

Sprinkler Systems



PRODUCT DESCRIPTION

The Model SD2133 and SD2121 1/2" orifice, standard Drencher vertical sidewall sprinkler is designed for standard. 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 3/4" of adjustments. All Protector Sprinklers are manufactured using the time proven Belleville seal used exclusively by all major manufacturers to ensure long life and safe operation.



Standard Vertical Sidewall



Quick Response Vertical Sidewall

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 deflec-

tor 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 sq.m); Ordinary Hazard = 100 square feet(9,3 sq.m)per NFPA 13. see page 4 for distribution patterns.

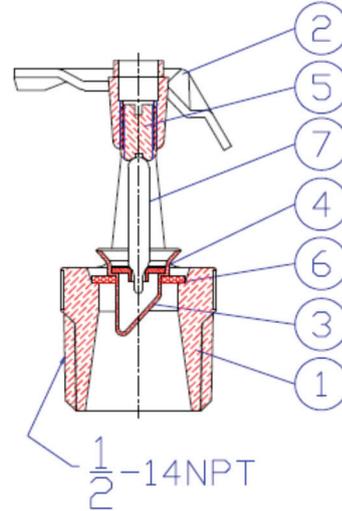
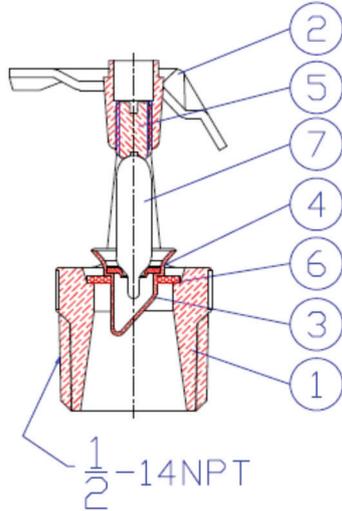
TECHNICAL SPECIFICATION

SIN	Standard SD2133 (bulb 5mm), Quick Response SD2121 (bulb 3mm)
Style	Vertical Sidewall
K-Factor	5.6Imp.(80S.l)
Response Time Index(RTI)	Standard 50, Quick Response 30
Norminal Thread Size	1/2"NPT(15mm)
Max. Working Pressure	175PSI(1200kPa)
Factory Hydrostatic Test	100%@500PSI(3450 kPa)
Min. Operation Pressure	7 PSI(48 kPa)

RATINGS

Sprinkler Temperature Classification	Norminal 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

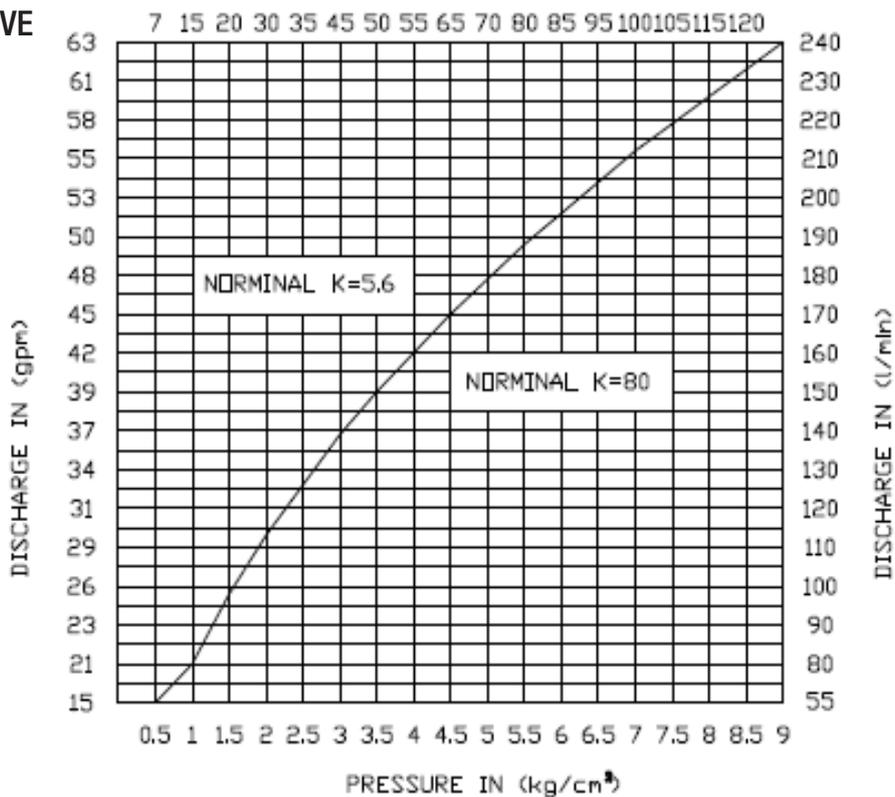


7	NORBULB N5
6	BERY. NICKEL SPRING TEFLON TAPE
5	ASTM C36000
4	ASTM S30400
3	ASTM C11000
2	ASTM C26800
1	ASTM C37700

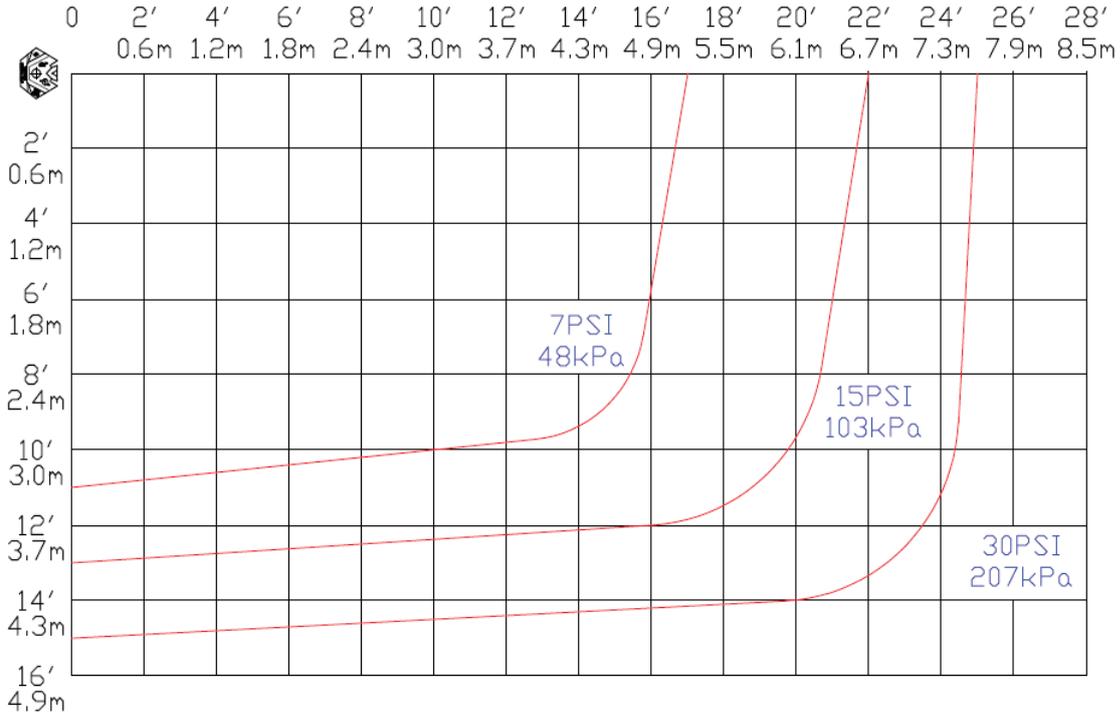
7	NORBULB N3
6	BERY. NICKEL SPRING TEFLON TAPE
5	ASTM C36000
4	ASTM S30400
3	ASTM C11000
2	ASTM C26800
1	ASTM C37700

PRESSURE IN (psi)

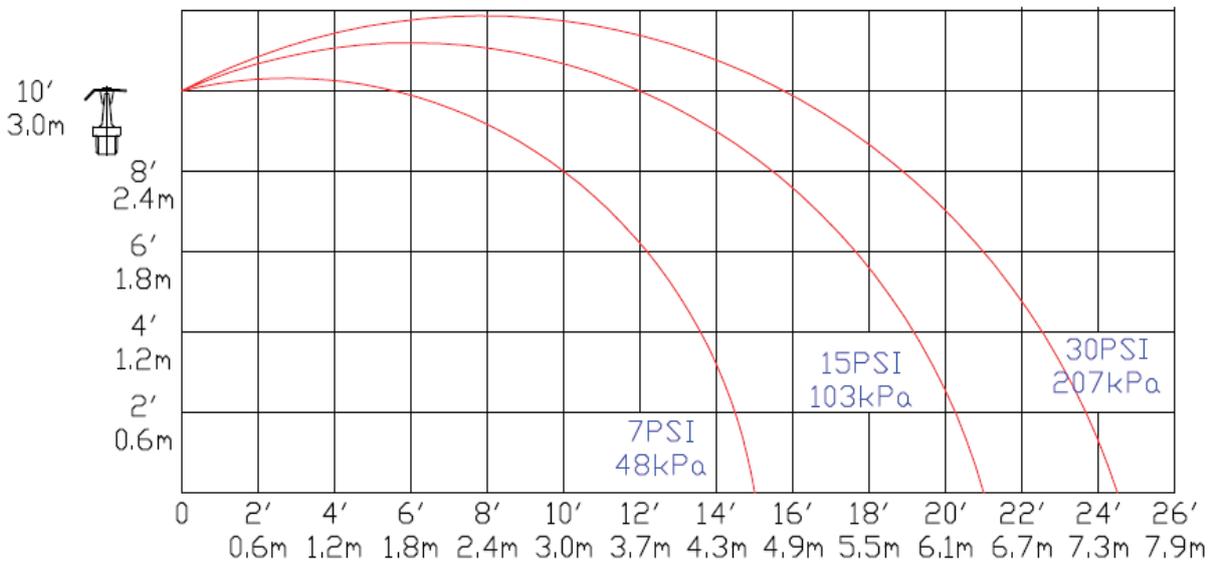
DISCHARGE CURVE



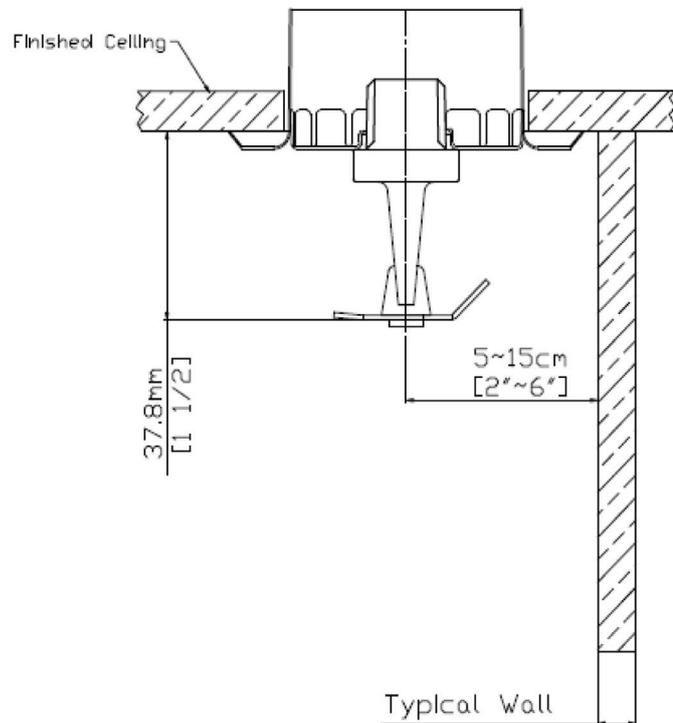
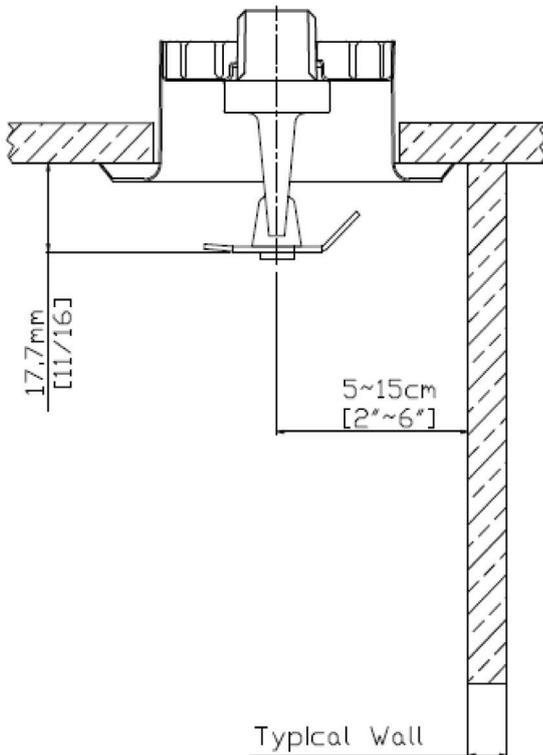
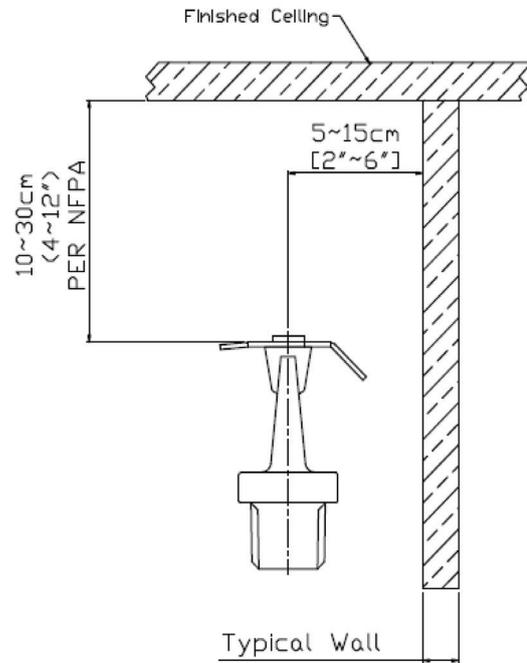
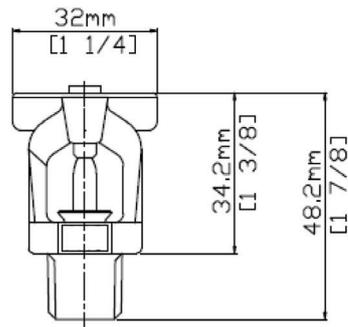
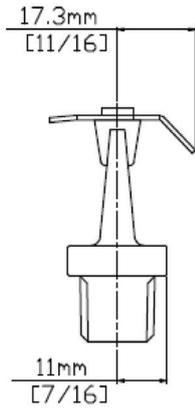
DISTRIBUTION PATTERNS



K5.6 STANDARD VERTICAL SIDEWALL
DISTRIBUTION PATTERNS – PLAN VIEW



DIMENSIONS



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We reserve the right to modify specifications without prior notice