

## Model TY7258 — 16.8 K-factor Standard Response Sprinklers Pendent and Recessed Pendent — Specific Use

### General Description

The TYCO 16.8 K-factor Model TY7258 Pendent and Recessed Pendent Sprinkler is an automatic, standard response sprinkler intended for a specific end use application.

The Tyco Model TY7258 Pendent and Recessed Pendent Sprinkler has been subjected to full-scale fire testing at UL LLC using test parameters specified by TYCO that are considered representative of the specific end use. The fire test performance results of the large scale testing have been verified by UL. Details of the tests performed and results obtained may be found in UL Test Report 'Report of a Special Services Investigation Involving K16.8 gpm/(psi)<sup>1/2</sup> Upright and Pendent Sprinkler Protection of a Shelf Display and Rack Storage Arrangement of Cartoned Group A Plastic' (Report Number NC27954).

For further details, contact the Technical Services Department.

#### NOTICE

*The Model TY7258 Pendent Sprinkler described herein must be installed and maintained in compliance with this document, as well as with the applicable standards of the National Fire Protection Association, in addition to the standards of any other authorities having jurisdiction. Failure to do so may impair the performance of these devices.*

*The owner is responsible for maintaining their fire protection system*

#### IMPORTANT

*Always refer to Technical Data Sheet TFP700 for the "INSTALLER WARNING" that provides cautions with respect to handling and installation of sprinkler systems and components. Improper handling and installation can permanently damage a sprinkler system or its components and cause the sprinkler to fail to operate in a fire situation or cause it to operate prematurely.*

and devices in proper operating condition. Contact the installing contractor or product manufacturer with any questions.

### Sprinkler Identification Number (SIN)

TY7258

### Technical Data

#### Approvals



#### Maximum Working Pressure

175 psi (12,1 bar)

#### Pipe Thread Connection

3/4 inch NPT

#### Minimum Spacing

7 ft (2,13 m)

#### Recessed Installation

Maximum 1/2 in. (12,7 mm) Recess

#### Discharge Coefficient

K=16.8 gpm/psi<sup>1/2</sup> (241,9 lpm/bar<sup>1/2</sup>)

#### Temperature Ratings

155°F (68°C), 200°F (93°C)

#### Finish

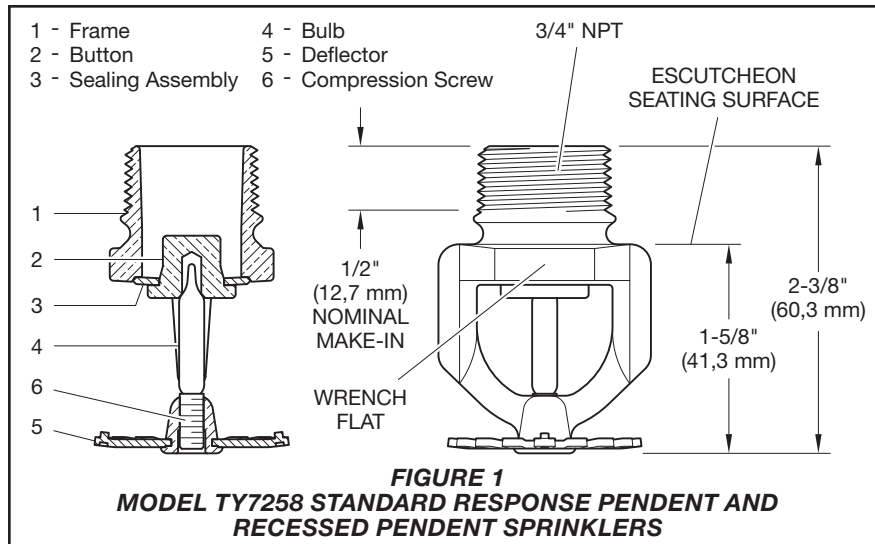
Sprinkler: Natural Brass, Signal White, Bright Chrome

Separately Ordered Escutcheon: Brass Plated, Signal White, Chrome Plated

#### Physical Characteristics

Frame .....	Brass
Deflector .....	Bronze
Compression Screw .....	Brass
Bulb (5 mm) .....	Glass
Button .....	Brass
Sealing Assembly ..	Beryllium Nickel w/TEFLON





## Operation

When the glass bulb reaches its rated temperature of 155°F (68°C) or 200°F (93°C), the glass bulb bursts allowing the sprinkler to activate and flow water.

## Installation

Install the TYCO Model TY7258 Pendent Sprinkler in accordance with this section.

### General Instructions

Do not install any bulb type sprinkler if the bulb is cracked or there is a loss of liquid from the bulb. With the sprinkler held horizontal, a small air bubble should be present. For the Model TY7258 Sprinkler, the diameter of the air bubble is approximately 1/16 inch (7,0 mm).

A leak tight 3/4 inch NPT sprinkler joint should be obtained with a torque of 10 to 20 ft.-lbs. (13,4 to 26,8 Nm). Higher levels of torque can distort the sprinkler inlet with consequent leakage or impairment of the sprinkler.

### Model TY7258 Pendent Sprinkler

The Model TY7258 Pendent Sprinklers must be installed in accordance with the following instructions:

**Step 1.** Apply pipe-thread sealant to sprinkler threads.

**Step 2.** Hand-tighten the sprinkler into the sprinkler fitting. Do not apply force to the glass bulb, grasp only by wrench flats while hand-tightening.

**Step 3.** Wrench tighten the Model TY7258 Sprinkler using only the W-Type 8 Sprinkler Wrench (Ref. Figure 2) and by fully engaging (seating) the wrench on the sprinkler wrench flats.

### Model TY7258 Recessed Pendent Sprinkler with Style 30 Escutcheon

The Model TY7258 Recessed Pendent Sprinklers must be installed in accordance with the following instructions.

**Step 1.** After installing the Style 30 Escutcheon Mounting Plate over the sprinkler threads, and with pipe thread sealant applied to the pipe threads, hand tighten the sprinkler into the sprinkler fitting.

**Step 2.** Tighten the sprinkler into the sprinkler fitting using only the W-Type 38 Sprinkler Wrench (Ref. Figure 3). With reference to Figure 4, apply the W-Type 38 Recessed Sprinkler Wrench to the sprinkler wrench flats.

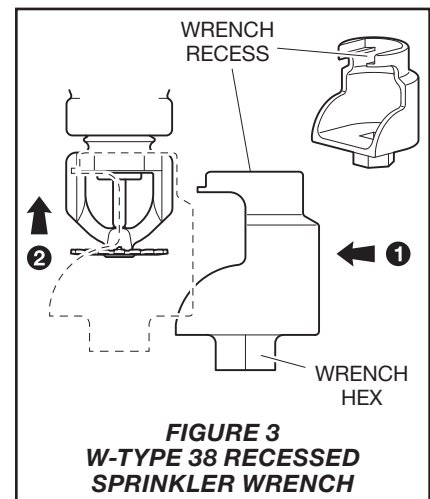
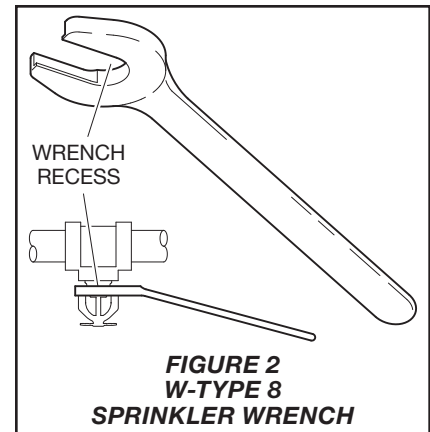
**Step 3.** After the ceiling is installed, slide the Style 30 Escutcheon Closure over the Model TY7258 Sprinkler and push the closure over the mounting plate until its flange comes in contact with the ceiling.

### Model TY7258 Pendent Sprinkler with Style 65 Escutcheon

The pipe connected to the sprinkler fitting must be cut to locate the escutcheon plate seating surface at the proper nominal distance in front of the wall or below the ceiling. Manufacturing variations in the take-out of the fittings as well as the make-in of the sprinklers (as permitted by ANSI B1.20.1) may require that trial cuts of the connecting pipe be made.

**Step 1.** After installation of the Style 65 Escutcheon Plate over the sprinkler threads, and with pipe thread sealant applied to the pipe threads, hand tighten the sprinkler into the sprinkler fitting.

**Step 2.** Wrench tighten the sprinkler into the sprinkler fitting using only the W-Type 8 Sprinkler Wrench (Ref. Figure 2). With reference to Figure 5, apply



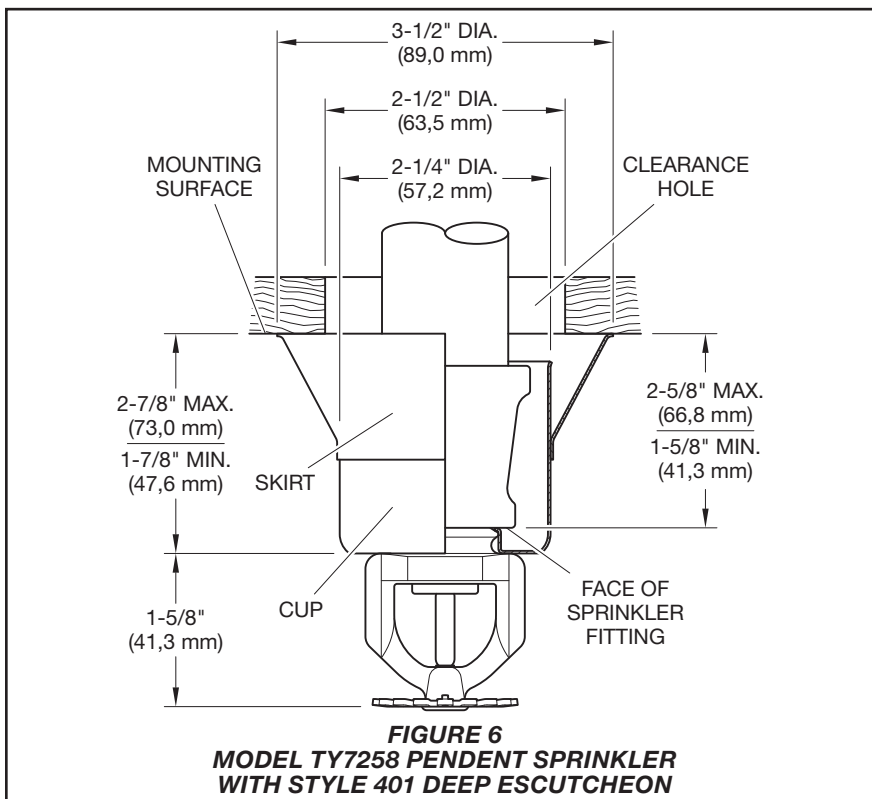
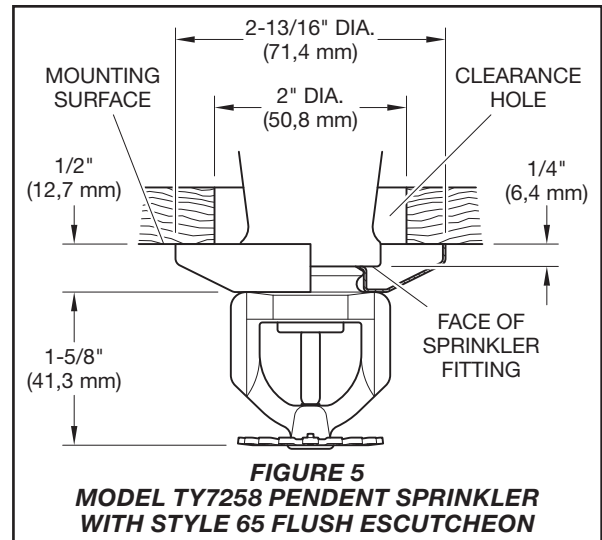
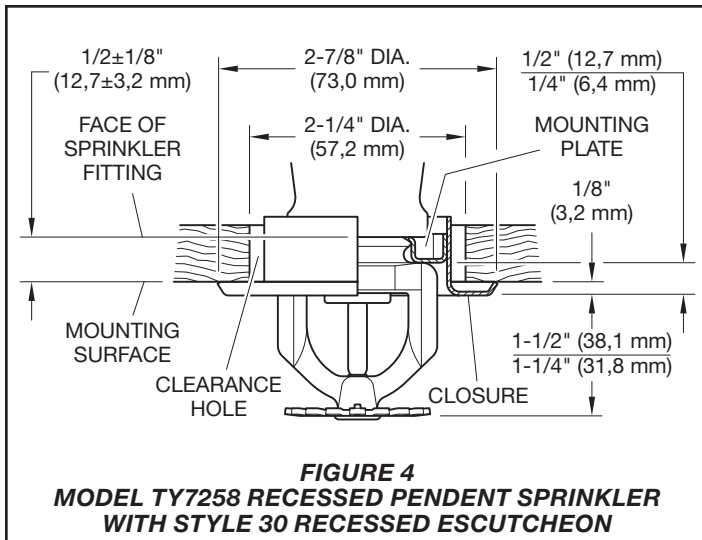
the W-Type 8 Sprinkler Wrench to the sprinkler wrench flats.

### Model TY7258 Pendent Sprinkler with Style 401 Escutcheon

**Step 1.** After installation of the Style 401 Escutcheon Cup over the sprinkler threads, and with pipe thread sealant applied to the pipe threads, hand tighten the sprinkler into the sprinkler fitting.

**Step 2.** Wrench tighten the sprinkler into the sprinkler fitting using only the W-Type 8 Sprinkler Wrench (Ref. Figure 2). With reference to Figure 6, apply the W-Type 8 Sprinkler Wrench to the sprinkler wrench flats.

**Step 3.** After the ceiling is installed, align the detents in the escutcheon skirt over those in the cup and then slide the skirt over the cup until it comes in contact with the mounting surface. Do not push the skirt such that it lifts a ceiling tile out of its normal position. Holding the skirt in contact with the mounting surface, rotate approximately 1/8-turn relative to the cup, creating a friction fit between skirt detents and cup surface to hold the Style 401 Escutcheon firmly together.



## Care and Maintenance

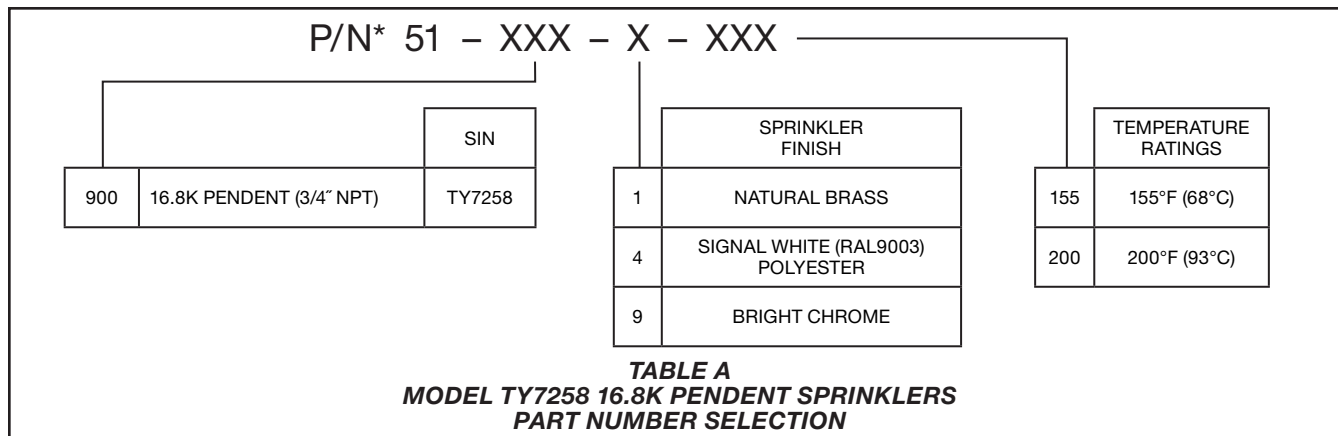
The TYCO Model TY7258 Pendent Sprinkler must be maintained and serviced in accordance with this section.

Before closing a fire protection system main control valve for maintenance work on the fire protection system that it controls, obtain permission to shut down the affected fire protection system from the proper authorities and notify all personnel who may be affected by this decision.

Inspection, testing, and maintenance must be performed as indicated below and in accordance with the local requirements and/or national codes. Any impairment must be immediately corrected.

The owner is responsible for the inspection, testing, and maintenance of their fire protection system and devices in compliance with this document, as well as with the applicable standards of any authorities having jurisdiction. Contact the installing contractor or product manufacturer regarding any questions.

Automatic sprinkler systems are recommended to be inspected, tested, and maintained by a qualified Inspection Service in accordance with local requirements and/or national codes.



## Limited Warranty

For warranty terms and conditions, visit [www.tyco-fire.com](http://www.tyco-fire.com).

## Ordering Procedure

When placing an order, indicate the full product description and Part Number (P/N).

### Sprinkler Assembly

Specify: Model TY7258 Pendent Sprinkler, SIN TY7258, (specify temperature rating), with (specify) finish, P/N (specify from Table A)

### Separately Ordered Style 30 Recessed Escutcheon

Specify: Style 30 Recessed Escutcheon, 3/4" NPT, 1/2" total adjustment, (specify finish, P/N (specify):

Brass Plated. . . . . 56-705-2-011  
 Signal White (RAL9003). . . . . 56-705-4-011  
 Chrome Plated. . . . . 56-705-9-011

### Separately Ordered Style 65 One-Piece Flush Escutcheon

Specify: Style 65 One-Piece Flush Escutcheon, 3/4" NPT, (specify finish), P/N (specify):

Chrome Plated. . . . . 1152  
 Signal White (RAL9003). . . . . 1175  
 Brass Plated. . . . . 1184

### Separately Ordered Style 401 Two-Piece Deep Escutcheon

The Style 401 Two-Piece Deep Escutcheon is comprised of separately ordered Cup and Skirt components.

Specify: Style 401 Two-Piece Deep Escutcheon Cup, 3/4" NPT (specify finish) 1/2" total adjustment, (specify finish), P/N (specify):

Chrome Plated. . . . . 1193  
 Signal White (RAL9003). . . . . 1197  
 Brass Plated. . . . . 1195

Specify: Style 401 Two-Piece Deep Escutcheon Skirt (specify finish), P/N (specify):

Chrome Plated. . . . . 1198  
 Signal White (RAL9003). . . . . 1200  
 Brass . . . . . 1199

### Sprinkler Wrenches

Specify: W Type 8 Sprinkler Wrench, P/N 56-892-1-001

Specify: W Type 38 Sprinkler Wrench, P/N 56-100-1-607