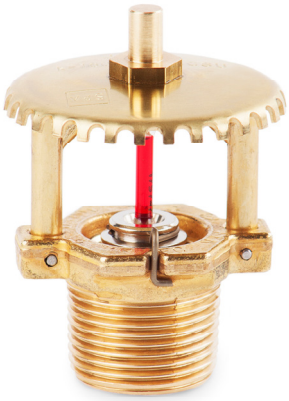
SPRINKLER HEAD

ELO- SPRAY-SPRINKLER

MODEL: SD-5160, SD-5165



DESCRIPTION

The shield ELO - Spray Sprinkler DN20 - K160 Type: SD-ECSU Model SD-5160 & SD-5165, Standard orifice ELO upright type design incorporate state-of-the-art, heat responsive, frangible glass bulb design for prompt, precise operation. The frame is more streamlined, wide coverage and attractive than traditional one. All sprinklers are manufactured to ensure long life and safe operation.

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.

WARNINGS

The SHIELD sprinklers must be installed and maintained in compliance with this document. De-pressurize and drain the piping system before attempting to install, remove, or adjust any Sprinklers. Failure to do so may impair the performance of these sprinklers. The owner is responsible for maintaining the fire protection system and devices in operation.

Sprinklers containing in the original packing have been manufactured and tested according the requirements of the sprinkler authorities. Any modification to the sprinkler in the form of painting, warp of deflector, will seriously affect the operation. This will lead to withdraw of insurances approval and any guarantee to manufacturer.

Sprinklers (brass and chrome plated) may only install in normal atmosphere. For areas with aggressive, corrosive atmosphere ore in case of leakage current, use sprinklers with special coating or stainless steel sprinklers.

INSTALLATION

All SHIELD Sprinklers must be installed according to recognized Standards. Deviations from these requirements and standards or any alteration to the sprinkler itself will void any warranty made by manufacturer. In addition, installation must also meet 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 be tested per recognized standards .

TECHNICAL SPECIFICATION

Type	SD-ECSU
Sprinkler Identification No.	SD-5160 – 68°
	SD-5165 – 79°
Spray Characteristics	ELO- Spray-Sprinkler SU, Upright
Max. Working Pressure	12.5 Bar
Min. Working Pressure	0.35 bar
Temperature Range	68°C, 79°C
K- Factor	160
Response Time Index (RTI)	Standard Response 055
Nominal Thread Size	¾”NPT (20mm)
Material	Brass
Finish	Raw/Chrome Plated/Colored

TOOL DESCRIPTION

All SHIELD sprinklers must be installed according to the following. The Sprinkler Wrench’s is a tool specifically designed for installing SHIELD 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

INSTALLATION SEQUENCE

1. The unit must be installed in the upright position.
2. Use only a non-hardening pipe joint compound or tape seal. Apply only to the male threads.
3. Hand tighten the sprinkler into fitting.

4. For ELO upright 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 Nm) of torque.. Once torque level reach over 300 kg.cm (29.4 Nm) it may distort the orifice seal, resulting in leakage. For exposed piping systems, the sprinkler should be oriented so the frame arms are parallel with the branch line pipe.

CAUTION

Do not over-tighten or under-tighten the sprinkler.

Protection clips are used to protect its bulb. Please have clip on at all times during transportation.

NEVER install a sprinkler that has had their packaging damaged.
NEVER install a sprinkler that has been dropped or has suffered any impact.
ALWAYS to align sprinklers turn clockwise only. Alignment on the opposite side can create leakage.

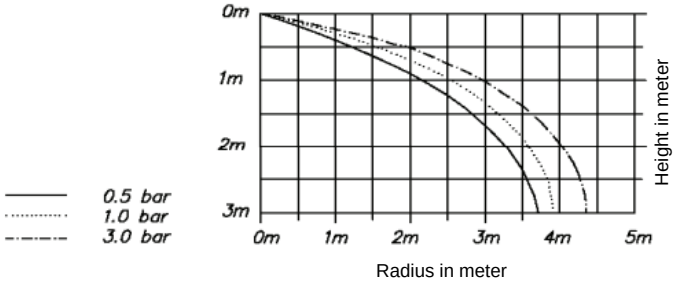
INSTALLATION INSTRUCTION

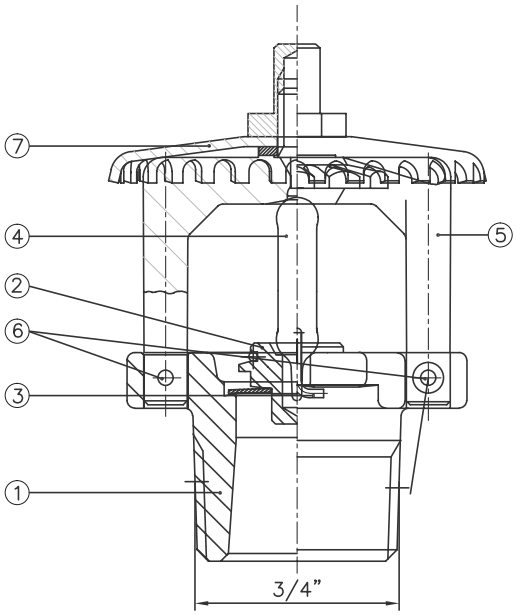
- Sprinkler may only installed by trained personal.
- Install sprinklers only with the special wrench foreseen for each sprinkler type.
- Install sprinklers only in fully installed and fixed pipe work.
- The threads (fitting / socket) must be clean, free of grease and burrs.

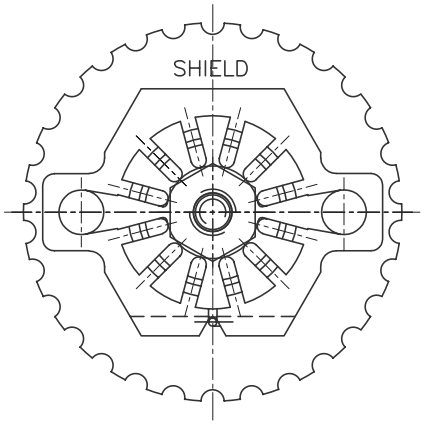
MAINTENANCE

Sprinklers must never be altered after manufacture. Any alteration such as painting and coating will directly harm the sprinkler and cause malfunctions. Sprinkler in contact with corrosive products should be replaced if they cannot be cleaned completely.

Visual inspections are recommended after installation. After installation, a close-up inspection annually 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.







PART LIST

1	Body
2	Holder
3	Ejector
4	Bulb
5	Frame
6	Frame Pin
7	Deflector