

Reliable®

Model G Conventional Sprinklers

K Factor 4.10 (59.1), 5.62 (81.0), and 8.2 (118.2)

Features

- Standard response
- Conventional deflector
- Robust solder capsule thermal element
- Available in a wide variety of finishes

Product Description

Conventional (or “old-style” sprinklers) direct approximately 40% of their water discharge up against the ceiling and the remainder downward to the floor, and may be used in either the upright or pendent position.

Reliable Model G Conventional Sprinklers are standard-response fire sprinklers utilizing a solder capsule/strut and lever thermal element.

These sprinklers are available in 4.10 (59.1 metric), 5.62 (81.0 metric), and 8.2 (118.2 metric) K factor.

When used in the pendent position, sprinklers may be installed exposed or surface mounted using escutcheons such as the Reliable Models B, C, or HB (reference Technical Bulletin 204).

Table A provides a summary of the approvals and availability of specific Model G Series Conventional sprinkler configurations. Additional technical information for each sprinkler model is provided on the following pages.

Important! Reliable fire sprinklers must be handled, stored, and installed in accordance with the guidelines in Caution Sheet 310 and this bulletin. Failure to follow these instructions may result in unintended operation or nonoperation of the fire protection system.



Model G Conventional

Note: Not all versions of the sprinkler are shown.

Model G Series Conventional Sprinklers

Table A

Sprinkler Model	K-Factor gpm/psi ^{1/2} (lpm/bar ^{1/2})	Orientation	Response	Listings & Approvals	Max. Working Pressure psi (bar)	Sprinkler Identification Number (SIN)
G	4.10 (59.1)	Conventional	SR	Planiere Assemblée	175 psi (12 bar)	R1074
	5.62 (81.0)			LPCB, CE, Planiere Assemblée, UKCA		R1075
	8.2 (118.2)			LPCB, CE, Planiere Assemblée, UKCA		R1077

Technical Specifications

Style: Upright or Pendent
Threads: 3/8" BSPT
Nominal K-Factor: 4.10 (59.1 metric)
Max. Working Pressure: 175 psi (12 bar)

Material Specifications

Thermal Sensor: Solder Capsule
Sprinkler Frame: Leaded Red Brass Alloy
Cap: Brass Alloy with PTFE
Load Screw: Brass CDA Alloy
Deflector: Brass CDA Alloy

Sprinkler Finishes

(See Table B)

Sensitivity

Standard Response

Temperature Ratings

135°F (57°C)
 165°F (74°C)
 212°F (100°C)
 286°F (141°C)

Sprinkler Wrench

Model W2

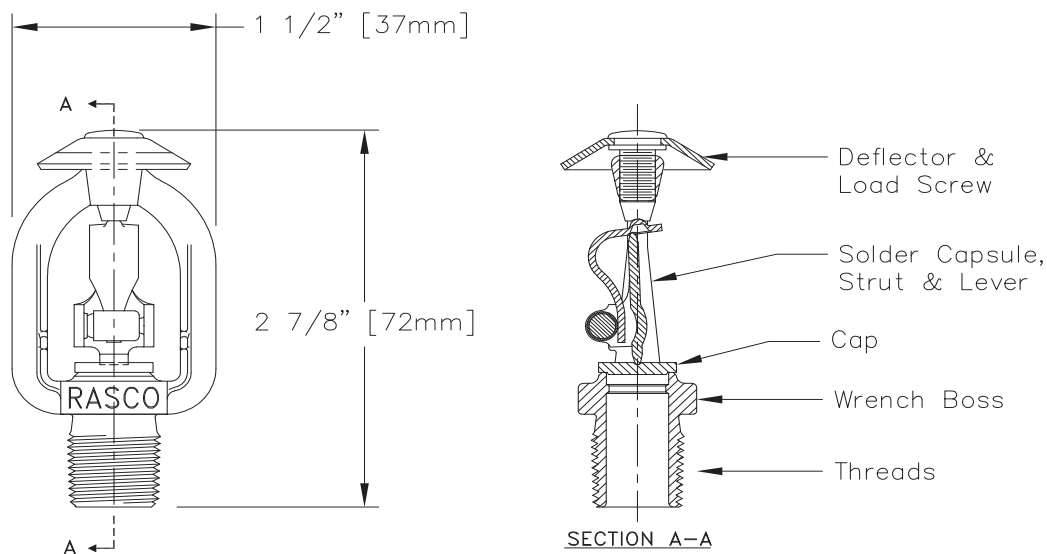
Listings and Approvals

Pleniere Assemblée



Model G (3/8") Conventional Sprinkler Components and Dimensions

Figure 1



Technical Specifications

Style: Upright or Pendent
Threads: 1/2" BSPT
Nominal K-Factor: 5.62 (81.0 metric)
Max. Working Pressure: 175 psi (12 bar)

Material Specifications

Thermal Sensor: Solder Capsule
Sprinkler Frame: Leaded Red Brass Alloy
Cap: Brass Alloy with PTFE
Load Screw: Brass CDA Alloy
Deflector: Brass CDA Alloy

Sprinkler Finishes

(See Table B)

Sensitivity

Quick Response

Temperature Ratings

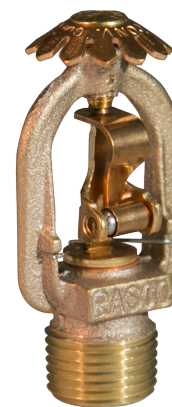
135°F (57°C)
 165°F (74°C)
 212°F (100°C)
 286°F (141°C)

Sprinkler Wrenches

Model W2

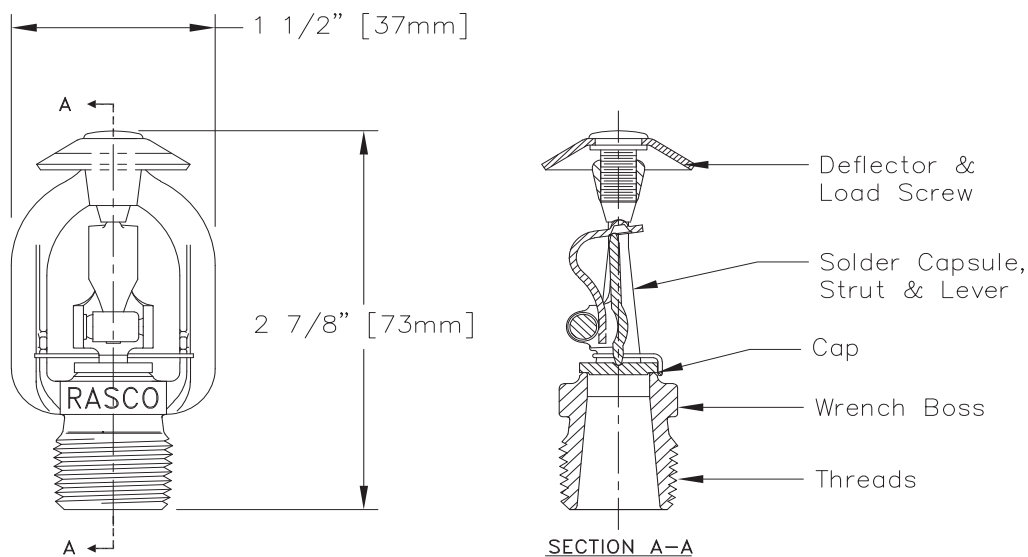
Listings and Approvals

LPCB
 Pleniere Assemblée
 CE (1438-CPR-0052)
 UKCA: 0832-UKCA-CPR-S5104



Model G (1/2") Conventional Sprinkler Components and Dimensions

Figure 2



Technical Specifications

Style: Upright or Pendent
Threads: 3/4" BSPT
Nominal K-Factor: 8.2 (118.2 metric)
Max. Working Pressure: 175 psi (12 bar)

Material Specifications

Thermal Sensor: Solder Capsule
Sprinkler Frame: Leaded Red Brass Alloy
Cap: Brass Alloy with PTFE
Load Screw: Brass CDA Alloy
Deflector: Brass CDA Alloy

Sprinkler Finishes
 (See Table B)

Sensitivity
 Standard Response

Temperature Ratings

135°F (57°C)
 165°F (74°C)
 212°F (100°C)
 286°F (141°C)

Sprinkler Wrenches
 Model W2

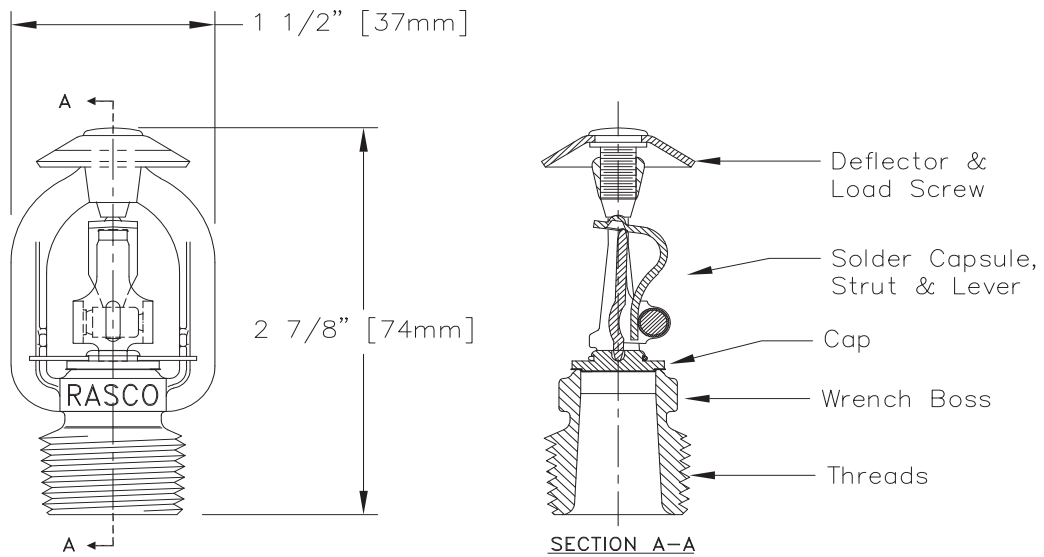
Listings and Approvals

LPCB
 Pleniere Assemblée
 CE (1438-CPR-0052)
 UKCA: 0832-UKCA-CPR-S5104



Model G (3/4") Conventional Sprinkler Components and Dimensions

Figure 3



Model W2 Wrench**Figure 5**

Installation

Model G series sprinklers must be installed with the Reliable Model W2 sprinkler installation wrench as identified in this Bulletin. Any other wrench may damage the sprinkler. The Model W2 wrench has two sets of jaws. Use the smallest set of jaws that fit on the wrench flats of the sprinkler. A leak tight sprinkler joint can be obtained with an appropriate thread sealant and a torque of 6 to 12 lb-ft (8 to 16 N·m) for 3/8" threads, 8 to 18 lb-ft (11 to 24 N·m) for 1/2" threads, and 14 to 20 lb-ft (19 to 27 N·m) for 3/4" threads. Do not tighten sprinklers over the maximum recommended installation torque. Exceeding the maximum recommended installation torque may cause leakage or impairment of the sprinkler.

Maintenance

Reliable Model G series sprinklers should be inspected and the sprinkler system maintained in accordance with NFPA 25, as well as the requirements of any Authorities Having Jurisdiction.

Prior to installation, sprinklers should remain in the original cartons and packaging until used. This will minimize the potential for damage to sprinklers that could cause improper operation or non-operation.

Do not clean sprinklers with soap and water, ammonia liquid or any other cleaning fluids. Remove dust by gentle vacuuming without touching the sprinkler.

Replace any sprinkler which has been painted (other than factory applied). A stock of spare sprinklers should be maintained to allow quick replacement of damaged or operated sprinklers. Failure to properly maintain sprinklers may result in inadvertent operation or non-operation during a fire event.

Sprinkler Finishes⁽¹⁾⁽²⁾**Table B**

Standard Finishes	Special Application Finishes
Bronze	Bright Brass ⁽³⁾
Chrome Plated	Lead Plated
White Polyester	Wax Coated ⁽⁴⁾
	Wax ⁽⁴⁾ over Lead

Notes:

1. Other finishes and colors are available on special order. Consult your Reliable sales representative for details.
2. Paint or any other coating applied over the factory finish will void all approvals and warranties.
3. For 212°F (100°C) maximum temperature rated sprinklers only.
4. Clear wax used on ordinary temperature rated sprinklers; brown wax used on intermediate temperature rated sprinklers. Brown wax may be used on high temperature rated sprinklers where the ambient temperature does not exceed 150°F (66°C).

Guarantee

For the Reliable Automatic Sprinkler Co., Inc. guarantee, terms, and conditions, visit www.reliablesprinkler.com.

Ordering Information

Specify the following when ordering:

Model

- G

Threads/K Factor

- 3/8" BSPT, 4.10 (59.1 metric)
- 1/2" BSPT, 5.62 (81.0 metric)
- 3/4" BSPT, 8.2 (118.2 metric)

Temperature Rating

- See Sprinkler Specification Page

Sprinkler Rating

- See Table B

Sprinkler Wrench

- Model W2