

PRODUCT DESCRIPTION

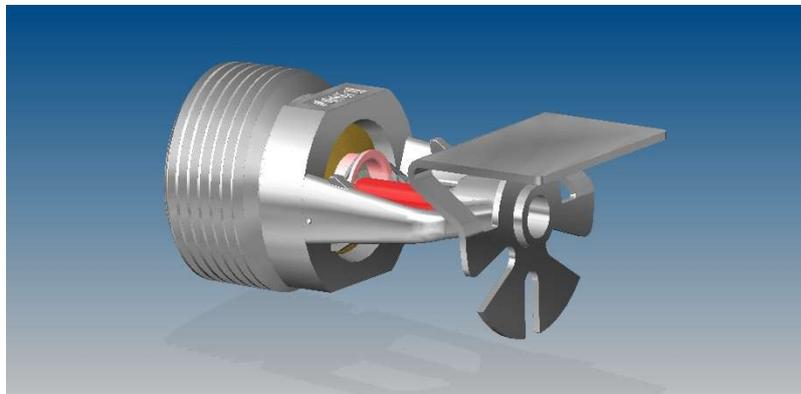
The Model A PS217 · PS227 ¾” orifice, standard horizontal sidewall sprinkler is designed for standard or recessed installation. The design provides a crescent-shaped water discharge pattern for installation along a wall or under a beam or ceiling. The design incorporates state-of-the-art, heat responsive, frangible glass bulb design (standard or quick response) for prompt, precise operation. The die cast frame is more streamlined and attractive than traditional sand cast frames. It is cast with a hex-shaped wrench boss to allow easy tightening from many angles, reducing assembly effort. This sprinkler is available in various temperature ratings (see chart on page 2) and finishes to meet many design requirements. The recessed pendent should be utilized with a Model A recessed escutcheon which provides up ¾” of adjustments.

Sprinkler Operation

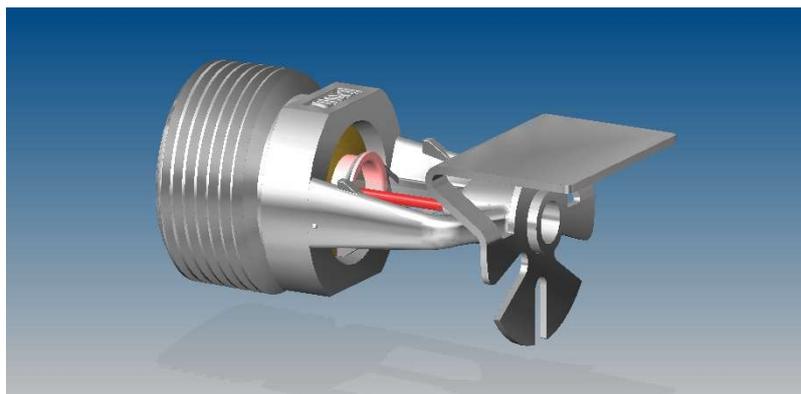
The operating mechanism is a frangible glass bulb which contains a heat responsive liquid. During a fire, the ambient temperature rises causing the liquid in the bulb to expand. When the ambient temperature reaches the rated temperature of the sprinkler, the bulb shatters. As a result the waterway is cleared of all sealing parts and water is discharged towards the deflector. The deflector is designed to distribute the water in a pattern that is most effective in controlling the fire.

Maximum Coverage

Standard spray coverage is up to: Light Hazard = 196 square feet (18.2 m²); Ordinary Hazard = 100 square feet (9.3 m²) per NFPA 13.



PS217 Standard Horizontal Sidewall



PS227 Recessed Horizontal Sidewall

TECHNICAL SPECIFICATION

SIN : Standard PS217(bulb 5mm),Quick Response PS227(bulb 3mm)

Style : Horizontal Sidewall

K-Factor : 8.0Imp.(114S.I)

Response Time Index(RTI) : Standard 90 , Quick Response 33

Nominal Thread Size : 3/4"NPT(20mm)

Max. Working Pressure : 175PSI(1200kPa)

Factory Hydrostatic Test : 100%@500PSI(3450 kPa)

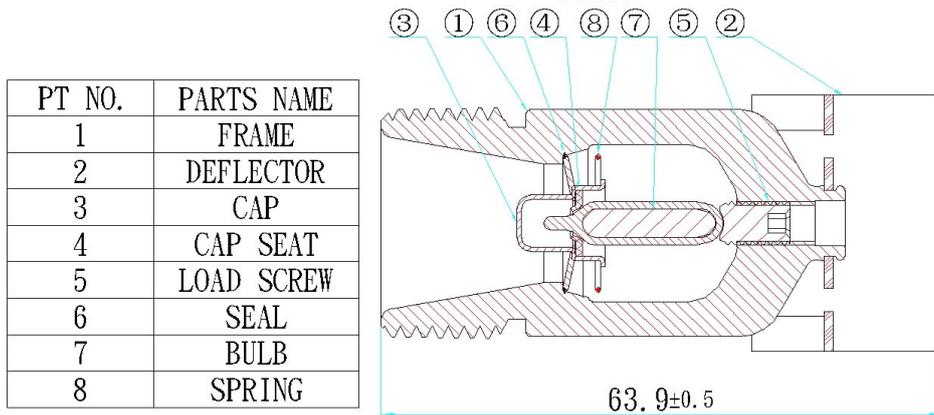
Min. Operation Pressure : 7 PSI(48 kPa)

RATINGS

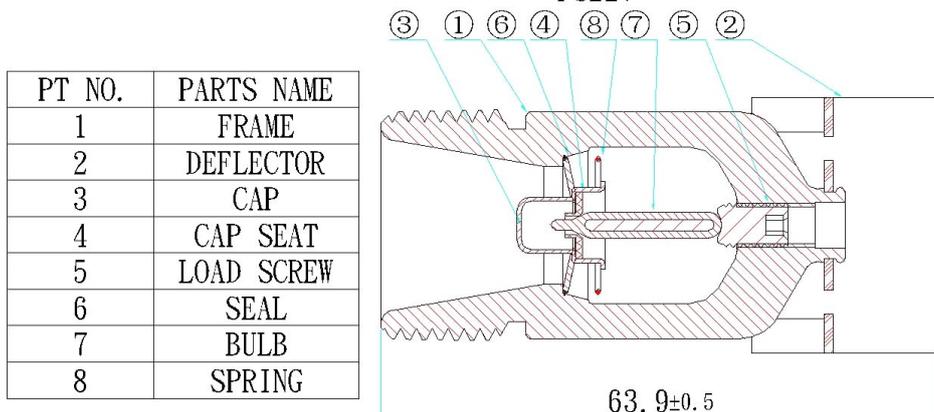
| SPRINKLER TEMPERATURE CLASSIFICATION | NOMINAL SPRINKLER TEMPERATURE RATING | N.F.P.A MAXIMUM AMBIENT (CEILING) TEMP.(ALLOWED) | GLASS BULB COLOR |
|--------------------------------------|--------------------------------------|--|------------------|
| Ordinary | 135°F/57°C | 100°F/38°C | Orange |
| Ordinary | 155°F/68°C | 100°F/38°C | Red |
| Intermediate | 175°F/79°C | 150°F/65°C | Yellow |
| Intermediate | 200°F/93°C | 150°F/65°C | Green |

DIMENSIONS

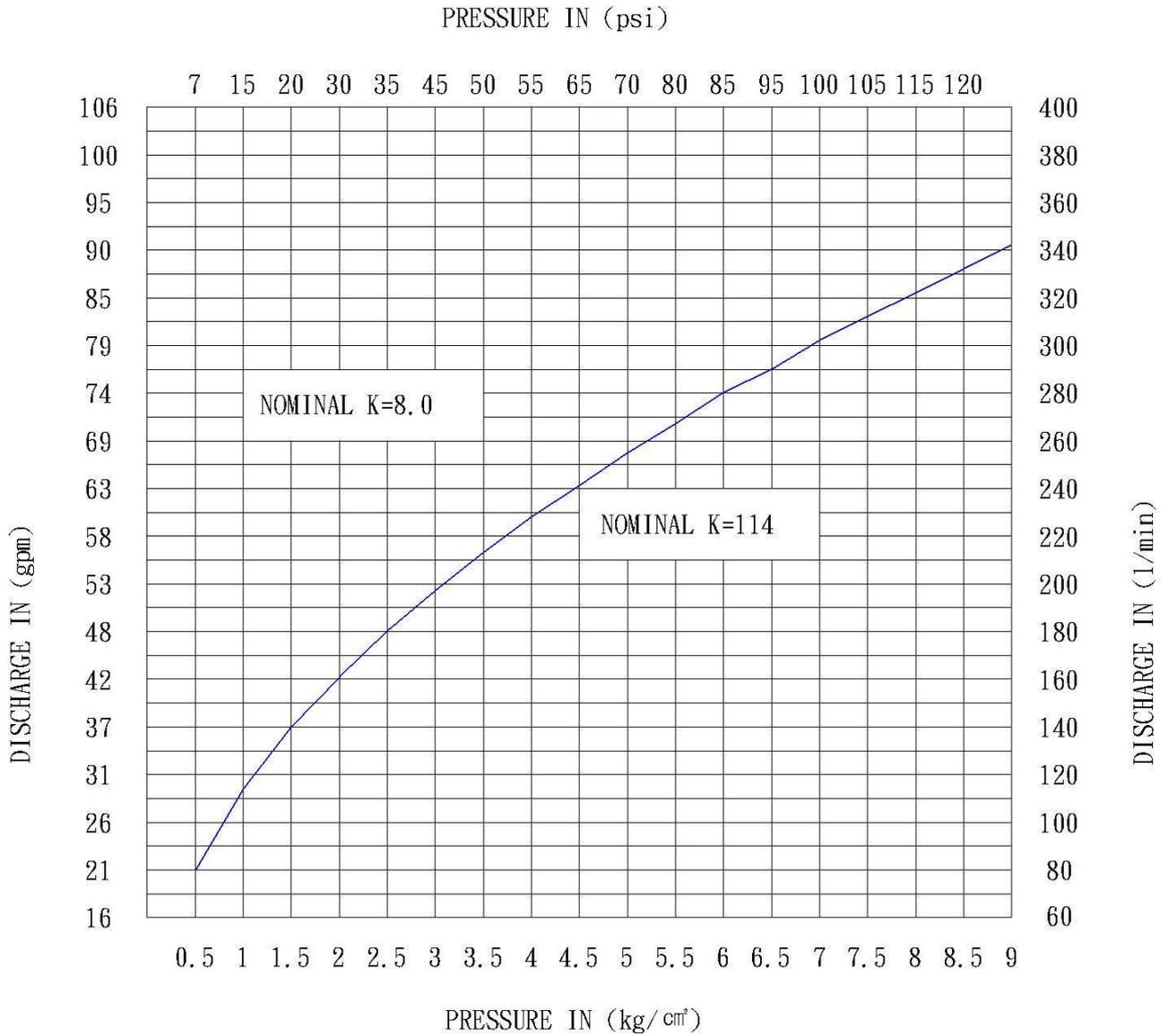
FRAME AND DEFLECTOR FINISH PENDANT BRASS, CHROME
PS217



PS227

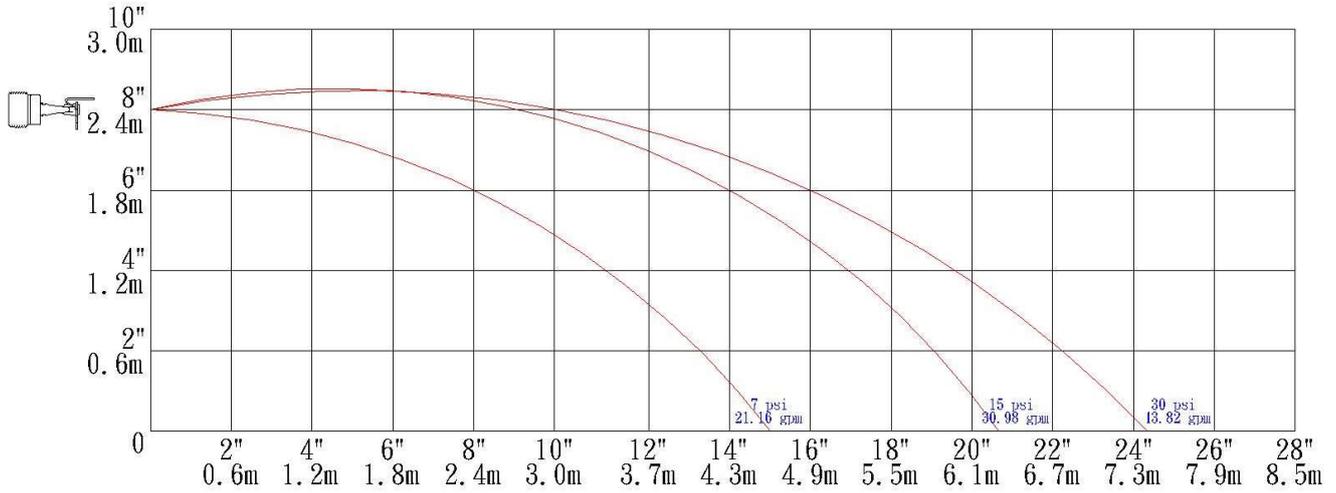


DISCHARGE CURVE

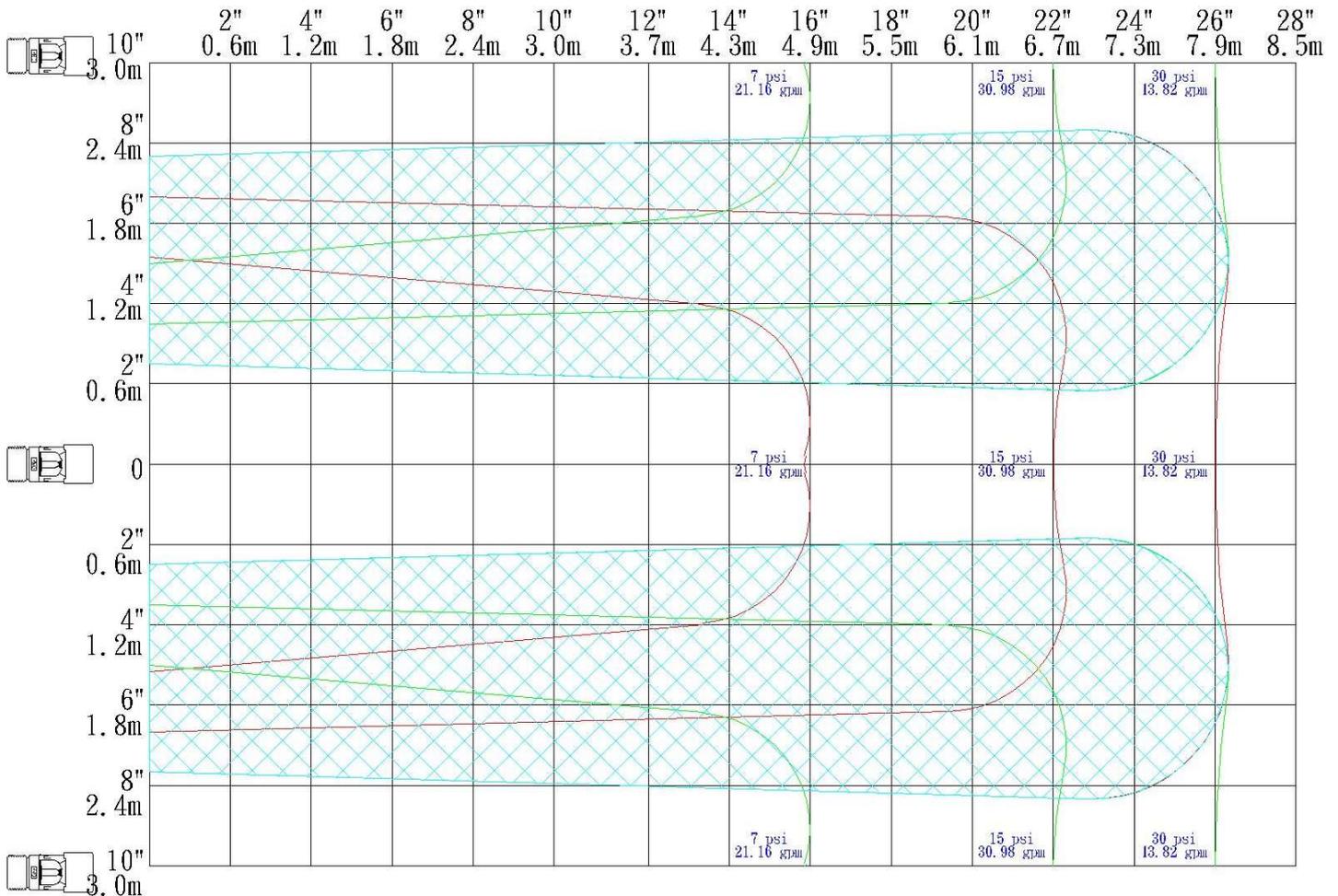


DISTRIBUTION PATTERNS

K8.0 STANDARD HORIZONTAL SIDEWALL AND RECESSED HORIZONTAL SIDEWALL DISTRIBUTION PATTERNS - TRAJECTORY



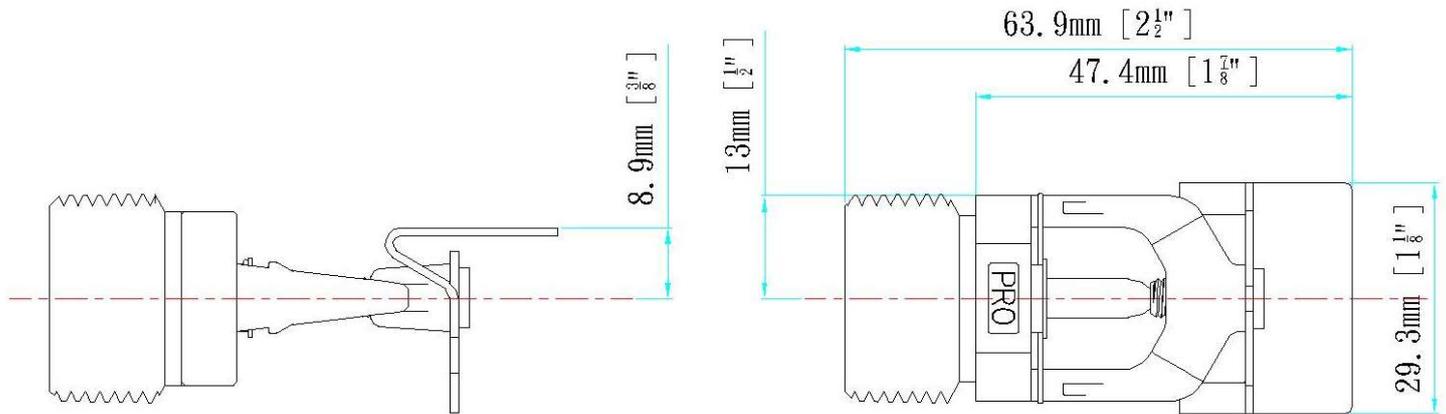
K8.0 STANDARD HORIZONTAL SIDEWALL DISTRIBUTION PATTERNS – PLAN VIEW



Installation

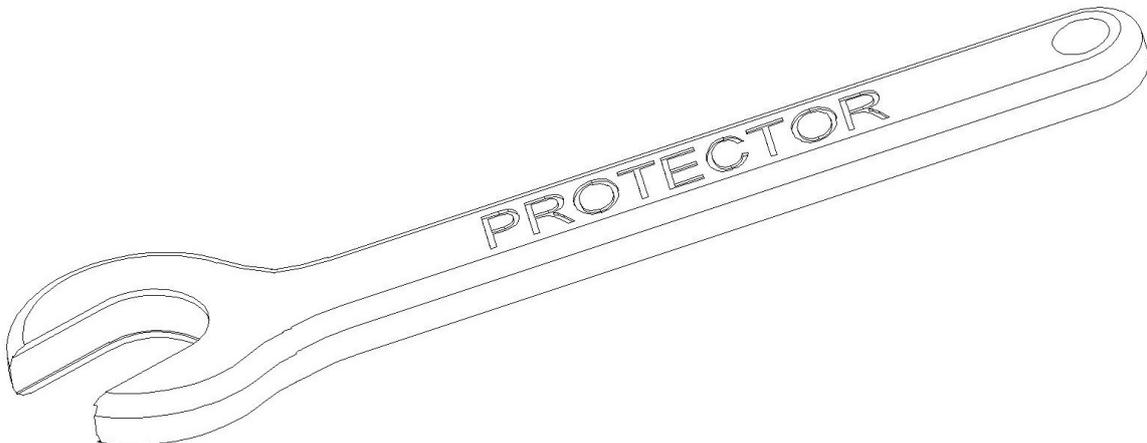
All Protector Sprinklers must be installed according to NFPA 13 Standards. Deviations from these requirements and standards or any alteration to the sprinkler itself will void any warranty made by Protector Safety Company. In addition, installation must also must local government provisions, codes and standards as applicable. The system piping must be properly sized to insure the minimum required flow rate at the sprinkler. Check for the proper model, style, orifice size and temperature rating prior to installation. Install sprinklers after the piping is in place to avoid mechanical damage, replace any damaged units. Wet pipe systems must be protected from freezing. Upon completion of the installation, the system must tested per recognized standards. In the event of a thread task, remove the unit, apply new pipe joint compound or tape, and reinstall.

DIMENSIONS

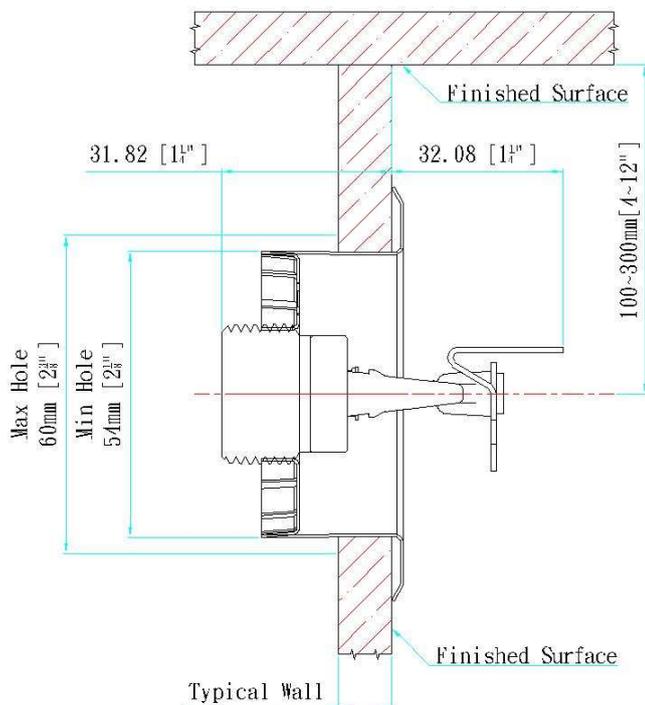


Tool Description

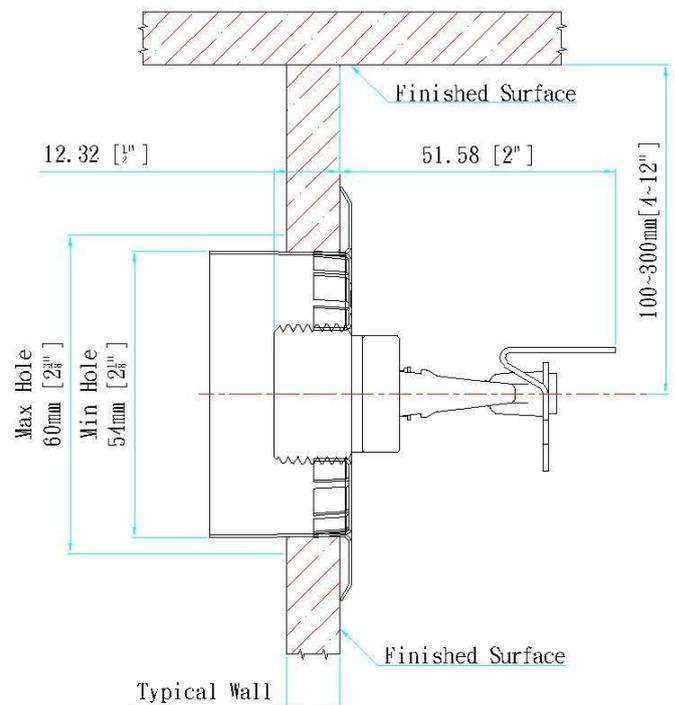
All protector sprinklers must be installed according to the Sprinkler Wrench is a tool specifically designed for installing Protector sprinklers. These special wrenches must be used to provide the proper leverage when tightening the sprinkler and to minimize slippage during installation. Any other wrench may damage the sprinkler. The following wrenches are available for installing Protector sprinklers.



Protector Sprinkler Wrench



MAXIMUM RECESS



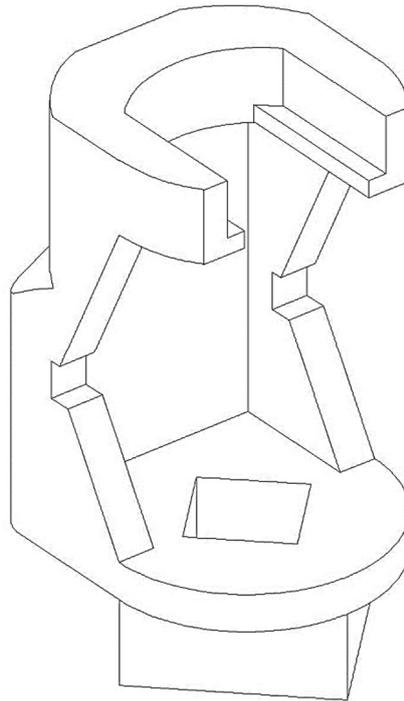
MAXIMUM EXTENSION

Escutcheon installation

Use Protector escutcheon plate to ensure proper sprinkler distribution and coverage. To install the escutcheon plate on recessed sprinklers, align with it and push or thread over the sprinkler body into the upper support piece, until the outer edge of the escutcheon meets the mounting surface.

Installation Sequence

- Step 1. The unit must be installed in the upright position for the upright Sprinkler and the Recessed upright Sprinkler. And in the pendent position for the pendent Sprinkler and the Recessed pendent Sprinkler.
- Step 2. Use only a non-hardening pipe joint compound or tape seal. Apply only to the male-threads.
- Step 3. Hand tighten the sprinkler into fitting.
- Step 4. For upright and pendent Sprinklers, use a standard wrench. Tighten the unit into the fitting. A lead-tight joint requires only 150 to 200 kg-cm(14.7 to 19.6 N-m)of torque. Once torque level reach over 300 kg-cm(29.4 N-m) it may distort the orifice seal, resulting in leakage. For exposed piping systems, the sprinkler should be oriented so the frame are parallel with the branch line pipe.



Protector Sprinkler Key

Caution

Do not over-tighten or under-tighten the sprinkler to compensate for inaccurate escutcheon plate adjustment. Protection clips are used to protect its bulb. Please have clip on at all times during transportation.

Maintenance

Sprinklers must never be altered after manufacture. Any alteration such as painting and coating will directly harm the sprinkler and cause malfunction. Sprinkler in contact with corrosive products should be replaced if they cannot be cleaned completely. Visual inspection are recommended after installation. After installation, an annual close-up inspection will suffice. Inspection and maintenance of fire protection system is the responsibility of the owner. It is recommended that automatic sprinkler system be inspected and tested according to local and/or national regulations.