

Tyco Fire 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 Products serves a diverse group of specifiers, including architects, engineers, contractors, and associated

industries with a nationwide network of distribution and manufacturing facilities. The introduction of new innovative products, technologies and product application extensions have positioned the company well for continued growth.

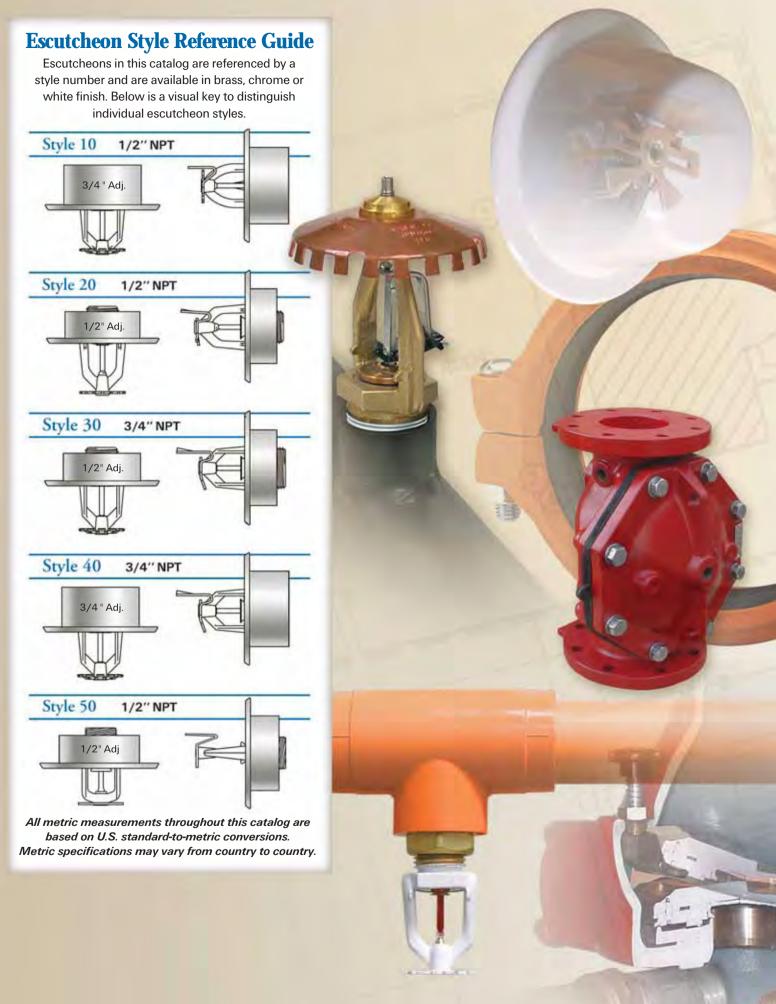
Tyco Fire Products also offers the industry's most complete fire protection software package through its SprinkCAD® programs.



Fire Products









Breadth of Line

Tyco Fire Products (TFP) offers more than 250 fire protection products and over 1,200 items used in the fabrication of fire protection systems, including sprinklers, nozzles, valves, devices, CPVC, pipe fittings and hangers, and sprinkler system accessories.

Research and Development

TFP is backed by the largest research, design, and development group and facilities in the industry. Our experienced staff of engineers is continually working to develop new types of sprinklers and valves, as well as special hazard fire protection devices to fill present and future market needs.

Listings & Approvals

Products offered by TFP are listed and approved by various fire protection product approval laboratories and organizations. General listing and approval information for the following organizations is provided for each product in the specification charts. Refer to the application Technical Data Sheets for specific listing and approval information.













Customer Service

TFP distributes its manufactured products through TFP locations or independent distributors that are strategically located to provide our customers with the quickest delivery possible of their complete order.

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

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

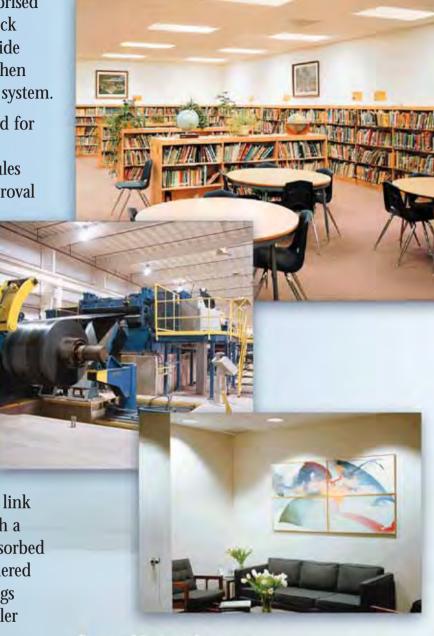
response sprinklers – bulb type and solder type.

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.



Applications

- Office Buildings
- · Banks
- · Factories
- Libraries
- · Theaters
- · Warehouses
- · Light & Ordinary

 Hazard Occupancies

TY-L

Upright, Pendent & Recessed Pendent

- Standard response
- All hazards
- Solder type
- Discharges a hemispherical water spray pattern in the area under the sprinkler

Tech Data	TFP110
Finish	Brass, Chrome
Escutcheon	Style 20 · Style 30
Thread Size	1/2" (15 mm) · 3/4" (20 mm)
K Factor	K=5.6 (80,6) · K=8.0 (115,2)

K=5.6 (80,6)

1/2" (15 mm)

Brass, Chrome

TFP120



TY-L

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

K Factor

Finish

Thread Size

Tech Data

Horizontal Sidewall



TY-FRL

- Quick response
- 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

Upright, Pendent & Recessed Pendent

Tech Data	TEP130	
Finish	Brass, Chrome	
Escutcheon	Style 20	
Thread Size	1/2" (15 mm) · 3/4" (20 mm)	
	K=8.0 (115,2)	
K Factor	K=2.8 (40,3) · K=5.6 (80,6)	

K=5.6 (80,6)

1/2" (15 mm)

Brass, Chrome

TFP140



TY-FRL

- Quick response
- 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 or economic considerations

K Factor

Finish

Thread Size

Horizontal Sidewall



TY-B

Upright, Pendent & Recessed Pendent

- Standard response
- All hazard light hazard K=2.8 (40,3)
- 5 mm bulb
- Discharges a hemispherical water spray pattern in the area under the sprinkler
- Small frame, narrow profile bulb

K Factor	K=2.8 (40,3) · K=5.6 (80,6)		
	K=8.0 (115,2)		
Thread Size	1/2" (15 mm) · 3/4" (20 mm)		
Escutcheon	Style 10 · Style 40		
Finish	Brass, Chrome, White	Engl	
Tech Data	TFP151		
			6
		36	
		1	

TY-B

Horizontal, Recessed Horizontal & Vertical Sidewall

- Standard response
- Light hazard/ordinary hazard
- 5 mm bulb
- Small frame
- Unique deflector design of the horizontal sidewall sprinkler results in smaller profile
- K Factor K=5.6 (80,6)

 Thread Size 1/2" (15 mm)

 Escutcheon Style 10

 Finish Brass, Chrome, White
- Tech Data TFP161
- Designed for installation along a wall or on the side of a beam just beneath a smooth ceiling
- Water discharge is directed primarily outward and downward in a quarter spherical pattern
- Special deflector on the vertical sidewall sprinkler allows it to be installed in either a pendent or upright position
- Sidewall sprinklers are often used in lieu of standard pendent or upright sprinklers due to building construction, economic considerations, or aesthetics

TY-FRB

Upright, Pendent & Recessed Pendent

- Quick response
- Light hazard/ordinary hazard *light hazard K=2.8 (40,3)*
- 3 mm bulb
- Hemispherical water spray pattern in the area under the sprinkler
- Small frame and narrow profile bulb enhance appearance

Tech Data	TFP171	
Finish	Brass, Chrome, White	
	Style 30 · Style 40	
Escutcheon	Style 10 · Style 20	
Thread Size	1/2" (15 mm) · 3/4" (20 mi	
	K=5.6(80,6) · K=8.0 (115,2)	
K Factor	K=2.8 (40,3) · K=4.2 (60,5)	

TY-FRB

Horizontal, Recessed Horizontal Sidewall & Vertical Sidewall

- Quick response
- 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

RFII "Royal Flush II"

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

Concealed Pendent





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, where needed. 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.

Hiding in Plain Sight

The CHEC sprinkler is the ideal solution for:
Student Housing

Residential Occupancies

Office Buildings

Schools

Hospitals

Hotels

CONCEALED

HORIZONTAL

EXTENDED

COVERAGE

- Attractive Concealed Contour
- Coverage to 16 ft. x 22 ft.
- Industry's Lowest
 Flows & Pressures
- Quick Response
- K-Factor 8.0
- 1/2 in. Adjustment
- Push On/Thread On Feature
- 12 in. Deflector Distance
- No "Slots" in Cover Plate

For Peace of Mind, the First Thing to CHEC...

tyco

Fire Products

Applications

- · Office Buildings
- Hotels
- · Hospitals
- · High-Piled Storage
- Big Box' Retailing

EC-25 Upright

Standard response

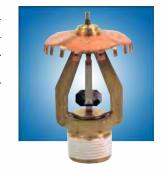
All hazard

Solder type

Extended coverage area/density

 Deflector design expands maximum coverage area to 14' x 14' (4,3 m x 4,3 m)

EXTENDED COVERAGE SPRINKLERS



 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)

EC-11 & EC-14

Upright, Pendent & Recessed Pendent

- Standard response/Quick response
- · Light hazard/Ordinary hazard
- 3 mm bulb
- Nominal K=11.2 designed for coverage applications of 14' x 14' (4,3 m x 4,3 m) up to 20' x 20' (6,1 m x 6,1 m)
- K Factor
 K=11.2 (161,3) ⋅ K=14.0 (201,6)

 Thread Size
 3/4" (20 mm)

 Escutcheon
 Style 30 ⋅ Style 40

 Finish
 Brass, Chrome, White

 Tech Data
 TFP220
- Nominal K=14.0 designed for coverage applications of 16' x 16' (4,9 m x 4,9 m) up to 20' x 20' (6,1 m x 6,1 m)
- Low profile glass bulb spray sprinklers

nite

TY-FRB

Horizontal & Recessed Horizontal Sidewall

- Standard response/Quick response
- Light hazard
- 3 mm bulb

K = 8.0

• 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

 Provides 3/4" (19,1 mm) of horizontal adjustment from the flush sidewall position

	A11111
Tech Data	TFP296
Finish	Brass, Chrome, White
	Style 30 · Style 40
Escutcheon	Style 10 · Style 20
Thread Size	1/2" (15 mm) · 3/4" (20 mm)
K Factor	K=5.6 (80,6) · K=8.0 (115,2)



EXTENDED COVERAGE **SPRINKLERS**

- Standard response
- Ordinary hazard
- 3 mm bulb
- Utilizes an extra large orifice that allows low water pressure requirements, while providing the flow required for extended coverage

Tech Data	TFP230
Finish	Brass, Chrome, White
Thread Size	3/4" (20 mm)
K Factor	K=11.2 (161,3)

• SW-20 Listed to a 16'-0" (4,9 m) wide and a 20'-0" (6,1 m) throw maximum coverage area

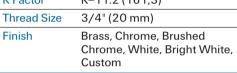
• SW-24 Listed	to a 16'-0"	(4.9 m)	wide and a
24'-0" (7,3 m)	throw max	ximum co	overage area



ELOC

- Standard response/quick response
- Light hazard
- Covers 400 sq. ft. (37,2 m²) using less pressure than a standard 1/2" (12,7 mm) sprinkler at 225 sq. ft. (20,3 mm)
- Available with optional dust and air seal

Concealed Pendent K Factor K=11.2 (161,3)



Tech Data TFP250



RFII Concealed Pendent

K=5.6 (80,6)

1/2" (15 mm)

TFP260

Cover Plate: Chrome Plated,

colors available on request.)

Brass Plated, or White Painted. (Custom paint matches &

- Quick response
- Light hazard
- 3 mm bulb
- Maximum 18' x 18' (5,5 m x 5,5 m) QR Listing
- **Tech Data** 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

K Factor

Finish

Thread Size

• Internally threaded closure with 1/2" (12,7 mm) of adjustment



TY-FRL **Horizontal Sidewall**

 Standard response/quick response

Light hazard

Solder type

• K=5.6 for QR-EC coverage areas up to 16' x 20' (4.9 m x 6.1 m) and 18' x 16' (5,5 m x 4,9 m)

• K=8.0 for EC and QR-EC coverage areas up to 16' x 24' (4,9 m x 7,3 m)

• QR-EC coverage areas up to 20' x 16' (6,1 m x 4,9 m)

Thread Size Finish	1/2" (15 mm) · 3/4" (20 mm) Brass. Chrome
Tech Data	TFP280





CHEC

Concealed Horizontal Extended Coverage Sidewall

- Quick response
- Light hazard
- 3 mm bulb
- Attractive concealed contour
- Coverage up to 16' x 22' (4.9 m x 6.7 m)
- Lowest flows & pressures allowed by NFPA 13
- 1/2" adjustment

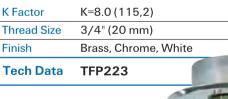
- K Factor K=8.0 (115,2) **Thread Size** 3/4" (20 mm) Finish Bright White, Chrome Plated **Tech Data TFP265**
- Push on / thread off option
- 12" maximum deflector distance from ceiling
- No "Slots" in cover plate



EC-8

Pendent & Recessed Pendent

- Quick response
- Light hazard
- 3 mm bulb
- Covers areas as large as 20' x 20' (6,1 m x 6,1 m)





EC-5

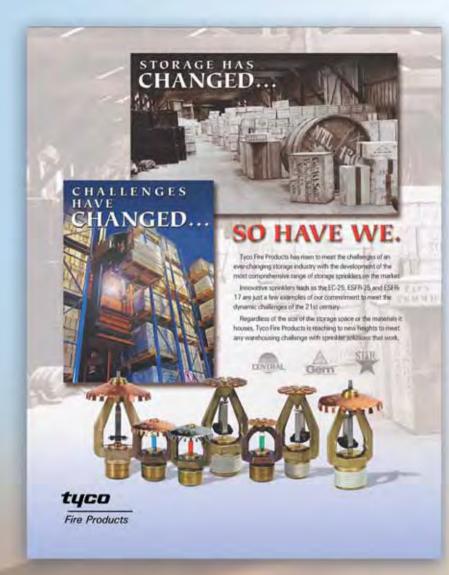
Pendent, Recessed Pendent & Horizontal Sidewall

- Quick response
- Light hazard
- 3 mm bulb
- Pendent coverage up to 20' x 20' (6,1 m x 6,1 m)
- HSW coverage up to 16' x 24' (4,9 m x 7,3 m)



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).





Applications

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

ESFR-25TM Pendent

Fast response, early suppression

Solder type

 Designed for use in the protection of high-piled storage

K Factor	K=25.2 (362,9)
Thread Size	1" (30 mm)
Finish	Brass
Tech Data	TFP312



STORAGE SPRINKLERS

- Eliminates many of the requirements for in-rack sprinklers
- Materials may be stored up to 40' (12,2 m) high, in buildings up to 45' (13,7 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

ESFR-17 Upright

- Fast response, early suppression
- 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 high piled storage
- Unique, upright design and large K Factor overcome many pendent obstruction problems

Tech Data	TFP316
Finish	Brass
Thread Size	3/4" (20 mm)
K Factor	K=16.8 (241,9)







ESFR-17 Pendent

Fast response, early suppression

Solder type

STORAGE

SPRINKLERS

- 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 high piled storage
- Operates at lower pressure than ESFR-1

K Factor	K=16.8 (241,9)
Thread Size	3/4" (20 mm)
Finish	Brass
Tech Data	TFP315



ESFR-1 Pendent

Brass

TFP318

K=14.0(201,6)

3/4" (20 mm)

K Factor

Finish

Thread Size

Tech Data

- Fast response, early suppression
- Solder type
- Designed for use in the protection of high-piled storage
- Eliminates many of the requirements for in-rack sprinklers
- 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



Ultra K17 Upright, Specific Application

Brass

K=16.8 (241,9)

3/4" (20 mm)

- Standard response
- 5 mm bulb
- Control mode sprinkler
- 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
- Reduced end head pressures often eliminate the need for a fire pump
- Approved for storage heights of 25' (7,6 m) and building heights to 30' (9,1 m)

K Factor
Thread Size

Finish



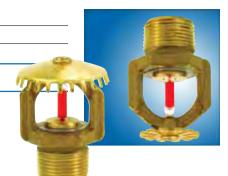
Pendent & Upright

- Standard response
- 5 mm bulb
- Very large orifice sprinkler for use in high challenge storage occupancies

K Factor	K=16.8 (241,9)
Thread Size	3/4" (20 mm)
Finish	Brass

TFP332 Tech Data

- Low-pressure requirement can save cost by reducing branchline size, taking advantage of maximized spacing, and upgrading existing densities
- Can operate at pressures as low as 7 psi (0,48 bar)

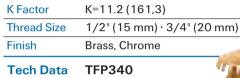


STORAGE SPRINKLERS

ELO-231

- Standard response
- 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

		Pendent & Upright
Factor	K=11.2 (161,3)	





ELO-231B

- Standard response
- 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

Pendent & Upright

K Factor K=11.2 (161,3) **Thread Size** 1/2" (15 mm) · 3/4" (20 mm) Finish Brass, Chrome

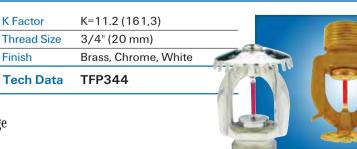
Tech Data TFP342



ELO-231 FRB

- Quick response
- 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

Pendent & Upright





LD "Large Drop"

Upright

Standard response

• 5 mm bulb

STORAGE

SPRINKLERS

- Control mode sprinkler
- Designed for the protection of high-piled storage

Tech Data	TFP335
Finish	Brass
Thread Size	3/4" (20 mm)
K Factor	K=11.2 (161,3)

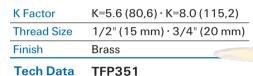


• Can provide a higher level of protection than standard spray sprinklers

Can provide an advantage by eliminating in-rack sprinklers

TY-B Pendent & Upright

- Standard response
- 5 mm bulb
- Intermediate level (in-rack) with shield
- Factory assembled unit having an integral water shield.
- Used where sprinkler guards are not required.
- Eliminates the necessity of a separate guard/shield combination.





TY-FRB Pendent & Upright

- Quick response
- 3 mm bulb
- Intermediate level with shield

Tech Data	TFP356
Finish	Brass
Thread Size	1/2" (15 mm) · 3/4" (20 mm)
K Factor	K=5.6 (80,6) · K=8.0 (115,2)



- Standard response
- Solder type
- Intermediate level with shield

K Factor	K=5.6 (80,6) · K=8.0 (115,2)
Thread Size	1/2" (15 mm) · 3/4" (20 mm)
Finish	Brass

Tech Data TFF 330	Tech Data	TFP350
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STORAGE SPRINKLERS

TY-FRL

• Quick response

- Solder type
- Intermediate level with shield

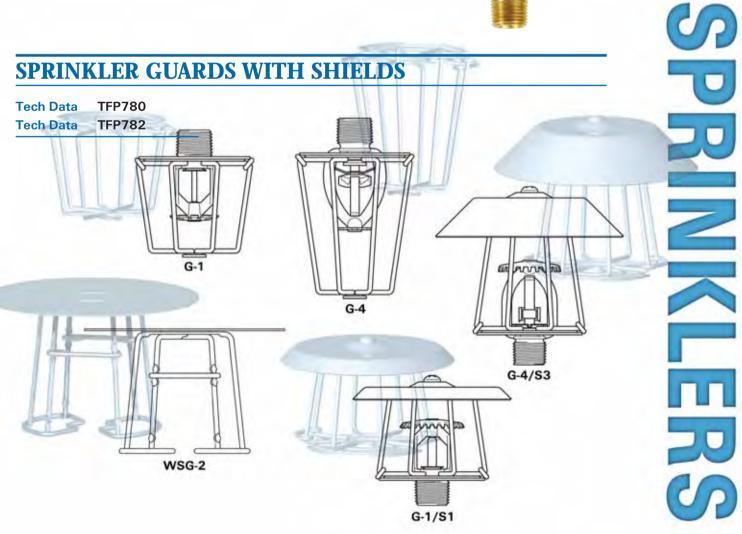
K Factor	K=5.6 (80,6) · K=8.0 (115,2)
Thread Size	1/2" (15 mm) · 3/4" (20 mm)

Finish Brass

Tech Data TFP355



Pendent & Upright

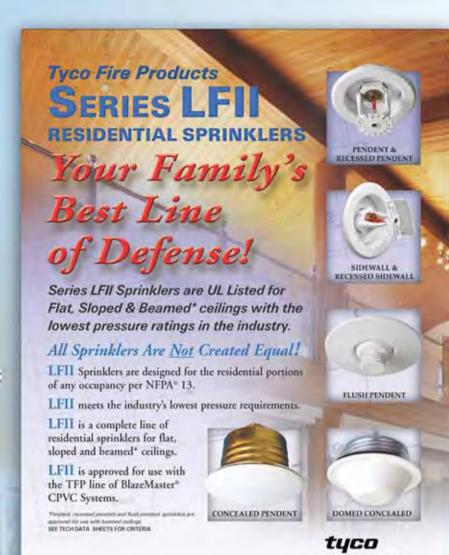


Residential Sprinklers offer the optimum design and flow characteristics for all residential applications.
With K Factors as low as 4.2, the flow

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 to an 8:12 pitch. These unique features avoid obstruction to the sprinklers' discharge pattern without adding additional sprinklers.

Applications

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



LFII

Pendent & Recessed Pendent

Fire Products

- Fast response
- 3 mm bulb
- Approved for special applications with beamed ceilings
- Used in wet pipe residential sprinkler systems for one/two– family dwellings and mobile homes per NFPA 13D
- Used in wet pipe residential occupancies up to and including four stories in height per NFPA 13R
- Used in wet pipe sprinkler systems for the residential portions of any occupancy per NFPA 13



LFII

Horizontal & Recessed Horizontal Sidewall

- Fast response
- 3 mm bulb
- Used in wet pipe residential sprinkler systems for one/twofamily dwellings and mobile homes per NFPA 13D

Tech Data	TFP410
Finish	Brass, Chrome, White
Escutcheon	Style 20
Thread Size	1/2" (15 mm)
K Factor	K=4.2 (60,5)

K=4.2 (60,5)

TFP440

K=4.2 (60,5)

TFP420

1/2" (15 mm)

Chrome, White, Black

1/2" (15 mm)

Chrome, White, Custom

- Used in wet pipe residential occupancies up to and including four stories in height per NFPA 13R
- Used in wet pipe sprinkler systems for the residential portions of any occupancy per NFPA 13



RESIDENTIAL **SPRINKLERS**

LFII **Concealed Pendent**

K Factor

Finish

Thread Size

Tech Data

- Fast response
- Solder type
- Can be used for horizontal and sloped ceilings
- Used in wet pipe residential sprinkler systems for one- and two-family dwellings and mobile homes per NFPA 13D
- Used in wet pipe residential sprinkler systems for residential occupancies up to and including four stories in height per NFPA 13R
- Used in wet pipe sprinkler systems for the residential portions of any occupancy per NFPA 13

K Factor

Finish

Thread Size

Tech Data



LFII Flush Pendent

- Fast response
- Solder type
- Approved for special applications with beamed ceilings
- Aesthetically pleasing
- Used in wet pipe residential sprinkler systems for one- and two-family dwellings and mobile homes per NFPA 13D
- Used in wet pipe residential sprinkler systems for residential occupancies up to and including four stories in height per NFPA 13R
- Used in wet pipe sprinkler systems for the residential portions of any occupancy per NFPA 13



LFII

Domed Concealed Pendent

- Fast response
- Solder type
- Can be used for horizontal and sloped ceilings
- Used in wet pipe residential sprinkler systems for one- and twofamily dwellings and mobile homes per NFPA 13D
- K=4.9 (70,6) K Factor 1/2" (15 mm) **Thread Size** Style 20 Escutcheon **Finish** Brass, Chrome, White **TFP450 Tech Data**
- Used in wet pipe residential sprinkler systems for residential occupancies up to and including four stories in height per NFPA 13R
- Used in wet pipe sprinkler systems for the residential portions of any occupancy per NFPA 13





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. TFP 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 on the market. Most models are listed in lengths up to 4'-0". The extended escutcheon option has up to 3" of adjustment.

Applications

- · Unheated Warehouse
- · Freezing Conditions

DS-1 (Standard Response)

K Factor

K=5.6 (80,6)

Tech Data

TFP500

- Standard response, standard coverage
- All hazards (light hazards, horizontal sidewall)
- 5 mm bulb
- Lengths to 48" (1220 mm)

Pendent, Upright & Horizontal Sidewall

- Designed for use in applications where sprinklers and/or connecting piping may be exposed to freezing conditions, or the sprinkler system is seasonally drained
- 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
- Special assembly provides a seal at the main pipe to prevent water from entering the sprinkler assembly until the sprinkler operates

DS-1 (Quick Response)

K Factor

K=5.6 (80,6)

Tech Data

TFP510

- Quick response, standard coverage
- Light hazard/ordinary hazard
- 3 mm bulb
- Lengths to 48" (1220 mm)

Pendent, Upright & Horizontal Sidewall

- Designed for use in applications where sprinklers and/or connecting piping may be exposed to freezing conditions, or the sprinkler system is seasonally drained
- 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
- Special assembly provides a seal at the main pipe to prevent water from entering the sprinkler assembly until the sprinkler operates

DS-1

K Factor K=5.6 (80,6)

Tech Data

TFP520

- Standard response or quick response, standard coverage
- EC light hazard
- 3 mm bulb

Extended Coverage Horizontal Sidewall

- 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 sprinkler assembly until the sprinkler operates

DS-C

K Factor

K=5.6 (80,6)

Tech Data

TFP515

- Standard response or quick response, 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



DRY Sprinklers

DS-ECC

K Factor

K=5.6 (80,6)

Tech Data

TFP518

- Standard response/quick response
- EC light hazard/EC ordinary hazard
- 3 mm bulb
- Lengths to 48" (1220 mm)

Extended Coverage Concealed Pendent

- 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



Pendent

K Factor

DS-2

K=11.2 (161,3)

Tech Data

TFP530

- Standard response or quick response, 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

DS-2

K Factor

K=11.2 (161,3)

Tech Data

TFP540

- Standard response/quick response, standard coverage
- EC light hazard/EC ordinary hazard
- 3 mm bulb

Extended Coverage Pendent

- 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



Applications

· Attic Space

- Retail Windows
- High Security Institutions
- · Minimal Water Damage Conditions

greater area.

- · High Temperature Conditions
- · Corresive Conditions

Attic

K Factor

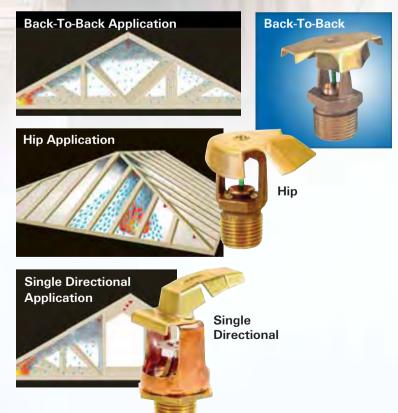
K=5.6 (80,60) K=8.0 (115,2)

Tech Data TFP610

- Fast response
- 3 mm bulb or solder type
- 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

Back-to-Back, Hip, Single Directional

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



Window Horizontal & Vertical

K Factor K=5.6 (80,6)

Tech Data TFP620

- Fast response
- 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 tempered or heat strengthened glass





Combustible Concealed Space Upright

CC1TM & CC2TM

K Factor CC1: K=2.8 (40,3)

CC2: K=5.6 (80,6)

Tech Data CC1: TFP630

CC2: TFP632

- Meets NFPA® Requirements for Specialty Listed Sprinklers in Combustible Concealed Spaces
- Allows CPVC to be Used in Combustible Concealed Wood Truss Spaces Requiring Sprinkler Protection
- CC2 Can Cover a Larger Area Than Standard Spray Sprinklers
- Remote Area Size is Up to 30% Smaller Than Using Standard Spray Sprinklers
- Fast response
- 3 mm bulb
- Allows the use of BLAZEMASTER** CPVC pipe in combustible concealed areas with the benefit of superior sprinkler protection for Wood truss spaces
- UL Listed
- Unique spray pattern and design characteristics
- Remote design area has been reduced to 1000 sq. ft. when using the CC1 and CC2 sprinkler









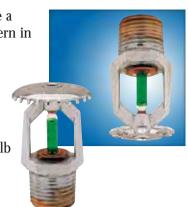


TY300-B

Upright, Pendent & Sidewall

K Factor K=5.6 (80,6) **TFP640 Tech Data**

- Standard response
- All hazards, (light/ordinary hazards, horizontal sidewall)
- 5 mm Bulb
- Sidewall sprinklers are designed for installation along a wall or on the side of a beam just beneath a smooth ceiling
- Upright and pendent discharge a hemispherical water spray pattern in the area under the sprinkler
- Sidewall sprinkler water discharge is directed primarily outward and downward in a quarter spherical pattern
- Small frame, narrow profile bulb
- Listed to 300 psi (20,7 bar) service pressure



SPECIAL **Purpose SPRINKLERS**

TY300-FRB

K Factor K=5.6 (80,6)

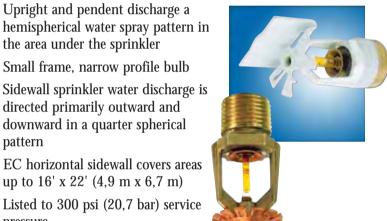
TFP642 Tech Data

- Quick response, (standard/quick) response E/C horizontal sidewall)
- Light/ordinary hazard, (light hazards, E/C horizontal sidewall)
- 3 mm Bulb
- Sidewall sprinklers are designed for installation along a wall or on the side of a beam just beneath a smooth ceiling

- Upright, Pendent & E/C Sidewall Upright and pendent discharge a
- Small frame, narrow profile bulb

the area under the sprinkler

- Sidewall sprinkler water discharge is directed primarily outward and downward in a quarter spherical pattern
- EC horizontal sidewall covers areas up to 16' x 22' (4,9 m x 6,7 m)
- Listed to 300 psi (20,7 bar) service pressure



TFP PH2

K Factor K=5.6 (80,6) Standard response **Thread Size** 1/2" (15 mm) · All hazard

Tech Data TFP650

- Solder type
- · Low breakaway weight
- Flush mount escutcheons
- 175 psi (12,1 bar)



Institutional Pendent

TFP PH5

Standard response

- K Factor K=5.6 (80,6) **Thread Size** 1/2" (15 mm) **Tech Data TFP654**
- · Light hazard/ordinary hazard
- Solder type
- Low breakaway weight
- Flush mount escutcheons
- 175 psi (12,1 bar)



Institutional Horizontal Sidewall

TFP MAX

Institutional Pendent

K=5.6 (80,6) K Factor **Thread Size** 1/2" (15 mm) TFP652

Tech Data

- Quick response
- Light hazard/ordinary hazard
- 2.5 mm bulb
- Designed to provide maximum solutions to the unique fire protection needs of institutional facilities

- For use in correctional, detention. and mental health care facilities
- Vandalizing, moving, or disassembling the sprinkler results in activation and a water flow alarm
- Low breakaway weight
- Flush mount escutcheons
- 175 psi (12,1 bar)



SPECIAL **Purpose SPRINKLERS**

TFP MAX

Institutional Horizontal Sidewall

K Factor K=5.6 (80,6) **Thread Size** 1/2" (15 mm)

Tech Data TFP656

- Quick response
- Light hazard/ordinary hazard
- 2.5 mm bulb
- Designed to provide maximum solutions to the unique fire protection needs of institutional facilities
- For use in correctional, detention, and mental health care facilities
- Vandalizing, moving, or disassembling the sprinkler results in activation and a water flow alarm
- · Low breakaway weight
- Flush mount escutcheons
- Aesthetics same as pendent model
- 175 psi (12,1 bar)



TY-B

Conventional (Old Style)

K Factor $K=5.6 (80,6) \cdot K=8.0 (115,2)$ 1/2" (15 mm) · 3/4" (20 mm) Thread Size **Tech Data TFP661**

- Standard response
- Light hazard/All hazard
- 5 mm bulb





K Factor

Thread Size

Tech Data

Tech Data	TFP666
Thread Size	1/2" (15 mm) · 3/4" (20 mm)
K Factor	K=5.6 (80,6) · K=8.0 (115,2)

K=5.6 (80,6)

1/2" (15 mm)

TD525M

- Quick response
- Light hazard/Ordinary hazard
- 3 mm bulb



Pendent & Upright

SPECIAL PURPOSE SPRINKLERS

Issue "D" Quartzoid* (High Temperature)

• Standard response

- All hazard
- 11 mm bulb
- Extra-high and ultra-high temperature ratings and corrosion resistant coatings
- Up to 650°F (343°C)



Issue "D" Quartzoid* (High Temperature)

K Factor	K=8.0 (115,2)
Thread Size	3/4" (20 mm)

Tech Data TD527Q

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



Pendent & Upright

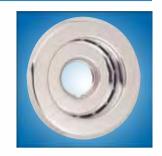
Sprinkler Accessories are for use with the sprinklers and nozzles described in this catalog. For complete specifications, installation instructions, and ratings (where applicable), please refer to the TFP Technical Data Sheet listed after each product description.

Escutcheon Plates

Pendent & Sidewall Recessed Escutcheons

Tech Data TFP770

- Consists of a mounting plate and closure for finished appearance in ceilings or soffits
- Maximum 1/2" (15 mm) to 3/4" (20 mm) adjustment
- Primarily designed for use with standard spray, quick response sprinklers and the Designer residential sidewall sprinklers
- Available for use with 1/2"(15 mm) or 3/4" (20 mm) NPT sprinkler heads



SPRINKLER ACCESSORIES

Model 65

One-Piece Flat Escutcheon

Contact a TFP distributor for details

- Used to improve the overall appearance of the sprinkler installation by concealing the clearance holes required for wall or ceiling installation
- Available for 1/2"(15 mm) and 3/4" (20 mm) NPT



Model 401

Two-Piece Adjustable Escutcheon

Contact a TFP distributor for details

- 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 1/2"(15 mm) and 3/4" (20 mm) NPT



Sprinkler Head Cabinet

3, 6 or 12 capacity

Contact a TFP distributor for details

- 3, 6 or 12 capacity
- Provides storage for spare sprinklers and sprinkler wrench
- Space sprinklers facilitate the prompt replacement of operated or damaged sprinklers and return of fire protection system to service as soon as possible



Guards / Shields

Model G1 & G2 Guards, G1/S1 & G4/S3 Guards w/ Shields

K=5.6 (80,6) · K=8.0 (115,2) K=11.2 (000,0) (Sprinklers)

Tech Data TFP780 & TFP782

- Low profile design for use with Series TY-B, TY-FRB, TY-L and TY-FRL and ELO-231upright and pendent sprinklers
- Shields are for use in storage racks or beneath grated mezzanine or other areas requiring the sprinklers to be shielded from possible discharge from sprinklers above
- Can be used with either 1/2" (15 mm) or 3/4" (20 mm) NPT sprinklers
- Rugged guard design to minimize possible damage to sprinklers



SPRINKLER ACCESSORIES

Sprinkler Wrenches

Contact a TFP distributor for details W-Type 7 W-Type 19 Available in different models Wrench Wrench for use with the various types of sprinklers: refer to the W-Type 8 W-Type 20 individual sprinkler data sheet Wrench Wrench for the correct sprinkler wrench. W-Type 9 W-Type 21 Wrench Wrench W-Type 1 W-Type 10 1509-3 Institutional Wrench Wrench Wrench W-Type 11 W-Type 2 RFII Wrench Wrench Wrench W-Type 3 W-Type 12 Socket (only) Wrench Wrench W-Type 4 W-Type 17 Socket/Ratchet Wrench Wrench Wrench **Cover Removal Tool** W-Type 6 W-Type 18 Wrench Wrench

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.

D-3	
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 (108,7)
Thread Size	1/2" (15 mm)
Finish	Natural brass, chrome plated, electroless nickel plated, lead coated or Teflon coated. Stainless steel, plain only.

Contact a TFP distributor for details

Protectospray[™] Nozzle

- Open orifice design type for use in deluge systems
- Nozzles are external deflector types that discharge a filled cone of water droplets at relatively low velocity
- Spray angles available:
 65°, 80°, 95°, 110°, 125°,
 140°, 160°, and 180°



Nozzles & Accessories

EA-1

Automatic Protectospray[™] Nozzle

K Factor	K=1.4 (20,2) · K=2.8 (40,3)
	K=5.6 (80,6)
Thread Size	1/2" (15 mm)
Finish	Natural brass finish or chrome plated finish in 135°F/57°C through 500°F/57°C; Corroproof or lead coated in 135°F/57°C and 175°F/79°C

Contact a TFP distributor for details

- Bulb type frangible element for use in closed head systems
- Discharges a filled cone of water droplets at relatively low velocity
- Spray angles available:
 65°, 80°, 95°, 110°, 125°,
 140°, 160°, and 180°



HV "High Velocity"

such as the protection of flammable liquids, electrical

K Factor	K=1.6 (23,0) · K=1.8 (26,0)
	K=2.9 (41,8) · K=4.3 (62,0)
	K=5.5 (79,2) · K=6.0 (86,4)
Thread Size	1" (30 mm)
	1 1/4" (38 mm) <i>only K=6.0</i>
Finish	Natural brass or stainless steel

Contact a TFP distributor for details

- Open, directional spray nozzles
- Designed for use in fixed water spray fire protection systems where a high velocity water application is needed,

such as the protection of flammable liquids, electrical transformers, circuit breakers, oil-fired boilers and lube oil systems

- Available in six different orifice sizes
- Produces a solid conical spray pattern
- Available in six angle spray patterns



Spray Nozzles

K Factor	K=5.6 (80,6)
Thread Size	1/2" (15 mm)
Finish	Brass

Contact a TFP distributor for details

- Air aspirating foam-water nozzles
- For use with all types of foam (required for Non-AFFF type foams)
- Pendent & upright designs
- Open nozzle for use on deluge systems



AM10 AQUAMIST®

 K Factor
 K=0.24 (3,5)

 Thread Size
 1/2" (15 mm)

 Finish
 Stainless Steel

Contact a TFP distributor for details

- Open spray nozzles
- Designed for use in water mist protection systems protecting flammable liquids and turbine bearings
- Minimal water demand, approximately 3.1 GPM/nozzle at 170psi (11,73 lpm at 11,6 bar)
- Mist represents latest in fire protection technology
- For use in "low pressure" mist applications
- Minimum operating pressure is 170 psi (11,6 bar)



Nozzles & Accessories

AM4 AQUAMIST®

K Factor K=0.24 (3,5)
Thread Size 1/2" (15 mm)
Finish Stainless Steel

Contact a TFP distributor for details

- Open, directional spray nozzles
- Listed & Approved for the protection of flammable liquid hazards (UL/FM)
- Approved for protection of gas turbines (FM)

- Maximum ceiling height, 26' 3" (8 m)
- Compartment volume
 - UL 56,500 ft³ (1,600 m³)
 - FM 45.203 ft³ (1.280 m³)
- Maximum utilization of water for flammable liquid fire protection
- Nozzle coverage: maximum 172 ft² (16 m²)
- Nozzle pressure: 185 to 250 psi (12,8 to 17,2 bar)



AM24 AQUAMIST®

K Factor	K=0.64 (9,2)
Thread Size	1/2" (15 mm)
Finish	Brass, Chrome Plated,
	White Polyester

Contact a TFP distributor for details

- Closed spray nozzles
- Designed for use in ordinary hazard occupancies

- Maximum ceiling height of 8' 2" (2,5 m)
- For the protection of sensitive occupancies while minimizing potential water damage
- Minimum 102 psi (6,14 bar) nozzle pressure



Bulb Type

F822 through F834

MULSIFYRE™ Nozzles

Finish	Natural Brass, Chrome Plated
Thread Size	3/4" (20 mm)
	K=5.1 (73,44) ·
	K=2.7 (38,88) · K=4.6 (66,24)
K Factor	K=2.3 (33,12) · K=2.6 (37,44)

Contact a TFP distributor for details

- Open, internal scroll type nozzles
- Six different orifice sizes and spray angles afford a variety of design options

- Designed to discharge a filled cone of water droplets at a relatively high velocity
- Used in either open or water primed systems
- A blow-off cap is available with the nozzle for a primed system (chrome plated finish only)



Cooling Tower Nozzles

K Factor	K=2.9 (41,76)
Thread Size	3/4" (20 mm)

Contact a TFP distributor for details

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



Type 1 and 2

Nozzles & Accessories

TI-MAX®

Nozzles & Sprinklers

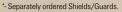
Contact a TFP distributor for details

- Unique discharge devices are made from titanium and can be used in offshore and other marine applications
- Designed for use where strength, low weight, and salt water corrosion resistance are required
- Medium and high velocity type nozzles are available in various orifice sizes and spray angles
- Standard spray sprinklers are available in upright and pendent configurations





- (2) Sprinkler Finish Legend: B=Brass; BB=Bright Brass; C=Chrome; L=Lead Coating; P=Polyester Coating (White is standard); Wh=White; W=Wax Coating (for 135° to 212°); WOL=Wax Coating over Lead (135° to 212°)
- (3) Hazard Legend: LH=Light Hazard; OH=Ordinary Hazard; All=Any Hazard
- (4) Response Legend: SR=Standard Response; QR=Quick Response; FR=Fast Response
- (5) "Previously Offered As" provides the Brand, Model, and SIN from which the TY SIN had been redesignated.
- (6) "Principally Replaces" provides the Brand, Model, and SIN for which the TY SIN can generally be used as a replacement; however, refer to the Technical Data Sheet to assure the appropriateness for a given application.







Standard Spray Sprinklers

MODEL (1)	SPRINKLER ID NUMBER (SIN)	TYPE	RESPONSE (4)	HAZARD (1,3)	K FACTOR	ELEMENT	THREAD SIZE	DATA SHEET	TEMPERATURE, °F (1)
TY-L	TY3111	Upright	SR	All	5.6	Solder	1/2	TFP110	165, 212, 280
TY-L	TY3211	Pendent	SR	All	5.6	Solder	1/2	TFP110	165, 212, 280
TY-L	TY3311	Horiz. SW	SR	LH	5.6	Solder	1/2	TFP120	165, 212, 280
TY-L	TY4111	Upright	SR	All	8.0	Solder	3/4	TFP110	165, 212, 280
TY-L	TY4211	Pendent	SR	All	8.0	Solder	3/4	TFP110	165, 212, 280
TY-L	TY4811	Upright	SR	All	8.0	Solder	1/2	TFP110	165, 212, 280
TY-L	TY4911	Pendent	SR	All	8.0	Solder	1/2	TFP110	165, 212, 280
TY-FRL	TY1121	Upright	QR	LH	2.8	Solder	1/2	TFP130	165, 212
TY-FRL	TY1221	Pendent	QR	LH	2.8	Solder	1/2	TFP130	165, 212
TY-FRL	TY3121	Upright	QR	LH/OH	5.6	Solder	1/2	TFP130	165, 212
TY-FRL	TY3221	Pendent	QR	LH/OH	5.6	Solder	1/2	TFP130	165, 212
TY-FRL	TY3321	Horiz. SW	QR	LH/OH	5.6	Solder	1/2	TFP140	165, 212
TY-FRL	TY4121	Upright	QR	LH/OH	8.0	Solder	3/4	TFP130	165, 212
TY-FRL	TY4221	Pendent	QR	LH/OH	8.0	Solder	3/4	TFP130	165, 212
TY-B	TY3151	Upright	SR	All	5.6	5 mm Bulb	1/2	TFP151	135, 155, 175, 200, 286, 360
TY-B	TY3251	Pendent	SR	All	5.6	5 mm Bulb	1/2	TFP151	135, 155, 175, 200, 286, 360
TY-B	TY3451	Vertical SW	SR	LH/OH	5.6	5 mm Bulb	1/2	TFP161	135, 155, 175, 200, 286, 360
TY-B	TY3351	Horiz. SW	SR	LH/OH	5.6	5 mm Bulb	1/2	TFP161	135, 155, 175, 200, 286, 360
TY-B	TY4851	Upright	SR	All	8.0	5 mm Bulb	1/2	TFP151	135, 155, 175, 200, 286, 360
TY-B	TY4951	Pendent	SR	All	8.0	5 mm Bulb	1/2	TFP151	135, 155, 175, 200, 286, 360
TY-B	TY4151	Upright	SR	All	8.0	5 mm Bulb	3/4	TFP151	135, 155, 175, 200, 286, 360
TY-B	TY4251	Pendent	SR	All	8.0	5 mm Bulb	3/4	TFP151	135, 155, 175, 200, 286, 360
TY-FRB	TY1131	Upright	QR	LH	2.8	3 mm Bulb	1/2	TFP171	135, 155, 175, 200, 286
TY-FRB	TY1231	Pendent	QR	LH	2.8	3 mm Bulb	1/2	TFP171	135, 155, 175, 200, 286
TY-FRB	TY2131	Upright	QR	LH	4.2	3 mm Bulb	1/2	TFP171	135, 155, 175, 200, 286
TY-FRB	TY2231	Pendent	QR	LH	4.2	3 mm Bulb	1/2	TFP171	135, 155, 175, 200, 286
TY-FRB	TY3131	Upright	QR	LH/OH	5.6	3 mm Bulb	1/2	TFP171	135, 155, 175, 200, 286
TY-FRB	TY3231	Pendent	QR	LH/OH	5.6	3 mm Bulb	1/2	TFP171	135, 155, 175, 200, 286
TY-FRB	TY3431	Vertical SW	QR	LH/OH	5.6	3 mm Bulb	1/2	TFP176	135, 155, 175, 200, 286
TY-FRB	TY3331	Horiz. SW	QR	LH/OH	5.6	3 mm Bulb	1/2	TFP176	135, 155, 175, 200, 286
TY-FRB	TY4131	Upright	QR	LH/OH	8.0	3 mm Bulb	3/4	TFP171	135, 155, 175, 200, 286
TY-FRB	TY4231	Pendent	QR	LH/OH	8.0	3 mm Bulb	3/4	TFP171	135, 155, 175, 200, 286
RFII	TY3531	Concealed Pendent	QR	LH/OH	5.6	3 mm Bulb	1/2	TFP181	155, 200
RFII	TY3505	Concealed Pendent	QR	LH/OH	5.6	3 mm Bulb	1/2	TFP181	155, 200
RFII	TY3551	Concealed Pendent	SR	All	5.6	5 mm Bulb	1/2	TFP181	155, 200
RFII	TY3504	Concealed Pendent	SR	All	5.6	5 mm Bulb	1/2	TFP181	155, 200









MAX. PRES. (PSI)	MAX. SPACING (1)	MIN. SPACING	SPRINKLER FINISH (1,2)	LISTINGS & APPROVALS (1)	WRENCH	RECESS. WRENCH	RECESS. ESCUTCH. AVAIL. (1)
175	Per NFPA	6'-0"	B, C, W, L, WOL	UL, C-UL, FM, LPC	W9	_	-
175	Per NFPA	6'-0"	B, C, W, L, WOL	UL, C-UL, FM, LPC	W9	W10	YES
175	Per NFPA	6'-0"	B, C	UL, C-UL, FM	W9	-	_
175	Per NFPA	6'-0"	B, C, W, L, WOL	UL, C-UL, FM, LPC	W9	-	-
175	Per NFPA	6'-0"	B, C, W, L, WOL	UL, C-UL, FM, LPC	W9	W10	YES
175	Per NFPA	6'-0"	B, C, W, L, WOL	UL, C-UL, FM	W9	-	-
175	Per NFPA	6'-0"	B, C, W, L, WOL	UL, C-UL, FM	W9	W10	YES
175	Per NFPA	6'-0"	B, C	UL, C-UL	W9	-	-
175	Per NFPA	6'-0"	B, C	UL, C-UL	W9	W12	YES
175	Per NFPA	6'-0"	B, C	UL, C-UL, FM, LPC	W9	-	-
175	Per NFPA	6'-0"	B, C	UL, C-UL, FM, LPC	W9	W12	YES
175	Per NFPA	6'-0"	B, C	UL, C-UL, FM	W9	-	-
175	Per NFPA	6'-0"	B, C	UL, C-UL	W9	-	-
175	Per NFPA	6'-0"	B, C	UL, C-UL	W9	-	-
175	Per NFPA	6'-0"	B, C, P, W, L, WOL	UL, C-UL, FM, LPC, NYC, VdS	W6	-	-
175	Per NFPA	6'-0"	B, C, P, W, L, WOL	UL, C-UL, FM, LPC, VdS, NYC	W6	W7	YES
175	Per NFPA	6'-0"	B, C, P, W, L, WOL	UL, C-UL, FM, LPC, NYC	W6	W7	YES
175	Per NFPA	6'-0"	B, C, P, W, L, WOL	UL, C-UL, FM, LPC, NYC	W6	W7	YES
175	Per NFPA	6'-0"	B, C, P	UL, C-UL, FM, NYC	W6	-	-
175	Per NFPA	6'-0"	B, C, P	UL, C-UL, FM, NYC	W6	-	-
175	Per NFPA	6'-0"	B, C, P, W, L, WOL	UL, C-UL, FM, LPC, VdS, NYC	W6	-	-
175	Per NFPA	6'-0"	B, C, P, W, L, WOL	UL, C-UL, FM, LPC, VdS, NYC	W6	W7	YES
175	Per NFPA	6'-0"	B, C, P	UL, C-UL, FM, NYC	W6	-	_
175	Per NFPA	6'-0"	B, C, P	UL, C-UL, FM, NYC	W6	W7	YES
175	Per NFPA	6'-0"	B, C, P	UL, C-UL	W6	-	-
175	Per NFPA	6'-0"	B, C, P	UL, C-UL	W6	W7	YES
175	Per NFPA	6'-0"	B, C, P, L	UL, C-UL, FM, NYC, LPC, VdS	W6	-	-
175	Per NFPA	6'-0"	B, C, P, L	UL, C-UL, FM, NYC, LPC, VdS	W6	W7	YES
175	Per NFPA	6'-0"	B, C, P, L	UL, C-UL, FM, NYC, LPC	W6	-	-
175	Per NFPA	6'-0"	B, C, P, L	UL, C-UL, FM, NYC, LPC	W6	W7	YES
175	Per NFPA	6'-0"	B, C, P, L	UL, C-UL, FM, NYC, LPC, VdS	W6	-	-
175	Per NFPA	6'-0"	B, C, P, L	UL, C-UL, FM, NYC, LPC, VdS	W6	W7	YES
175	Per NFPA	6'-0"	C, Wh	UL, C-UL, FM, NYC	RFII	-	_
250	Per NFPA	6'-0"	C, Wh	UL, C-UL, NYC	RFII	-	-
175	Per NFPA	6'-0"	C, Wh	UL, C-UL, FM, NYC	RFII	-	-
250	Per NFPA	6'-0"	C, Wh	UL, C-UL, NYC	RFII	-	-

- (2) Sprinkler Finish Legend: B=Brass; BB=Bright Brass; C=Chrome; L=Lead Coating; P=Polyester Coating (White is standard); Wh=White; W=Wax Coating (for 135° to 212°); WOL=Wax Coating over Lead (135° to 212°)
- (3) Hazard Legend: LH=Light Hazard; OH=Ordinary Hazard; All=Any Hazard
- (4) Response Legend: SR=Standard Response; QR=Quick Response; FR=Fast Response
- (5) "Previously Offered As" provides the Brand, Model, and SIN from which the TY SIN had been redesignated.
- (6) "Principally Replaces" provides the Brand, Model, and SIN for which the TY SIN can generally be used as a replacement; however, refer to the Technical Data Sheet to assure the appropriateness for a given application.



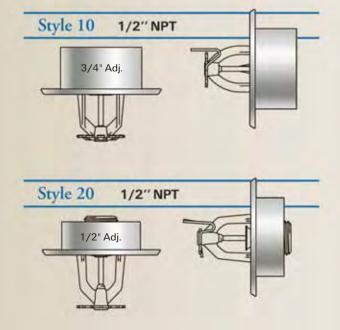


Extended Coverage Sprinklers

MODEL (1)	SPRINKLER ID NUMBER (SIN)	ТҮРЕ	RESPONSE (4)	HAZARD (1,3)	K FACTOR	ELEMENT	THREAD SIZE	DATA SHEET	TEMPERATURE, °F (1)	
EC-25	TY9128	Upright	SR	All	25.2	Solder	1	TFP213	165, 214	
EC-14	TY6137	Upright	QR/SR	LH/OH	14.0	3 mm Bulb	3/4	TFP220	135, 155, 175, 200, 286	
EC-14	TY6237	Pendent	QR/SR	LH/OH	14.0	3 mm Bulb	3/4	TFP220	135, 155, 175, 200, 286	
EC-11	TY5137	Upright	QR/SR	LH/OH	11.2	3 mm Bulb	3/4	TFP220	135, 155, 175, 200, 286	
EC-11	TY5237	Pendent	QR/SR	LH/OH	11.2	3 mm Bulb	3/4	TFP220	135, 155, 175, 200, 286	
TY-FRB	TY3332	Horiz. SW	QR/SR	LH	5.6	3 mm Bulb	1/2	TFP296	135, 155, 175	
TY-FRB	TY4332	Horiz. SW	QR/SR	LH	8.0	3 mm Bulb	3/4	TFP296	135, 155, 175	
ELO SW-	20 TY5332	Horiz. SW	SR	ОН	11.2	3 mm Bulb	3/4	TFP230	155, 200	
ELO SW-	24 TY5337	Horiz. SW	SR	ОН	11.2	3 mm Bulb	3/4	TFP230	200	
TY-FRL	TY3322	Horiz. SW	QR/SR	LH	5.6	Solder	1/2	TFP280	165	
TY-FRL	TY4322	Horiz. SW	QR/SR	LH	8.0	Solder	3/4	TFP280	140, 165	
CHEC	TY4332	Concealed Horiz. SW	QR	LH	8.0	3 mm Bulb	3/4	TFP265	135, 155	
ELOC	TY5522	Concealed Pendent	QR	LH	11.2	Solder	3/4	TFP250	160, 212	
RFII	TY3532	Concealed Pendent	QR	LH	5.6	3 mm Bulb	1/2	TFP260	155, 200	
EC-5	TY3232	Pendent	QR	LH	5.6	3 mm Bulb	1/2	TFP228	135, 155	
EC-5	TY3302	Horiz. SW	QR	LH	5.6	3 mm Bulb	1/2	TFP298	135, 155, 200	
EC-8	TY4232	Pendent	QR	LH	8.0	3 mm Bulb	3/4	TFP223	135, 155	

Escutcheon Style Reference Guide

Escutcheons in this catalog are referenced by a style number and are available in brass, chrome or white finish. Below is a visual key to distinguish individual escutcheon styles.

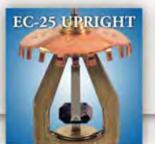


^{*-} Separately ordered Shields/Guards.



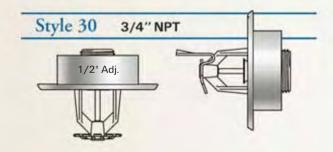


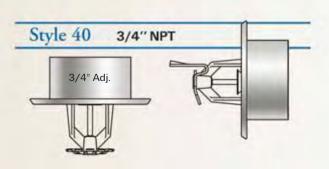


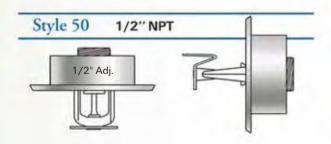




MAX. PRES. (PSI)	MAX. SPACING (1)	MIN. SPACING	SPRINKLER FINISH (1,2)	LISTINGS & APPROVALS (1)	WRENCH	RECESS. WRENCH	RECESS. ESCUTCH. AVAIL. (1)
175	14' x 14'	10'-0"	В	UL, C-UL, FM, NYC	W1	-	-
175	20' x 20'	8'-0"	B, C, P, L	UL, C-UL, FM	W3	-	-
175	20' x 20'	9'-0"	B, C, P, L	UL, C-UL, FM	W3	W4	YES
175	20' x 20'	8'-0"	B, C, P, L	UL, C-UL, FM	W3	-	-
175	20' x 20'	9'-0"	B, C, P, L	UL, C-UL, FM	W3	W4	YES
175	16' x 22'	10'-0"	B, C, P	UL, C-UL, FM, NYC	W6	W7	YES
175	16' x 24'	10'-0"	B, C, P	UL, C-UL, FM, NYC	W6	W7	YES
175	16' x 20'	8'-0"	B, C, P	UL, C-UL	W3	-	-
175	16' x 24'	8'-0"	B, C, P	UL, C-UL	W3	-	-
175	16' x 20'	8'-0"	B, C	UL, C-UL, FM	W9	-	-
175	16' x 24'	10'-0"	B, C	UL, C-UL, FM	W9	-	-
175	16' x 22'	8'-0"	C, Wh	UL, C-UL	W7	-	-
175	18' x 18'	8'-0"	B, C, Wh	UL, C-UL	W18	-	-
175	18' x 18'	8'-0"	C, Wh	UL, C-UL, NYC	RFII	-	-
175	20' x 20'	8'-0"	B, C, P	UL, C-UL, FM	W6	W7	YES
175	16' x 24'	8'-0"	B, C, P	UL, C-UL, FM	W6	W7	YES
175	20' x 20'	8'-0"	B, C, P	UL, C-UL, NYC	W3	W4	YES







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- (3) Hazard Legend: LH=Light Hazard; OH=Ordinary Hazard; All=Any Hazard
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Storage Sprinklers

MODEL (1)	SPRINKLER ID NUMBER (SIN)	ТҮРЕ	RESPONSE (4)	HAZARD (1,3)	K FACTOR	ELEMENT	THREAD SIZE	DATA SHEET	TEMPERATURE, °F (1)
ESFR-25	TY9226	ESFR Pendent	FR	Storage	25.2	Solder	1	TFP312	165, 214
ESFR-17	TY7126	ESFR Upright	FR	Storage	16.8	Solder	3/4	TFP316	165, 214
ESFR-17	TY7226	ESFR Pendent	FR	Storage	16.8	Solder	3/4	TFP315	165, 214
ESFR-1	TY6226	ESFR Pendent	FR	Storage	14.0	Solder	3/4	TFP318	165, 214
Ultra K17	TY7153	Upright	SR	Storage	16.8	5 mm Bulb	3/4	TFP330	155, 200
K17-231	TY7151	Upright	SR	Storage	16.8	5 mm Bulb	3/4	TFP332	155, 200, 286
K17-231	TY7251	Pendent	SR	Storage	16.8	5 mm Bulb	3/4	TFP332	155, 200, 286
LD	TY5153	Large Drop Upright	SR	Storage	11.2	5 mm Bulb	3/4	TFP335	155, 200, 286
ELO-231	TY5811	Upright	SR	Storage	11.2	Solder	1/2	TFP340	165, 212, 286
ELO-231	TY5111	Upright	SR	Storage	11.2	Solder	3/4	TFP340	165, 212, 286
ELO-231	TY5211	Pendent	SR	Storage	11.2	Solder	3/4	TFP340	165, 212, 286
ELO-231 B	TY5851	Upright	SR	Storage	11.2	5 mm Bulb	1/2	TFP342	155, 200, 286
ELO-231 B	TY5151	Upright	SR	Storage	11.2	5 mm Bulb	3/4	TFP342	155, 200, 286
ELO-231 B	TY5251	Pendent	SR	Storage	11.2	5 mm Bulb	3/4	TFP342	155, 200, 286
ELO-231 FRB	TY5131	Upright	QR	Storage	11.2	3 mm Bulb	3/4	TFP344	155, 200, 286
ELO-231 FRB	TY5231	Pendent	QR	Storage	11.2	3 mm Bulb	3/4	TFP344	155, 200, 286
TY-L	TY3113	Intrmed. Level Upright	SR	Storage	5.6	Solder	1/2	TFP350	165, 212, 280
TY-L	TY4113	Intrmed. Level Upright	SR	Storage	8.0	Solder	3/4	TFP350	165, 212, 280
TY-FRL	TY3123	Intrmed. Level Upright	QR	Storage	5.6	Solder	1/2	TFP355	165
TY-FRL	TY4123	Intrmed. Level Upright	QR	Storage	8.0	Solder	3/4	TFP355	165
TY-B	TY3153	Intrmed. Level Upright	SR	Storage	5.6	5 mm Bulb	1/2	TFP351	135, 155, 175, 200, 286, 360
TY-B	TY4153	Intrmed. Level Upright	SR	Storage	8.0	5 mm Bulb	3/4	TFP351	135, 155, 175, 200, 286, 360
TY-FRB	TY3133	Intrmed. Level Upright	QR	Storage	5.6	3 mm Bulb	1/2	TFP356	135, 155, 175, 200, 286
TY-FRB	TY4133	Intrmed. Level Upright	QR	Storage	8.0	3 mm Bulb	3/4	TFP356	135, 155, 175, 200, 286
ELO-231	TY5811	Intrmed. Level Upright*	SR	Storage	11.2	Solder	1/2	TFP340	165, 212, 286
ELO-231	TY5111	Intrmed. Level Upright*	SR	Storage	11.2	Solder	3/4	TFP340	165, 212, 286
ELO-231 B	TY5851	Intrmed. Level Upright*	SR	Storage	11.2	5 mm Bulb	1/2	TFP342	155, 200, 286
ELO-231 B	TY5151	Intrmed. Level Upright*	SR	Storage	11.2	5 mm Bulb	3/4	TFP342	155, 200, 286
ELO-231 FRB	TY5131	Intrmed. Level Upright*	QR	Storage	11.2	3 mm Bulb	3/4	TFP344	155, 200, 286

^{*-} Separately ordered Shields/Guards.





K17-231 PENDENT





MAX.	MAX.	MIN.	SPRINKLER	LISTINGS & APPROVALS	WRENCH	RECESS.	RECESS.
PRES. (PSI)	SPACING (1)	SPACING	FINISH (1,2)	(1)		WRENCH	ESCUTCH. AVAIL. (1)
175	Per NFPA	8'-0"	В	UL, C-UL, FM, NYC, China, HK, VdS	W1	-	-
175	Per NFPA	8'-0"	В	FM	W21	-	-
175	Per NFPA	8'-0"	В	UL, C-UL, FM, VdS	W21	-	-
175	Per NFPA	8'-0"	В	UL, C-UL, FM, NYC, LPC, VdS, HK	W2	-	-
175	Per NFPA	8'-0"	В	UL, C-UL, FM	W8	-	-
175	Per NFPA	6'-0"	В	UL, C-UL, FM	W8	-	-
175	Per NFPA	6'-0"	В	UL, C-UL	W8	-	-
175	Per NFPA	8'-0"	В	UL, C-UL, FM	W3	-	-
175	Per NFPA	6'-0"	B, C, L, W, WOL	UL, C-UL, FM	W3	-	-
175	Per NFPA	6'-0"	B, C, L, W, WOL	UL, C-UL, FM	W3	-	-
175	Per NFPA	6'-0"	B, C, L, W, WOL	UL, C-UL, FM	W3	-	-
175	Per NFPA	6'-0"	B, C, L, P, W, WOL	UL, C-UL, FM	W3	-	-
175	Per NFPA	6'-0"	B, C, L, P, W, WOL	UL, C-UL, FM	W3	-	-
175	Per NFPA	6'-0"	B, C, L, P, W, WOL	UL, C-UL, FM	W3	-	-
175	Per NFPA	6'-0"	B, C, P	UL, C-UL, FM	W3	-	-
175	Per NFPA	6'-0"	B, C, P	UL, C-UL, FM	W3	1093	YES
175	Per NFPA	6'-0"	В	UL, C-UL, FM	W9	-	-
175	Per NFPA	6'-0"	В	UL, C-UL, FM	W9	-	-
175	Per NFPA	6'-0"	B, C	UL, C-UL, FM	W9	-	-
175	Per NFPA	6'-0"	B, C	UL, C-UL, FM	W9	-	-
175	Per NFPA	6'-0"	B, C, W, L, WOL	UL, C-UL, FM, NYC	W6	-	-
175	Per NFPA	6'-0"	B, C, L, W, WOL	UL, C-UL, FM, NYC	W6	-	-
175	Per NFPA	6'-0"	B, C, L	UL, C-UL, FM, NYC	W6	-	-
175	Per NFPA	6'-0"	B, C, L	UL, C-UL, FM, NYC	W6	-	-
175	Per NFPA	6'-0"	B, C, L, W, WOL	UL, C-UL, FM	W3	-	-
175	Per NFPA	6'-0"	B, C, L, W, WOL	UL, C-UL, FM	W3	-	-
175	Per NFPA	6'-0"	B, C, L, P, W, WOL	UL, C-UL, FM	W3	-	-
175	Per NFPA	6'-0"	B, C, L, P, W, WOL	UL, C-UL, FM	W3	-	-
175	Per NFPA	6'-0"	B, C, P	UL, C-UL, FM	W3	-	-

- (2) Sprinkler Finish Legend: B=Brass; BB=Bright Brass; C=Chrome; L=Lead Coating; P=Polyester Coating (White is standard); Wh=White; W=Wax Coating (for 135° to 212°); WOL=Wax Coating over Lead (135° to 212°)
- (3) Hazard Legend: LH=Light Hazard; OH=Ordinary Hazard; All=Any Hazard
- (4) Response Legend: SR=Standard Response; QR=Quick Response; FR=Fast Response
- (5) "Previously Offered As" provides the Brand, Model, and SIN from which the TY SIN had been redesignated.
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*- Separately ordered Shields/Guards.





Residential Sprinklers

MODEL (1)	SPRINKLER ID NUMBER (SIN)	TYPE	RESPONSE (4)	HAZARD (1,3)	K FACTOR	ELEMENT	THREAD SIZE	DATA SHEET	TEMPERATURE, °F (1)
LFII	TY2234	Pendent	FR	Residential	4.9	3 mm Bulb	1/2	TFP400	155, 175
LFII	TY1334	Horiz. SW	FR	Residential	4.2	3 mm Bulb	1/2	TFP410	155, 175
LFII	TY2284	Flush Pendent	FR	Residential	4.2	Solder	1/2	TFP420	162
LFII	TY2596	Concealed Pendent	FR	Residential	4.2	Solder	1/2	TFP440	160

Dry Sprinklers

MODEL (1)	SPRINKLER ID NUMBER (SIN)		RESPONSE (4)	HAZARD (1,3)	K FACTOR	ELEMENT	THREAD SIZE	DATA SHEET	TEMPERATURE, °F (1)	
DS-1	TY3155	Upright	SR	All	5.6	5 mm Bulb	1	TFP500	135, 155, 175, 200, 286, 360	
DS-1	TY3255	Pendent	SR	All	5.6	5 mm Bulb	1	TFP500	135, 155, 175, 200, 286, 360	
DS-1	TY3355	Horiz. SW	SR	LH/OH	5.6	5 mm Bulb	1	TFP500	135, 155, 175, 200, 286, 360	
DS-1	TY3358	EC Horiz. SW	SR	LH	5.6	5 mm Bulb	1	TFP520	135, 155	
DS-1	TY3135	Upright	QR	LH/OH	5.6	3 mm Bulb	1	TFP510	135, 155, 175, 200, 286	
DS-1	TY3235	Pendent	QR	LH/OH	5.6	3 mm Bulb	1	TFP510	135, 155, 175, 200, 286	
DS-1	TY3335	Horiz. SW	QR	LH/OH	5.6	3 mm Bulb	1	TFP510	135, 155, 175, 200, 286	
DS-1	TY3338	EC Horiz. SW	QR	LH	5.6	3 mm Bulb	1	TFP520	135, 155	
DS-2	TY5255	Pendent	SR	All	11.2	5 mm Bulb	1	TFP530	135, 155, 175, 200, 286	
DS-2	TY5235	Pendent	QR	LH/OH	11.2	3 mm Bulb	1	TFP530	135, 155, 175, 200, 286	
DS-2	TY5238	EC Pendent	QR/SR	LH/OH	11.2	3 mm Bulb	1	TFP540	135, 155, 175, 200, 286	
DS-C	TY3555	Concealed Pendent	SR	LH/OH	5.6	5 mm Bulb	1	TFP515	155, 200	
DS-C	TY3535	Concealed Pendent	QR	LH/OH	5.6	3 mm Bulb	1	TFP515	155, 200	
DS-ECC	TY3539	EC Concealed Pendent	t QR	LH	5.6	5 mm Bulb	1	TFP518	155, 200	









MAX. PRES. (PSI)	MAX. SPACING (1)	MIN. SPACING	SPRINKLER FINISH (1,2)	LISTINGS & APPROVALS (1)	WRENCH	RECESS. WRENCH	RECESS. ESCUTCH. AVAIL. (1)
175	20' x 20'	8'-0"	B, C, P	UL, C-UL, NYC	W6	W7	YES
175	16' x 20'	8'-0"	B, C, P	UL, C-UL, NYC	W6	W7	YES
175	20' x 20'	8'-0"	C, Wh	UL, C-UL	4947	-	-
175	20' x 20'	8'-0"	C, Wh	UL, C-UL, NYC	W18	-	_

MAX. PRES.	MAX. SPACING	MIN. SPACING	SPRINKLER FINISH	LISTINGS & APPROVALS (1)	WRENCH	RECESS. WRENCH	RECESS. ESCUTCH.
(PSI)	(1)		(1,2)				AVAIL. (1)
175	Per NFPA	6'-0"	B, C, Wh	UL, C-UL, FM, NYC	Pipe Wrench	-	-
175	Per NFPA	6'-0"	B, C, Wh	UL, C-UL, FM, NYC	Pipe Wrench	W7	YES
175	Per NFPA	6'-0"	B, C, Wh	UL, C-UL, FM, NYC	Pipe Wrench	-	-
175	16' x 20'	10'-0"	B, C, Wh	UL, C-UL, NYC	Pipe Wrench	W7	-
175	Per NFPA	6'-0"	B, C, Wh	UL, C-UL, FM, NYC	Pipe Wrench	-	-
175	Per NFPA	6'-0"	B, C, Wh	UL, C-UL, FM, NYC	Pipe Wrench	W7	YES
175	Per NFPA	6'-0"	B, C, Wh	UL, C-UL, FM, NYC	Pipe Wrench	-	-
175	16' x 20'	10'-0"	B, C, Wh	UL, C-UL, NYC	Pipe Wrench	W7	-
175	Per NFPA	6'-0"	B, C, Wh	UL, C-UL, NYC	Pipe Wrench	W17	YES
175	Per NFPA	6'-0"	B, C, Wh	UL, C-UL, NYC	Pipe Wrench	W17	YES
175	20' x 20'	12'-6"	B, C, Wh	UL, C-UL, NYC	Pipe Wrench	W17	YES
175	Per NFPA	6'-0"	C, Wh	UL, C-UL	Pipe Wrench	RFII	-
175	Per NFPA	6'-0"	C, Wh	UL, C-UL	Pipe Wrench	RFII	-
175	18' x 18'	8'-0"	C, Wh	UL, C-UL	Pipe Wrench	RFII	-

RESIDENTIAL SPRINKLERS

DRY SPRINKLERS

- (2) Sprinkler Finish Legend: B=Brass; BB=Bright Brass; C=Chrome; L=Lead Coating; P=Polyester Coating (White is standard); Wh=White; W=Wax Coating (for 135° to 212°); WOL=Wax Coating over Lead (135° to 212°)
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*- Separately ordered Shields/Guards.





Special Sprinklers

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MODEL (1)	SPRINKLER ID NUMBER (SIN)		RESPONSE (4)	HAZARD (1,3)	K FACTOR	ELEMENT	THREAD SIZE	DATA SHEET	TEMPERATURE, °F (1)
BB1 17/32	TY4180	Back to Back	FR	_	8.0	3 mm Bulb	3/4	TFP610	200
BB2 17/32	TY4181	Attic Back to Back	FR	_	8.0	3 mm Bulb	3/4	TFP610	200
BB3 17/32	TY4182	Attic Back to Back	FR	-	8.0	3 mm Bulb	3/4	TFP610	200
BB1	TY3180	Attic Back to Back	FR	-	5.6	Solder	1/2	TFP610	212
BB2	TY3181	Attic Back to Back	FR	_	5.6	Solder	1/2	TFP610	212
BB3	TY3182	Attic Back to Back	FR	-	5.6	Solder	1/2	TFP610	212
SD1	TY3183	Attic Single Directional	FR	-	5.6	Solder	1/2	TFP610	212
SD2	TY3184	Attic Single Directional	FR	-	5.6	Solder	1/2	TFP610	212
SD3	TY3185	Attic Single Directional	FR	_	5.6	Solder	1/2	TFP610	212
HIP	TY3187	Attic Hip	FR	-	5.6	3 mm Bulb	1/2	TFP610	200
WS	TY3388	Window Horiz. SW	FR	_	5.6	3 mm Bulb	1/2	TFP620	155, 200
WS	TY3488	Window Vertical SW	FR	-	5.6	3 mm Bulb	1/2	TFP620	155, 200
CC1	TY1189	Combust. Concld Upright	t FR	-	3	3 mm Bulb	1/2	TFP630	175
CC2	TY3189	Combust. Concld Upright	t FR	-	5.6	3 mm Bulb	1/2	TFP632	175
TY300-B	TY3104	High Press. Upright	SR	All	5.6	5 mm Bulb	1/2	TFP640	135, 155, 175, 200, 286, 360
TY300-B	TY3204	High Press. Pendent	SR	All	5.6	5 mm Bulb	1/2	TFP640	135, 155, 175, 200, 286, 360
TY300-B	TY3304	High Press. Horiz. SW	SR	LH/OH	5.6	5 mm Bulb	1/2	TFP640	135, 155, 175, 200, 286, 360
TY300-FRB	TY3105	High Press. Upright	QR	LH/OH	5.6	3 mm Bulb	1/2	TFP642	135, 155, 175, 200, 286
TY300-FRB	TY3205	High Press. Pendent	QR	LH/OH	5.6	3 mm Bulb	1/2	TFP642	135, 155, 175, 200, 286
TY300-FRB	TY3305	High Press. Horiz. SW	QR	LH/OH	5.6	3 mm Bulb	1/2	TFP642	135, 155, 175, 200, 286
TY300-FRB	TY3307	High Press. EC Horiz. SV	V QR/SR	LH	5.6	3 mm Bulb	1/2	TFP642	135, 155, 175
TFP PH2	TY3290	Institutional Pendent	SR	All	5.6	Solder	1/2	TFP650	135, 165, 212
TFP PH5	TY3390	Institutional Horiz. SW	SR	LH/OH	5.6	Solder	1/2	TFP654	135
TFP MAX	TY3291	Institutional Pendent	QR	LH/OH	5.6	2.5 mm Bulb	1/2	TFP652	135, 155, 175, 200
TFP MAX	TY3391	Institutional Horiz. SW	QR	LH/OH	5.6	2.5 mm Bulb	1/2	TFP656	135, 155, 175, 200
D	G1036	Upright (High Temp.)	SR	All	5.6	11 mm Bulb	1/2	TD525M	400, 500, 650
D	G1040	Pendent (High Temp.)	SR	All	5.6	11 mm Bulb	1/2	TD525M	400, 500, 650
D	G1136	Upright (High Temp.)	SR	All	8.0	11 mm Bulb	3/4	TD527Q	400, 500
D	G1140	Pendent (High Temp.)	SR	All	8.0	11 mm Bulb	3/4	TD527Q	400, 500
S.S.	-	Upright (St. Steel)	SR	All	5.6	11 mm Bulb	1/2	TD581M	135, 155, 175, 200
S.S.	-	Pendent (St. Steel)	SR	All	5.6	11 mm Bulb	1/2	TD581M	135, 155, 175, 200
TY-B	TY3651	Conventional (Old Style)	SR	All	5.6	5 mm Bulb	1/2	TFP661	135, 155, 175, 200, 286, 360
TY-B	TY4651	Conventional (Old Style)	SR	All	8.0	5 mm Bulb	3/4	TFP661	135, 155, 175, 200, 286, 360
TY-FRB	TY3631	Conventional (Old Style)	QR	LH/OH	5.6	3 mm Bulb	1/2	TFP666	135, 155, 175, 200, 286
TY-FRB	TY4631	Conventional (Old Style)	QR	LH/OH	8.0	3 mm Bulb	3/4	TFP666	135, 155, 175, 200, 286



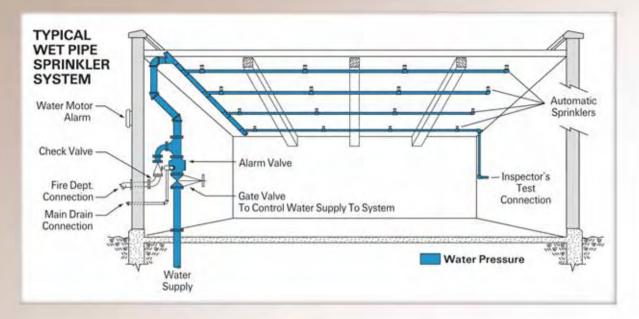






MAX. PRES.	MAX. SPACING	MIN. SPACING	SPRINKLER FINISH	LISTINGS & APPROVALS (1)	WRENCH	RECESS. WRENCH	RECESS. ESCUTCH.
(PSI)	(1)		(1,2)	(*)			AVAIL. (1)
175	400 sq. ft.	4'-0"	В	UL, ULC	W3	-	_
175	400 sq. ft.	4'-0"	В	UL, ULC	W3	-	-
175	400 sq. ft.	4'-0"	В	UL, ULC	W3	_	_
175	400 sq. ft.	4'-0"	В	UL, ULC	Adj. Wrench	-	-
175	400 sq. ft.	4'-0"	В	UL, ULC	Adj. Wrench	-	-
175	400 sq. ft.	4'-0"	В	UL, ULC	Adj. Wrench	-	-
175	_	4'-0"	В	UL, ULC	Adj. Wrench	_	_
175	-	4'-0"	В	UL, ULC	Adj. Wrench	-	-
175	-	4'-0"	В	UL, ULC	Adj. Wrench	-	-
175	-	4'-0"	В	UL, ULC	W20	-	-
175	-	6'-0"	B, C, P	UL, C-UL, ULC, NYC	W20	-	-
175	-	6'-0"	B, C, P	UL, C-UL, ULC, NYC	W20	-	-
175	100 sq. ft.	6'-0"	В	UL, C-UL	W20	-	-
175	144 sq. ft.	7'-0"	В	UL	W6	-	-
300	Per NFPA	6'-0"	B, C, P	UL, C-UL, NYC	W6	-	-
300	Per NFPA	6'-0"	B, C, P	UL, C-UL, NYC	W6	W7	YES
300	16' x 22'	10'-0"	B, C, P	UL, C-UL, NYC	W6	-	-
300	Per NFPA	6'-0"	B, C, P	UL, C-UL, NYC	W6	-	-
300	Per NFPA	6'-0"	B, C, P	UL, C-UL, NYC	W6	W7	YES
300	Per NFPA	6'-0"	B, C, P	UL, C-UL, NYC	W6	W7	YES
300	16' x 22'	10'-0"	B, C, P	UL, C-UL, NYC	W6	W7	YES
175	Per NFPA	6'-0"	С	UL, C-UL, NYC	1509-3	-	-
175	Per NFPA	6'-0"	С	UL, C-UL, NYC	1509-3	-	-
175	Per NFPA	6'-0"	С	UL, C-UL, NYC	1509-3	-	-
175	Per NFPA	6'-0"	С	UL, C-UL, NYC	1509-3	-	-
175	Per NFPA	6'-0"	B, C, L	UL, ULC, FM, NYC, LPC	W11	-	-
175	Per NFPA	6'-0"	B, C, L	UL, ULC, NYC	W11	-	-
175	Per NFPA	6'-0"	B, C, L	UL, ULC, NYC	W11	-	-
175	Per NFPA	6'-0"	B, C, L	UL, ULC, NYC	W11	-	-
175	Per NFPA	6'-0"	Stainless Steel	-	W11	-	-
175	Per NFPA	6'-0"	Stainless Steel	-	W11	-	-
175	Per NFPA	6'-0"	B, C, P, W, L, WOL	UL, C-UL, LPC, VdS, NYC	W6	-	-
175	Per NFPA	6'-0"	B, C, P, W, L, WOL	UL, C-UL, LPC, VdS, NYC	W6	-	-
175	Per NFPA	6'-0"	B, C, P, L	UL, C-UL, LPC, VdS, NYC	W6	-	-
175	Per NFPA	6'-0"	B, C, P, L	UL, C-UL, LPC, VdS, NYC	W6	-	-

SPECIAL SPRINKLERS



Wet Pipe Sprinkler Systems are

designed for use in applications where the temperature is maintained above freezing. In such systems each line 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. Typical applications include heated warehouses, factories, hospitals, stores, shopping centers and residential settings such as apartment or condominium complexes, and single family residences.

AV-1 Alarm Valve

Tech Data TFP910 & TFP912

- 2-1/2" (65 mm) Alarm Valves may be installed vertically
- 4", 6", and 8" (100 mm, 150 mm, and 200 mm) 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 system
- Automatically actuates electrically and/or hydraulically operated alarms when there is a steady flow equivalent to the discharge rate for one or more sprinklers
- Optional Retard Chamber used in installations subject to variable pressure (generally associated with public water supplies) to help prevent false alarms



Alarm Valve Trim

Contact a TFP distributor for details

- Available fully preassemble
- Semi-preassembled modular trim provides a quick and convenient method for trimming valve risers
- Modular pre-assembly minimizes time required to complete the valve trim

Tech Data TFP950

- Available sizes:
 2-1/2" through 8"
- 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 with ANSI class 150 or 300 Flanges utilizing flange adapters
- Designed with a removable cover for ease of field maintenance
- Standard seal is grade "E" EPDM
- Maximum rated working pressure is 300 psi (20,68 bar)



F540

Residential Domestic Shutoff Valve - 1" & 2"

Tech Data TD195 & TD196

- 1" size is designed for most single family homes (NFPA 13D)
- 2" size is designed for multi-family demand (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
- Valve automatically resets after the fire protection system is returned to normal service



513/513D/513R

Tech Data 28-1.0

- Available sizes:
 1" & 1-1/2" (threaded) and
 1-1/2" through 6" (grooved)
- Provides all of the accessory equipment for a system riser in a single assembly
- Availability in different configurations allows cost-effective riser installation in commercial (NFPA 13) systems, high rises requiring floor control assemblies, and residential systems (NFPA 13R/13D)



Riser Manifold

SYSTEMS

Resi-Riser

Contact a TFP distributor for details

- Available 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" studs in wall
- 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



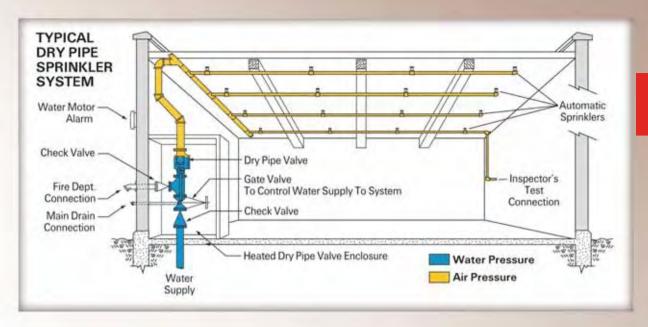
WMA-1

Tech Data TFP921

- Hydraulically operated outdoor alarm designed 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
- Other features: corrosion-resistant aluminum alloy gong, gongmount, water motor housing and Delrin bearings - which do not require lubrication - for long life
- May be mounted on any type of wall
- Can accommodate range of wall thicknesses from 2" to 18" (50 to 450 mm)
- Furnished with approved 3/4" (20 mm) Y-strainer for use in alarm line



DRY SYSTEM VALVES



Dry Pipe Sprinkler Systems are

designed for use in applications where the piping and sprinklers can be subjected to freezing temperatures. Valving for the system, however, must be installed in areas that are not subject to freezing, as this portion of the system does contain water. In most dry pipe systems, pipe lines to the sprinklers are pressurized with air, but nitrogen can also be used. When pressure in the system is lost through the actuation of a sprinkler head, the dry pipe valve trips and releases water into the system and activates alarms. 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 that are used to activate electric alarms, may be used to enhance the system. Typical applications for dry pipe sprinkler systems include unheated warehouses, parking garages, store windows, attic spaces, loading docks, and other areas exposed to freezing temperatures.

DPV-1

Tech Data TFP1041 & TFP1061

- Available sizes: 2-1/2" (63,5 mm), 3" (80 mm), 4" (100 mm) and 6" (150 mm)
- External reset differential dry pipe valves
- Used in larger dry pipe sprinkler systems
- Available as Flange x Flange, Flange x Groove, or Groove x Groove

Dry Pipe Valve - 2-1/2" through 6"

- Unique, offset clapper design minimizes external valve size
- Used to supply sprinkler installations in which sprinklers are subjected to freezing conditions (40°F / 4°C or less)
- Rated for use at a maximum service pressure of 250 psi (17.2 bar)
- Listings and Approvals: UL, C-UL, and FM





Dry Pipe Valve Trim

Contact a TFP distributor for details

Available fully preassemble

- Semi-preassembled modular trim provides a quick and convenient method for trimming valve risers
- Modular pre-assembly minimizes field time installation

QUICK OPENING DEVICES

QRS

Electronic Dry Pipe Valve Accelerator

Tech Data TFP1100

- 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)
- For retro-fit of existing mechanical accelerators
- Fully assembled package includes switch, solenoid, control panel, and accelerator trim pipe and fittings

- Operation of the dry pipe valve within four seconds -independent of various combinations of system initial air pressures, system volumes, or sprinkler K Factors
- Built-in low pressure and high pressure alarm supervision
- 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, FM



ACC-1

Dry Pipe Valve Accelerator

Tech Data TFP1112

- Designed for use with Model DPV-1 dry pipe valves
- Hastens 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
- 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
- Designed to trip when system air pressure drops at a rate exceeding approximately 1 psi/minute (0.07 bar/min)
- 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, LPC, SSL, and VdS



BB exhausted – 2"

Tech Data 2-5.2.10

- Attaches to a dry pipe system to quickly exhaust air from the system and reduce the amount of time required for water to fill the system
- In the event of a fire, one or more sprinklers open, resulting in a drop in air pressure that causes the exhausted to open
- Operation of the exhausted discharges air equaling approximately 15 sprinklers
- Listings and Approvals: UL, ULC, FM, LPC



QUICK OPENING DEVICES PAGE 48

AIR
MAINTENANCE
DEVICES
PAGE 49

AMD-1

Air Maintenance Device, Pressure Reducing Type

Tech Data TFP1221

- Field adjustable
- Used in systems where compressed air or nitrogen source is available
- Used in systems in which the air or nitrogen supply is at a higher

pressure than is desired for a sprinkler system or dry pilot line system

 Listings and Approvals: UL, ULC, and FM



AMD-2 Air Maintenance Device, Compressor (small w/o tank) Control Type

Tech Data TFP1231

- Field adjustable
- Used in conjunction with a small, non-tank-mounted air compressor
- Monitors sprinkler system or dry pilot line system air pressure and automatically cycles the compressor to maintain system pressure within preset limits
- Listings and Approvals: UL, ULC, and FM



AMD-3 Nitrogen Maintenance Device, High Pressure (Cylinder) Reducing Type

Tech Data TFP1241

- 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 system
- Listings and Approvals: UL, ULC, and FM



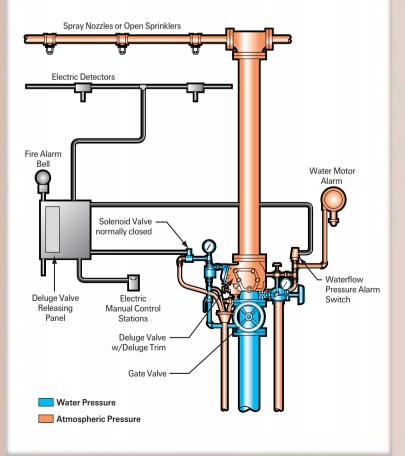


Deluge Valve & Deluge Systems

The "deluge valve" is the automatic water control valve that is used to control water flow into deluge, preaction, and special types of fire protection systems in response to a fire.

Deluge fire protection systems are normally used in special hazard installations where an entire area application of water is required for protection. Typical applications may include flammable liquid handling and storage areas, aircraft hangars, and other highhazard 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 Detection Shown



Single Interlock Preaction Systems

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 otherwise 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

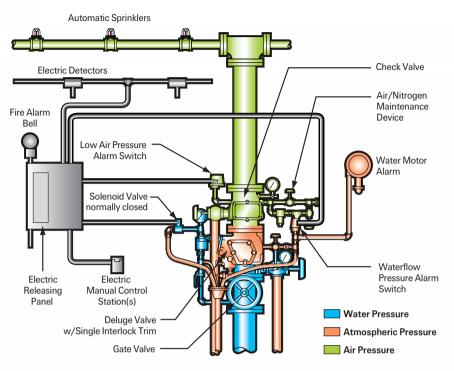
Double Interlock Preaction Systems

Double interlock preaction systems are designed for applications such as refrigerated areas that require the maximum degree of protection against an inadvertent operation that could result in unnecessary 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

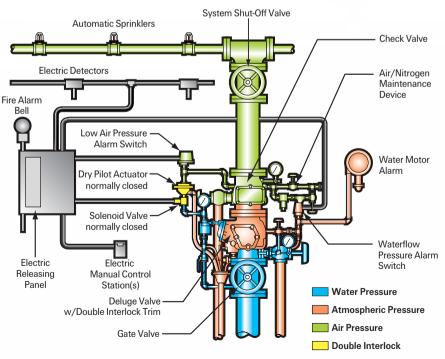
Electric Shown



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.

SPRINKLER SYSTEMS

Pneumatic/Electric Shown



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.

SYSTEMS

Tech Data TFP1305

- Available sizes: 1-1/2", 2", 3", 4", 6", and 8"
- 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, and FM



DV-1

DELUGE

System

VALVES &

Accessories

External Resetting Deluge Valve - 4" & 6"

Tech Data TFP1330

- Available sizes:4" (100 mm) and 6" (150 mm)
- Used as a system control valve in deluge, preaction and foam systems, preaction systems
- Can be reset externally without having to remove the hand-hole cover and unlatch the waterway clapper
- Positive mechanical latching style valve
- Available with three actuation trim arrangements: wet pilot, dry pilot, and electric
- Single and double interlock preaction trims available
- Rated for 175 psi (12.1 bar) maximum service pressure
- Listings and Approvals: UL, ULC, FM, LPC, and SSL



DV-3

Deluge Valve, Automatic Resetting – 2-1/2"

Tech Data TFP1350

- 2-1/2" (65 mm), right angle type deluge valves
- Available with either a grooved or threaded inlet and outlet
- For use as a control valve in deluge, or deluge, preaction and foam systems, preaction systems
- Can be reset externally without having to open a hand-hole cover to

- manually unlatch and set the center valve
- Trim arrangements provide wet pilot, dry pilot, and electric actuation
- Valves may be installed with the outlet facing either left or right
- 250 psi
- Listings and Approvals: UL, ULC, FM, LPC, and SSL.



TCV-1

Thermal Control Valves

Tech Data TD150

- 1" and 1-1/2"
- Valve is actuated by a thermally sensitive solder link that is mounted to the valve body
- Rated for use at 175 psi (12,1 bar) maximum service pressure
- Listings and Approvals:
 UL, ULC, FM, LPC, and SSL



Contact a TFP distributor for details

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 waterflow and supervisory switches. Where system air pressure is required for either supervision or automatic water control valve actuation. An air compressor and associated controls are also provided.

Integral to the Red-E Cabinet door 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 electrical connections to complete the system.

In addition to the integral control panel, windows have been provided in the Red-E Cabinet 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 1-1/2", 2", 3", 4" & 6" valve risers for the following types of systems:
- Deluge System Electric Actuation
- Single Interlock Preaction System
- Double Interlock Preaction System
- Aesthetically Pleasing Appearance
- Professionally Assembled
- Minimal Installation Time
- Internally Pre-Wired
- UL/ULC/FM Components
- Custom Manufactured
- Sizes 11/2", 2", 3", 4" & 6" Preaction, Double Interlock, and Deluge Packages
- Model DV-5 Deluge Valve (Standard)
- All Gauges and Panel Display are Visible Externally
- UL, C-UL Listed, and/or FM Approved

The Red-E Cabinet is constructed of 14 gauge steel, and is free-standing. The standard paint finish is bright red.



DELUGE
SYSTEM
VALVES &
ACCESSORIES





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.

GENERAL PURPOSE VALVES

CV-1F

Check Valve - 2" through 8"

Tech Data TFP1550

- 2" through 8" check valves
- 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
- Rated for use at a maximum pressure of 300 psi (20,7 bar)
- Listings and Approvals: UL, ULC, FM



CV-3

Check Valves - 4", 6" & 8"

Tech Data TD320

- Rubber faced swing check valves
- May be installed vertically or horizontally
- Can be used for gravity and pressure tank connections, connections from public water supplies to automatic sprinkler systems, fire pump discharge and by-pass connections and in

preaction systems having a nominal supervisory pressure of 1.5 psi (0.10 bar) or greater

 Listings and Approvals: UL, ULC, and FM



SIZE	CV-3 GROOVE X GROOVE	CV-3 FLANGE X FLANGE	CV-3 FLANGE X GROOVE
4" (100 mm)		•	•
6" (150 mm)		•	•
8" (200 mm)	-	•	•

= available

Tech Data TFP1530

- 2" through 12" butterfly valves
- Gear operator standard
- Used when visual indication of whether valve is open or closed is required
- Cut groove inlet and outlet connections

- Provided with or without internal supervisory switches
- 300 psi (20,7 bar)
- Listings and Approvals: UL, ULC, and FM



Trim Valves

Contact a TFP distributor for details

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



GENERAL PURPOSE VALVES

Butterfly Valves "Butterball"

Contact a TFP distributor for details

- Bronze body butterfly valves are designed specifically for fire protection applications
- Feature slow closure which 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
- BB-SCS01 has built in tamper resistant SPDT switch for use where proprietary or central station supervision of open position of valve is required
- Both models available in 2" and 2-1/2" NPT
- Rated for use at a maximum service pressure of 175 psi (12.1 bar)
- Listings and Approvals: UL, ULC, and FM



DD-1 (Drum Drip)

Contact a TFP distributor for details

- Ready to install
- No power machine for repair
- Eliminates searching for materials
- Eliminates potential leaks
- Eliminates labor of fabrication

Wiliag™ Condensate Drain

- Classic look of a professional job
- Net weight only 6.25 lbs.
- Overall length 24" (615 mm)
- Turning radius 2.5" (64 mm)





Tech Data TD431

- 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
- 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
- Releasing mechanism rated for 5-lb. to 50-lb. loads
- Listings and Approvals: UL and FM



Model A & B

Tech Data TD401 (Model A) TD402 (Model B)

- Model A available sizes:
 3" through 10" (80 mm through 250 mm)
- Bodies are welded steel
- -150 lb. flanges.
- Cast iron reducing inlet flanges and blind flanges complete the assembly
- Entire assembly is hot dipped galvanized

- Model B available sizes:
 - 3" 8" (80 mm through 200 mm)
 - Bodies of 3", 4" and 6" B-1 strainers are cast iron flanged tees
 - 8" B-1 strainers are pieces of welded Schedule 30 steel pipe and Class 150 steel flanges
- Both are rated for use in services up to 175 psi (12.1 bar)
- Both have Listings and Approvals: UL and FM



Pipe Line Strainers

Model B shown

Model C

Tech Data TD402M

- 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)
- Compact lightweight welded hot dipped galvanized 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 250 psi (17.2 bar)
- Listings and Approvals: UL, C-UL and FM

Pipe Line Strainers



SPECIALTY

ITEMS

Tech Data 28-9.0

- 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 signing requirements of NFPA 13



86

Straight & 90 Degree, Fire Department Connections

28-7.0 **Tech Data**

• Designed for fire department use to increase pressure and volume to automatic sprinkler system or standard-pipe system

• Available in both 90° side outlet pattern and the straight through

siamese pattern



F789

Automatic Drain (Ball Drip) Valve

TD425 Tech Data

- Automatically drains water from fire protection equipment (under low pressure)
- Provides visual indication of leakage past a check valve
- Automatically drains off condensate in fire protection systems
- Listings and Approvals: UL and FM



F350

Sectional Test & Drain

Tech Data TD455

- Integral sight-glass assembly
- Simplified method of testing waterflow alarms and draining sections of fire protection systems
- Listings and Approvals: UL and FM



Hangers

Pipe Hangers

Contact a TFP distributor for details

- 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



40-5 Strap

Tech Data TFP1720

- An economical alternative to welded pipe outlets on steel pipe. It may be used with full lengths of pipe and eliminates threading and welding, decreasing installation time
- May be used on 175 psi in fire protection wet, dry pipe, deluge and preaction systems



Ductile Iron Thread Fittings

Tech Data 21-3.0

- Ductile Iron provides 300 psi (standard) rated fittings
- Full complement of sizes in tee & elbows, and reducing tees & elbows

Grooved Piping Products are designed for use with grooved end fire sprinkler systems. It provides 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, or eliminated as necessary. Available in a wide range of sizes and configurations.



GROOVED PRODUCTS

Figure 705

Tech Data 18-2.0

- Used with 1-1/4" through 12" piping to provide ease of installation
- Provides the needed flexibility to accommodate differential movement

• Standard Grade A pre-lubed gasket

 Also available with tri-seal Grade E gasket for dry pipe fire protection systems, vacuum systems, and freezer applications

Flexible Coupling



Figure 772

Tech Data 18-5.0

- Available sizes:
 1-1/4" through 12"
- Specifically designed to give secure rigidity in grooved piping systems
- Standard Grade A pre-lubed gasket

 Also available with tri-seal Grade E gasket for dry pipe fire protection systems, vacuum systems, and freezer applications



Rigid Coupling

Figure 716

Flexible Reducing Coupling

Tech Data 18-3.0

- Reducing coupling allows easy transition between two different size pipes
- Faster and easier than threading, welding or using flanges





GROOVED PRODUCTS

Tech Data 18.8.0

 Allows a direct transition from flanged components to a grooved piping system Bolt patterns conform to ANSI Class 125 and 150 standards



Figure 730

Tech Data 18-6.0

Mechanical Tees

 Mechanical outlet tees may be used for any tee connection where a threaded or grooved outlet is needed. They may be converted to a cross when necessary



GROOVED PRODUCTS

Grooved Fittings

Tech Data 18-1.0

- Provide an economical and efficient method of changing direction, adding an outlet, reducing or capping grooved piping systems
- Increased internal diameter resulting in increased flow characteristics
- Full back stop behind the groove to ensure proper coupling engagement and rigidity versus serrated back stop found on competitors' fittings

- Full flow standard end-to-end dimensions
- Specifically engineered for the fire protection industry
- 300 psi pressure rated
- 90°, 45° and Tee will be available in "Short Pattern" Style



ADACAP®

Tech Data 18-1.0

- Used to install the last sprinkler head on grooved branch line piping or as a drain fitting
- End-of-the-line sprinkler fittings inclusive of an end cap and female outlet
- Can be turned down for end of line drain
- Available in 1/2", 3/4" and 1" outlets



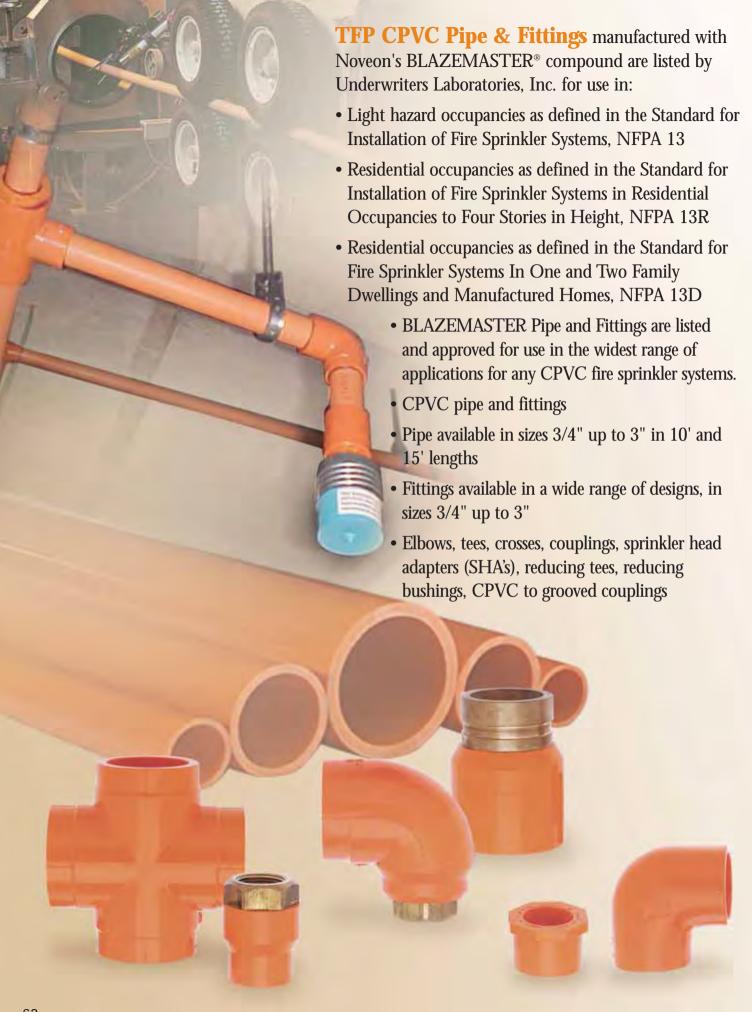
Galvanized Products

Contact a TFP distributor for details

Grooved piping products are also available galvanized







CPVC Pipe & Fittings

Contact a TFP distributor for details

- Pipe available in sizes 3/4" up to 3" in 10' and 15' lengths.
- Manufactured with Noveon's BlazeMaster compound.
- Fittings available in a wide range of designs and sizes 3/4" up to 3".



CPVC PIPE & FITTINGS

Back-to-Back Fitting

Contact a TFP distributor for details

- Included in the TFP line of BLAZEMASTER® CPVC products
- Allows two sidewall sprinklers to be piped into one fitting
- Ideal when the CPVC piping is located in a 3-1/2" (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

 Specially designed and dimensioned to enable the sidewall sprinklers to be recessed with 1/2" or 5/8" sheet-rock wall covering



CPVC to COPPER Fitting

Contact a TFP distributor for details

- Available sizes: 3/4" 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





CPVC Hangers & Supplies

Tech Data 19-2.0

- "No Block Hanger" is a two hole strap that eliminates blocking to the beam when hanging CPVC pipe
- Positions the face of the pipe 1 1/2" off the face of the joist
- Headset hanger is designed to hang CPVC pipe and for the proper placement of the sprinkler head before the ceiling is installed
- Provides vertical restraint, eliminating need for additional hangers
- BLAZEMASTER Caulk and Walk® Firestop
- One-Step CPVC Cement specifically formulated for use with BlazeMaster pipe and fittings



VSR Waterflow Alarm Switch with Retard

Flow & Pressure Switch

Contact a TFP distributor for details

- Available sizes:2" through 8" (15 200 mm)
- Vane type waterflow switch for use on wet sprinkler systems
- Actuated with a minimum flow of 10 gallons per minute
- Flow condition must exist for the period of time necessary to overcome the selected retard period
- Retard time is an adjustable delay feature and can be set from 0 to 90 seconds



ELECTRICAL

VSR Waterflow Alarm Switch for Small Pipe Flow & Pressure Switch

Contact a TFP distributor for details

- Available pipe sizes:
 1", 1-1/4", 1-1/2" or 2"
- Vane type waterflow switch for use on wet sprinkler systems
- May also be used as a sectional waterflow detector on large systems
- Installs directly into a tee fitting



Model PS40/PS10 High/Low Pressure Switch Flow & Pressure Switch

Contact a TFP distributor for details

- 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



Ball valve with Supervisory Switch

Tamper & Alarm Switch

Contact a TFP distributor for details

- Utilizes a 1/2" ball valve in conjunction with a switch assembly
- Switch assembly enclosed in a tamper resistant NEMA 4 (water resistant) enclosure



PCVS Control Valve Supervisory Switch

Tamper & Alarm Switch

Contact a TFP distributor for details

 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 TFP2180

- 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



ELECTRICAL

OSYSU

Tamper & Alarm Switch

Contact a TFP distributor for details

- 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" to 12"
- Also, mounts on some valves as small as 1/2"



Zonecheck®

Flow Switch Tester

Contact a TFP distributor for details

- Complies with NFPA® 25
 Quarterly Switch Test Requirements
- Testing Time Reduced
- Save Up to 400 Gallons Per Switch Annually
- No Inspectors Test Valve Opened
- Will Not Activate Fire Pump
- Simple Key-Switch Operation
- Multiple Zone Key-Switches Can be Operated From One Master



RP-1 Releasing Panel

Contact a TFP distributor for details

- Provide 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

- Series 100RC is single-zone fire control panel
- Can be used in single zone, cross zone, sequential or cross/sequential electric deduction systems
- Has programming capability
- Listings and Approvals: UL and FM



Tank Mounted Air Compressor

For Dry Pipe Sprinkler Systems

Contact a TFP distributor for details

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



ELECTRICAL

Base Mounted Air Compressor

For Dry Pipe Sprinkler Systems

Contact a TFP distributor for details

- 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



Riser Mounted Air Compressor

Fully Automatic

Contact a TFP distributor for details

- 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



Model G16AC812

Automatic Supervisory Air Supply

Tech Data TD126

- 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
- Listings and Approvals:
 UL



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