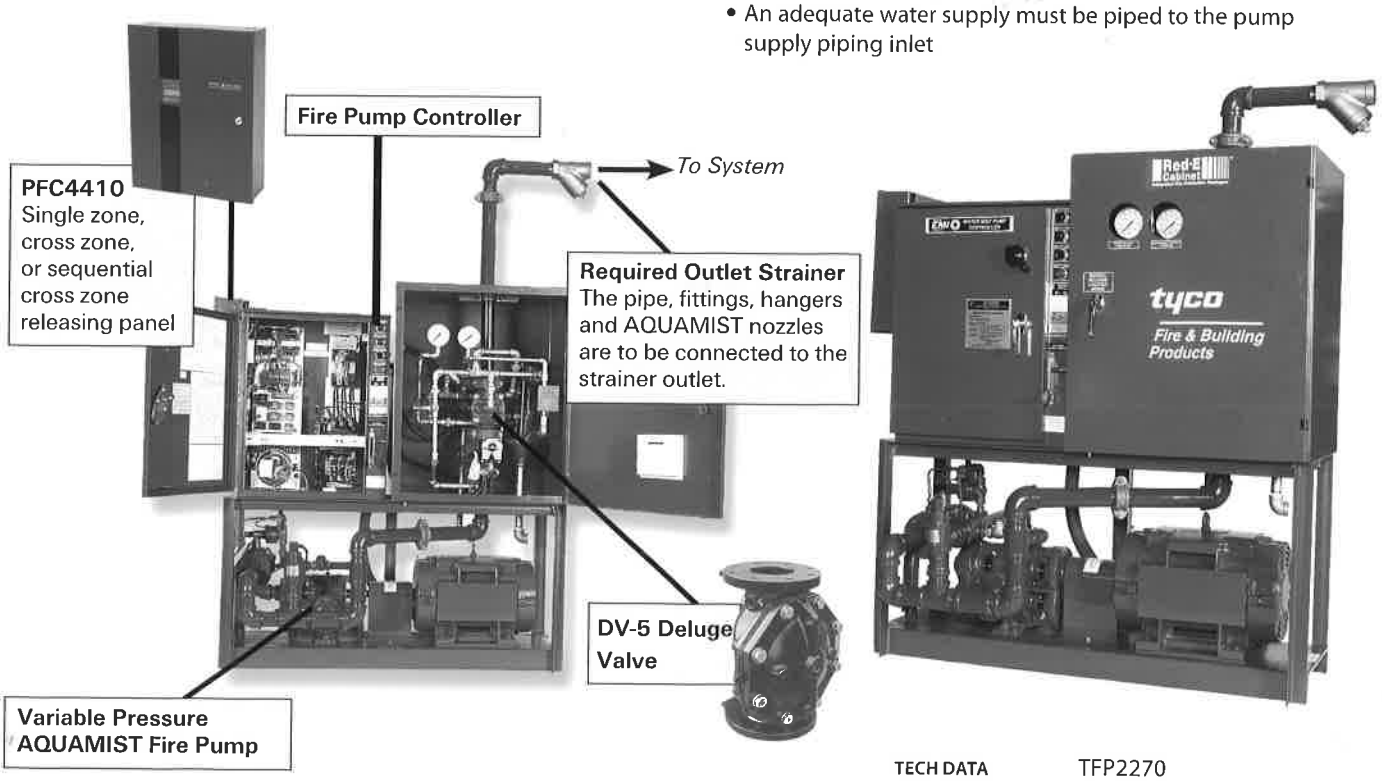
AquaMist

"MCC" MIST CONTROL CENTER WITH RED-E CABINET®

Pre-Assembled Fire Pump, Controller, Deluge Valve Cabinet & Releasing Panel

The "MCC" Pump Skid Package is the self-contained control center of the AQUAMIST System. The compact skid unit has been professionally designed and assembled to ease system installation and to meet the most stringent project requirements.

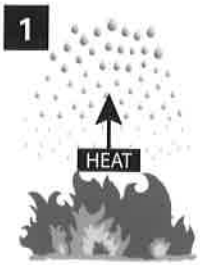
- Power must be provided for the control cabinet and pump controller
- Detection circuits must be installed and wired to the control cabinet
- An adequate water supply must be piped to the pump supply piping inlet



TECH DATA TFP2270

How the AQUAMIST System Works

1



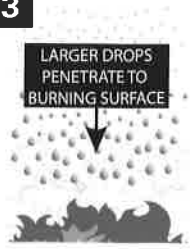
- Evaporation (heat extraction) is a function of surface area of droplets
- Reducing droplet size increases surface area
- Increase in surface area allows for larger cooling effect for a given flow

2



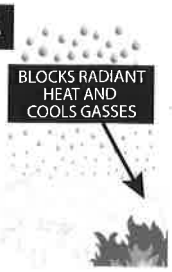
- Water converts to vapor expanding by a factor of 1650 times
- Oxygen is displaced and diluted, thereby blocking it from the fuel source
- Higher heat level causes a faster vaporization

3



- Fire extinguishment is improved with direct contact of water droplets
- This type of extinguishment is normally associated with standard sprinklers
- Important part of operation if ventilation is a factor and Class A combustibles are present

4



- Small water droplets tend to remain suspended
- The expanding mist will expand and cool the gases and other fuels in the area
- Blocks the transfer of radiant heat to the adjacent combustibles and pre-wets them

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.

AquaMist

AM4 AQUAMIST NOZZLE

Non-Automatic (Open)

- Intended for use with total compartment, engineered, watermist deluge systems.
- They are intermediate pressure nozzles which 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.

K FACTOR	K=0.24 (3,5)
THREAD SIZE	½" NPT
FINISH	Stainless Steel
TECH DATA	TFP2204



Sprinkler Wrench



AM10 & AM10B AQUAMIST NOZZLES

Non-Automatic (Open)

- Intended for use with total compartment, engineered, watermist deluge systems.
- They are intermediate pressure nozzles which 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 working pressure of 250 psi (17,2 bar)

K FACTOR	K=0.24 (3,5)
THREAD SIZE	½" NPT
FINISH	Stainless Steel
TECH DATA	TFP2210

- May be installed in recessed pendent applications using a unique threaded or socket-weld fitting with integrated tethered cap assembly. (see page 94 or TFP2242)



Sprinkler Wrench



AM24 AQUAMIST NOZZLE

Automatic Type Mist Nozzle

- Intended applications – IMO mandated local application system for protection of class a machinery spaces

K FACTOR	0.33 Gpm/psi $^{0.5}$, (4,71 Lpm/bar $^{1/2}$)
THREAD SIZE	½" NPT
APPROVALS	UL
FINISH	Stainless Steel
TECH DATA	Contact Tyco



Sprinkler Wrench



AM31 AQUAMIST NOZZLE

Non-Automatic (Open)

- Intended for use with engineered, watermist deluge systems.
- Produces a spray suitable for the extinguishment of Class K fires within industrial frying equipment.
- They may be installed in recessed pendent applications using a unique threaded or socket-weld fitting with integrated tethered cap assembly. (see TFP2242)

K FACTOR	0.30 Gpm/psi $^{1/2}$, (4,3 Lpm/bar $^{1/2}$)
THREAD SIZE	½" NPT
FINISH	Stainless Steel
TECH DATA	TFP2202



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.

AquaMist

TYPE IFP AQUAMIST FITTINGS

Recessed Nozzle Fittings

- These fittings are designed to accommodate the Type AM10 and AM31 nozzles for industrial fryer primary cooking area applications.
- The cap conceals the nozzle which separates from the fitting during system discharge but remains attached by a length of chain.

THREAD SIZE	½" NPT
FINISH	Stainless Steel
TECH DATA	TFP2242

- Maximum working pressure of 250 psi (17,2 bar)



Sprinkler Wrench



TYPE IFP AQUAMIST CONTROL CABINET

Zone Control Valve Cabinet

- Utilized in the IFP Intermediate Pressure Water Mist system designed to protect industrial fryer hazards.
- The Zone Control Valve Cabinet receives an alarm signal from the Fire Protection Releasing Panel allowing water flow to the areas of protection based on the incoming electrical signals.
- The Zone Control Valve Cabinet consists of two zone control valves. The first Zone Control Valve is a 1-½" TYCO Model DV-5 body with a specific trim configuration designed for the IFP application, and the other is the ¾" Fines Box solenoid valve.

TECH DATA	TFP2250

- Listings and Approvals:
  FM (as part of a FM Approved IFP System)



AQUAMIST RED-E MIST SUPPLY SKID

Tank-based Nitrogen Propelled Water Supply Unit

- The Red-E Mist Supply Skid consists of a bank of nitrogen supply cylinders and one or two water supply tanks
- The nitrogen is regulated to pressurize the head space inside the tank, pressurizing the water used to supply the Ultra Low Flow AQUAMIST System.
- The Red-E Mist Supply Skid is available in two sizes. The Model 600 skid consists of one 600 gallon (2271 liter) water supply tank with four nitrogen supply cylinders. The Model 1200 skid consists of two 600 gallon (2271 liter) water supply tanks with eight nitrogen supply cylinders

TECH DATA	TFP2272



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.

INDEX

40-5 Strap 78
4410-RC 83
ACC-1 57
AD-1 72
AD-2 72
ADACAP 78
Air Maintenance Devices 58
Alarm Valve 52
Alternate Materials Of Construction 44
AM10 and AM10B AQUAMIST 49, 95
AM24 AQUAMIST 49, 95
AM31 AQUAMIST Nozzle 95
AM4 AQUAMIST 49, 95
AMD-1 58
AMD-2 58
AMD-3 58
ANSULITE Concentrates ..... 89 - 91
Aquamist Supply Skid 96
Aquamist Systems ..... 93 - 96
ASV-1 68
Attic Sprinklers 40
Automatic Drain Valve 72
Automatic Protectospray Nozzle 48, 92
Automatic Shut-Off Valve 68
Automatic Supervisory Air Supply 84
Automatic Type Mist Nozzle ..... 95 - 96
AV-1 52
B-1 ..... 50, 92
Back-to-Back Fittings 80
Ball Valves 67, 82
Base Mounted Air Compressor 84
BFV-300 67
BFV-N 67
Bladder TanKs 88
Caps 77
CC1 41
CC2 41
CC2 41
CHEC 16
Combustible Concealed Space Sprinklers 41
Concealed Pendent 12, 17, 29-30, 37
Cooling Tower Nozzle 50
CPVC Hangers & Supplies 80
CPVC Pipe & Fittings ..... 79 - 81
CPVC to Copper Fitting 80
CV-1F 67
CV-1FR 53
D3 ..... 48, 92
D3S 48
D4a 50
DAP Series 85
DD-1 (Drum Drip) 70
Deluge & Preaction Systems ..... 59 – 64
Deluge Systems 60
Deluge Valves 63
Directional Spray Nozzle ..... 48 - 50
Domed Plate Concealed Pendent 30, 32
Double Interlock Preaction Systems 62
DP-1 68
DPV-1 56
Dry Air Pac 85
Dry Pilot Actuation ..... 60 - 61
Dry Pilot Actuator 68
Dry Pipe Valve 56
Dry Pipe Valve Accelerator 57
Dry Sprinkler Boot 38
Dry Sprinklers ..... 33 – 38
Dry System Valves & Devices ..... 55 – 58
DS-1 ..... 34 - 35
DS-1 Dry Sprinkler Guards 38
DS-1 Stainless Steel 35
DS-2 36
DS-3 38
DS-C 37
DS-ECC 37
DSB-2 38
DV-5 63
EA-1 ..... 48, 92
EC-11 14
EC-14 14
EC-25 14
EC-5 15
EC-8 14
Elbows 77
Elbows, Tees, Caps and Crosses 77
Electric Actuation ..... 60 - 61
Electric/Electric Actuation 62
Electric/Pneumatic Actuation 62
Electrical Devices ..... 81 - 86
Electronic Accelerator 57
Electronic Dry Pipe Accelerator 57
ELO SW-20/SW-24 16
ELO-231 ..... 23, 92
ELO-231 FRB 23, 92
ELO-231B 22, 92
ELOC 17
Escutcheon Plates 46
ESFR-1 21
ESFR-17 ..... 20 - 21
ESFR-25 20
Extended Coverage Sprinklers ..... 13 – 17
F822 thru F834 Mulsifyre 50
Fail-Safe Valve 68
Figure 577 74
Figure 702 75
Figure 705 74
Figure 707 75
Figure 71 75
Figure 716 74
Figure 730 76
Fire Department Connections 72
Fixed Temperature Release 44
Flange Adapter 75
Flat Plate Concealed Pendent 29
Flexible Coupling ..... 74 - 75
Flexible Reducing Coupling 74
Flow & Pressure Switch 82
Fluoroprotein Foam Concentrate ..... 90 - 91
Flush Horizontal Sidewall 30
Flush Pendent 12, 30
Foam Agents ..... 89 - 91
Foam Bladder Tanks 88
Foam Systems ..... 87 - 92
FSV-1 68
FTR-1 44
Fusible Links 70
General Purpose Valves ..... 65 – 68
Grooved Butterfly Valves 67

INDEX (CONT.)

Grooved Check Valves 67
Grooved Fittings 77
Grooved Piping Products ..... 73 – 78
Hangers 72
High Temperature, Upright & Pendent 42
High-Expansion foam Products 91
HV "High Velocity" 48
Identification Signs 71
IFP Aquamist Control Panel 96
IFP Aquamist Fittings 96
ILLUSION 12, 39
In-Line proportioner ..... 88 - 89
Industrial Fryer Protection 96
Integrated Fire Protection Packages 64
Introduction 2
Issue D Quartzoid 42
JET-X Foam Concentrate 91
K17-231 22
Lansdale Powerball 300 Valve 68
LD "Large Drop" 23
LFII ..... 28 - 32
LFII NFPA 13 Optimized Sprinklers 32
LHD 86
Linear Heat Detection Cable 86
Lug Butterfly Valve 67
Manual Control Station 71
Mechanical Outlet Coupling 76
Mechanical Tees & Crosses 76
Mist Control Center 94
Model A 70
Model B-1 70
Model C 71
Model FL-1 70
Model G1 & G4 Sprinkler Guards 26
Model G16AC812 84
Model G2 Sprinkler Guard 26
Model G5 Guards 38
Model MC-1 71
Model PS10/PS40 Pressure Alarm Switch 82
Model WSG-2 Sprinkler Guard with Shield 26
Nitrogen Maintenance Device 58
Nozzles & Nozzle Accessories ..... 47 – 50
Open Type 49
Open Type Mist Nozzle ..... 95 - 96
OSY-SU 83
Outside Screw and Yoke 66
PCVS Control Valve Supervisory Switch 83
Pipe Hangers 72
Pipe Line Strainers ..... 70 - 71
Pneumatic Actuation 62
Pre-Assembled Fire Pump 94
Pressure Regulating Valves 66
Pressure Relief Valves 66
Proportioner 88
Protectospray Directional Spray Nozzle 48
Protectospray Nozzle 92
PRV-1 66
QRS 57
Rapid Response Sprinklers ..... 27 – 32
RAVEN 40, 43
RC-1 53
RCP-1 58
RED-E-Cabinet 64
Reducing Tees 77
Releasing Panel 83
Resi-Riser 54
Residential Control Panel 58
Residential Domestic Shutoff Valve 54
Resilient-Seated Gate Valves 66
Retard Chamber 53
RFII (Royal Flush II) 10, 17
Rigid Coupling 74
Riser Check Valve 53
Riser Manifolds 53
Riser Mounted Air Compressor 84
Roll Groovers 78
RSV-1 54
RV-1 66
SF-1 71
Shields 26
Sight Flow Connection 71
Signs 71
SILV-EX Fire Control Concentrate 91
Single Interlock Preaction Systems 61
Solenoid Valve 83
Special Purpose Sprinklers ..... 39 – 44
Specialty Items ..... 69 – 72
Sprinkler Accessories ..... 45 – 46
Sprinkler Guards 26
Sprinkler Head Cabinet 46
Standard Spray Sprinklers ..... 7 – 12
Storage Sprinklers ..... 19 – 26
Style 10 thru 50 Escutcheons 46
Style 401, Adjustable Escutcheon 46
Style 60, Flush Escutcheon 46
Style 65, Flat Escutcheon 46
Table of Contents 3
Tamper & Alarm Switch 83
Tank Mounted Air Compressor 84
TARGET-7 Agent 91
Tees 77
The Inductry Leader ..... 4 – 5
TN-25 49
Trim Valves 67
TY-B 8, 24, 44, 92
TY-B (Conventional Old Style) 43
TY-FRB 9, 15, 24-25, 44, 92
TY-FRB (Conventional Old Style) 43
TY-FRL 11, 16, 25, 92
TY-L 10, 11, 25
TY-QRF 12
Type IFP Aquamist Control Panel 96
Type IFP Aquamist Fittings 96
ULTRA K-17 22
Vertical or Cross Wall Post Indicator 66
VIZOR 57
VSR Waterflow Alarm Switch 82
Wafer Butterfly Valve 67
Water Motor Alarm 54
Wet Pilot Actuation ..... 60 - 61
Wet System Valves & Devices ..... 51 – 54
Wiliag Condensate Drain 70
Window Sprinklers 42
WMA-1 54
WS 42

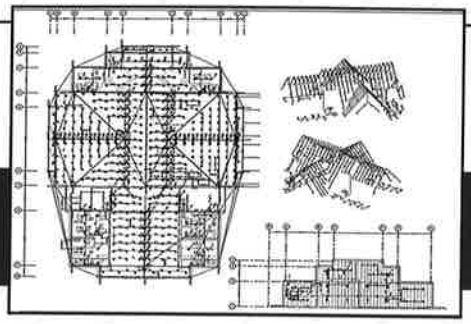
SprinkCAD®

Fire Protection Software for the Design Professional

SprinkCAD®

The Next Generation of SprinkCAD Design Software

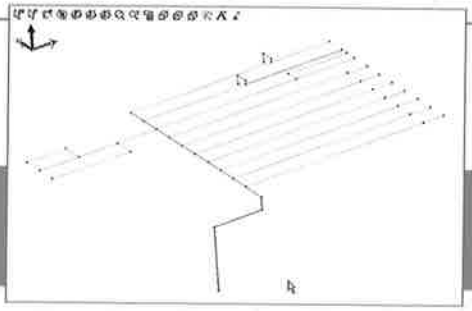
Complete Fire Sprinkler System Design Programs Built Upon the Industry-Leading CAD Graphics Program



SprinkCALC™

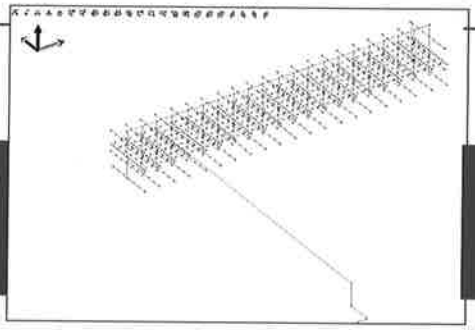
Advanced Hydraulic Calculations

Welcome to the newest and most advanced hydraulic calculation program available today... SprinkCALC



SprinkFDT™

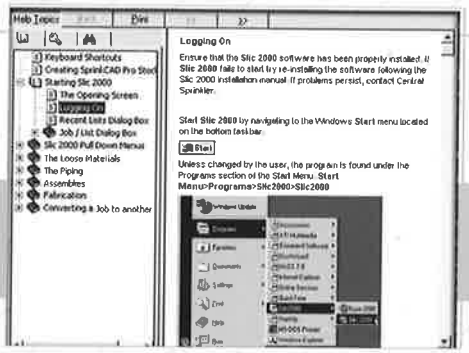
The first program to be listed by Underwriters Laboratories and Factory Mutual specification tested for the calculation of dry type systems per NFPA® requirements



SprinkSLIC™

Complete Fire Sprinkler Stock Listing

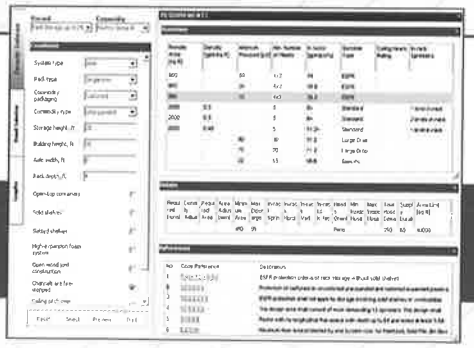
The name of the game is "PIPE ON THE JOB" and Stocklisting is the bridge between design and installation



SprinkCODE™

Interactive NFPA 13® Code Selector

Whether it's an estimate or the final design, this Code Expert is an essential member of your staff



www.sprinkcad.com

tyco
Fire Protection Products

Safer. Smarter. Tyco.™



Global strength. Local expertise. At your service.

SINGAPORE
2 Serangoon North Avenue 5
#07-01
Singapore 554911
Tel : +65 6577 4360
Fax : +65 6481 8791
E-mail : info.apac@tycofp.com

AUSTRALIA
Level 3, 95 Coventry Street
Southbank, VIC 3006
Melbourne, Australia
Tel : 1300 725 688 (within Australia)
Fax : 1300 720 733 (within Australia)
Tel : +61 3 9313 9700
Fax : +61 3 9313 9709
E-mail : tfppcustservice.au@tycofp.com

INDIA
1001, Wing 'C', 10th Floor,
Godrej Coliseum, Sion
Mumbai 400022, India
Tel : +91 22 6628 6628
Fax : +91 22 6628 6650
Email : info.india@tycofp.com

CHINA
7F, No.40, Kailong Elite Building,
1888 XinJinQiao Road, Jinqiao,
Pudong, Shanghai 201206, China
Tel : +86 21 6163 3373
Fax : +86 21 6163 3371
E-mail : info.china@tycofp.com

HONG KONG
23/F, Exchange Tower
33 Wang Chiu Road
Kowloon Bay, Kowloon, Hong Kong
Tel : +852 2753 3524
Fax : +852 2753 0456
E-mail : info.china@tycofp.com

TAIWAN
17F, No. 77, Sec. 1,
Xintai 5th Rd., Xizhi Dist.,
New Taipei City, 22101, Taiwan
Tel : +886 2 2698 3559
Fax : +886 2 2698 3565
Email : info.taiwan@tycofp.com

Copyright © 2015-2016 Tyco Fire Products LP. All rights reserved.

TFP2015024_APAC