Features

- Standard Coverage, Concealed Pendent (K2.8, 4.2, 5.6, & 8.0 [40, 60, 80, & 115 metric])
- Flat concealed cover plate available in a variety of finishes.
- Available with Stainless Steel Clad cover plate (see Table I).
- 3/4-inch (19 mm) cover plate adjustment.
- Cover plate available with optional gasket.

Product Description

Model G5 series sprinklers are standard coverage, flat plate concealed sprinklers designed for installation in accordance with NFPA 13 and FM Global Property Loss Prevention Data Sheets. The sprinklers are offered with a standard Model G4/G5 cover plate, a Model G4/G5 cover plate with a Quick-response (QR) gasket, or a Model G4/G5 cover plate with a Standard-response (SR) gasket. Model G5 sprinklers must only be used with the Model G4/G5 cover plate listed or approved with the sprinkler. All Model G5 series sprinklers use a fusible-link operating element. Table A provides a summary of available Model G5 series sprinklers, along with Listing and Approval information for each sprinkler and cover plate combination.

Model G5 Series Sprinkler Summary

<table>
<thead>
<tr>
<th>Sprinkler Model</th>
<th>K-Factor gpm/psi[^12] (L/min/bar[^12])</th>
<th>Cover Plate Model</th>
<th>Listings and Approvals</th>
<th>Sensitivity</th>
<th>Max. Working Pressure psi (bar)</th>
<th>Sprinkler Identification Number (SIN)</th>
</tr>
</thead>
<tbody>
<tr>
<td>G5-28</td>
<td>2.8 (40)</td>
<td>G4/G5</td>
<td>cULus, FM</td>
<td>QR</td>
<td>175 (12)</td>
<td>RA3411</td>
</tr>
<tr>
<td></td>
<td></td>
<td>G4/G5 QR Gasket</td>
<td>cULus</td>
<td>QR</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>G4/G5 SR Gasket</td>
<td>cULus, FM</td>
<td>SR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G5-42</td>
<td>4.2 (60)</td>
<td>G5</td>
<td>cULus</td>
<td>QR</td>
<td>175 (12)</td>
<td>RA3413</td>
</tr>
<tr>
<td></td>
<td></td>
<td>G5 QR Gasket</td>
<td>cULus</td>
<td>QR</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>G5 SR Gasket</td>
<td>cULus</td>
<td>SR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G5-56</td>
<td>5.6 (80)</td>
<td>G5</td>
<td>cULus, FM, LPCB, VdS, CE</td>
<td>SR</td>
<td>175 (12)</td>
<td>RA3415</td>
</tr>
<tr>
<td></td>
<td></td>
<td>G4/G5 QR Gasket</td>
<td>cULus</td>
<td>QR</td>
<td>250 (17)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>G4/G5 SR Gasket</td>
<td>cULus</td>
<td>SR</td>
<td>250 (17)</td>
<td></td>
</tr>
<tr>
<td>G5-56 300</td>
<td>5.6 (80)</td>
<td>G5</td>
<td>cULus</td>
<td>QR</td>
<td>300 (21)</td>
<td>RA4014</td>
</tr>
<tr>
<td></td>
<td></td>
<td>G4/G5 QR Gasket</td>
<td>cULus</td>
<td>QR</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>G4/G5 SR Gasket</td>
<td>cULus</td>
<td>SR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G5-80</td>
<td>8.0 (115)</td>
<td>G5</td>
<td>cULus</td>
<td>QR</td>
<td>175 (12)</td>
<td>RA3412</td>
</tr>
<tr>
<td></td>
<td></td>
<td>G4/G5 QR Gasket</td>
<td>cULus</td>
<td>QR</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>G4/G5 SR Gasket</td>
<td>cULus</td>
<td>SR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G5-80F</td>
<td>8.0 (115)</td>
<td>G5</td>
<td>FM</td>
<td>SR</td>
<td>175 (12)</td>
<td>RA3417</td>
</tr>
<tr>
<td></td>
<td></td>
<td>G4/G5 SR Gasket</td>
<td>FM</td>
<td>SR</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Model G5-28 Standard Coverage, Concealed Pendent Sprinkler

Technical Specifications
- **Style:** Flat Concealed Pendent
- **Threads:** 1/2" NPT or ISO 7-1 R1/2
- **Nominal K-Factor:** 2.8 (40 metric)
- **Max. Working Pressure:** 175 psi (12 bar)

Material Specifications
- **Fusible Link:** Beryllium Nickel
- **Sprinkler Body:** Brass Alloy
- **Levers:** Bronze Alloy
- **Yoke:** Brass Alloy
- **Sealing washer:** Nickel with PTFE
- **Load Screw:** Bronze Alloy
- **Towers:** Copper Alloy
- **Pins:** Stainless Steel
- **Deflector:** Bronze Alloy
- **Cup:** Steel

Sprinkler Temperature Ratings
- 165°F (74°C)
- 212°F (100°C)

Sensitivity
(See Table B)

Cover Plates
- Model G4/G5
- Model G4/G5 QR Gasket (cULus only)
- Model G4/G5 SR Gasket

Cover Plate Finishes
(See Table I)

Sprinkler Wrench
- Model W3
- Model FC

Listings and Approvals
- cULus Listed (Light Hazard only)
- FM Approved

Sprinkler Components and Dimensions

Model G5-28 Sprinkler Sensitivity

<table>
<thead>
<tr>
<th>Cover Plate Model</th>
<th>Listing or Approval Agency</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>cULus</td>
</tr>
<tr>
<td>G4/G5</td>
<td>QR</td>
</tr>
<tr>
<td>G4/G5 QR Gasket</td>
<td>QR</td>
</tr>
<tr>
<td>G4/G5 SR Gasket</td>
<td>SR</td>
</tr>
</tbody>
</table>

QR: Quick-response
SR: Standard-response
Model G5-42 Standard Coverage, Concealed Pendent Sprinkler

Technical Specifications
- **Style:** Flat Concealed Pendent
- **Threads:** 1/2” NPT or ISO 7-1 R1/2
- **Nominal K-Factor:** 4.2 (60 metric)
- **Max. Working Pressure:** 175 psi (12 bar)

Material Specifications
- **Fusible Link:** Beryllium Nickel
- **Sprinkler Body:** Brass Alloy
- **Levers:** Bronze Alloy
- **Yoke:** Brass Alloy
- **Sealing washer:** Nickel with PTFE
- **Load Screw:** Bronze Alloy
- **Towers:** Copper Alloy
- **Pins:** Stainless Steel
- **Deflector:** Bronze Alloy
- **Cup:** Steel

Sprinkler Temperature Ratings
- 165°F (74°C)
- 212°F (100°C)

Sensitivity
(See Table C)

Cover Plates
- Model G4/G5
- Model G4/G5 QR Gasket
- Model G4/G5 SR Gasket

Cover Plate Finishes
(See Table I)

Sprinkler Wrench
- Model W3
- Model FC

Listings and Approvals
- cULus Listed (Light Hazard only)

Model G5-42 Sensitivity

<table>
<thead>
<tr>
<th>Cover Plate Model</th>
<th>Listing or Approval Agency</th>
</tr>
</thead>
<tbody>
<tr>
<td>G4/G5</td>
<td>cULus QR</td>
</tr>
<tr>
<td>G4/G5 QR Gasket</td>
<td>QR</td>
</tr>
<tr>
<td>G4/G5 SR Gasket</td>
<td>SR</td>
</tr>
</tbody>
</table>

QR: Quick-response
SR: Standard-response

Model G5-42 Sprinkler Components and Dimensions

Model G5-42 Sensitivity Table C
**Model G5-56 Standard Coverage, Concealed Pendent Sprinkler**

**Technical Specifications**
- **Style:** Flat Concealed Pendent
- **Threads:** 1/2” NPT or ISO 7-1 R/6
- **Nominal K-Factor:** 5.6 (80 metric)
- **Max. Working Pressure:**
  - 175 psi (12 bar)
  - 250 psi (17 bar) (cULus only)

**Material Specifications**
- **Fusible Link:** Beryllium Nickel
- **Sprinkler Body:** Brass Alloy
- **Levers:** Bronze Alloy
- **Yoke:** Brass Alloy
- **Sealing washer:** Nickel with PTFE
- **Load Screw:** Bronze Alloy
- **Towers:** Copper Alloy
- **Pins:** Stainless Steel
- **Deflector:** Bronze Alloy
- **Cup:** Steel

**Sprinkler Temperature Ratings**
- 165°F (74°C)
- 212°F (100°C) (cULus, FM, LPCB, CE only)

**Sensitivity**
(See Table D)

**Cover Plates**
- Model G4/G5
- Model G4/G5 QR Gasket (cULus only)
- Model G4/G5 SR Gasket (cULus and FM only)

**Cover Plate Finishes**
(See Table I)

**Sprinkler Wrench**
- Model W3
- Model FC

**Listings and Approvals**
- cULus Listed (Light & Ordinary Hazard only)
- FM Approved
- LPCB Approved
- VdS Approved [165°F (74°C) only]
- CE Listed

---

**Model G5-56 Sprinkler Components and Dimensions**

---

**Model G5-56 Sensitivity**

<table>
<thead>
<tr>
<th>Cover Plate Model</th>
<th>cULus</th>
<th>FM</th>
<th>LPCB, VdS, CE</th>
</tr>
</thead>
<tbody>
<tr>
<td>G4/G5</td>
<td>QR</td>
<td>SR</td>
<td>SR</td>
</tr>
<tr>
<td>G4/G5 QR Gasket</td>
<td>QR</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>G4/G5 SR Gasket</td>
<td>SR</td>
<td>SR</td>
<td>--</td>
</tr>
</tbody>
</table>

QR: Quick-response
SR: Standard-response
Model G5-56 300 Standard Coverage, Concealed Pendent Sprinkler

Technical Specifications
- **Style:** Flat Concealed Pendent
- **Threads:** 1/2" NPT or ISO 7-1 R1/2
- **Nominal K-Factor:** 5.6 (80 metric)
- **Max. Working Pressure:** 300 psi (21 bar)

Material Specifications
- **Fusible Link:** Beryllium Nickel
- **Sprinkler Body:** Brass Alloy
- **Levers:** Bronze Alloy
- **Yoke:** Brass Alloy
- **Sealing washer:** Nickel with PTFE
- **Load Screw:** Bronze Alloy
- **Towers:** Copper Alloy
- **Pins:** Stainless Steel
- **Deflector:** Bronze Alloy
- **Cup:** Steel

Sprinkler Temperature Ratings
- 165°F (74°C)
- 212°F (100°C)

Sensitivity
- (See Table E)

Cover Plates
- Model G4/G5
- Model G4/G5 QR Gasket
- Model G4/G5 SR Gasket

Cover Plate Finishes
- (See Table I)

Sprinkler Wrench
- Model W3
- Model FC

Listings and Approvals
- cULus Listed (Light & Ordinary Hazard only)

Model G5-56 300 Sprinkler Components and Dimensions

Model G5-56 300 Sensitivity

<table>
<thead>
<tr>
<th>Cover Plate Model</th>
<th>Listing or Approval Agency</th>
</tr>
</thead>
<tbody>
<tr>
<td>G4/G5</td>
<td>cULus</td>
</tr>
<tr>
<td>G4/G5 QR Gasket</td>
<td>QR</td>
</tr>
<tr>
<td>G4/G5 SR Gasket</td>
<td>SR</td>
</tr>
</tbody>
</table>

QR: Quick-response
SR: Standard-response
Technical Specifications
- Style: Flat Concealed Pendent
- Threads: 3/4” NPT or ISO 7-1 R3/4
- Nominal K-Factor: 8.0 (115 metric)
- Max. Working Pressure: 175 psi (12 bar)

Material Specifications
- Fusible Link: Beryllium Nickel
- Sprinkler Body: Brass Alloy
- Levers: Bronze Alloy
- Yoke: Brass Alloy
- Sealing washer: Nickel with PTFE
- Load Screw: Bronze Alloy
- Towers: Copper Alloy
- Pins: Stainless Steel
- Deflector: Bronze Alloy
- Cup: Steel

Sprinkler Temperature Ratings
- 165°F (74°C)
- 212°F (100°C)

Sensitivity
(See Table F)

Cover Plates
- Model G4/G5
- Model G4/G5 QR Gasket
- Model G4/G5 SR Gasket

Cover Plate Finishes
(See Table I)

Sprinkler Wrench
- Model W3
- Model FC

Listings and Approvals
- cULus Listed (Light & Ordinary Hazard only)

Sprinkler Temperature Ratings
- 165°F (74°C)
- 212°F (100°C)

Sensitivity
(See Table F)

Cover Plates
- Model G4/G5
- Model G4/G5 QR Gasket
- Model G4/G5 SR Gasket

Cover Plate Finishes
(See Table I)

Sprinkler Wrench
- Model W3
- Model FC

Listings and Approvals
- cULus Listed (Light & Ordinary Hazard only)

Model G5-80 Sprinkler Components and Dimensions

Sprinkler Temperature Ratings
- 165°F (74°C)
- 212°F (100°C)

Sensitivity
(See Table F)

Cover Plates
- Model G4/G5
- Model G4/G5 QR Gasket
- Model G4/G5 SR Gasket

Cover Plate Finishes
(See Table I)

Sprinkler Wrench
- Model W3
- Model FC

Listings and Approvals
- cULus Listed (Light & Ordinary Hazard only)

Model G5-80 Sensitivity

<table>
<thead>
<tr>
<th>Cover Plate Model</th>
<th>Listing or Approval Agency</th>
</tr>
</thead>
<tbody>
<tr>
<td>G4/G5</td>
<td>QR</td>
</tr>
<tr>
<td>G4/G5 QR Gasket</td>
<td>QR</td>
</tr>
<tr>
<td>G4/G5 SR Gasket</td>
<td>SR</td>
</tr>
</tbody>
</table>

QR: Quick-response
SR: Standard-response
Model G5-80F Standard Coverage, Concealed Pendent Sprinkler

Technical Specifications
- Style: Flat Concealed Pendent
- Threads: ¾” NPT or ISO 7-1 R
- Nominal K-Factor: 8.0 (115 metric)
- Max. Working Pressure: 175 psi (12 bar)

Material Specifications
- Fusible Link: Beryllium Nickel
- Sprinkler Body: Brass Alloy
- Levers: Bronze Alloy
- Yoke: Brass Alloy
- Sealing washer: Nickel with PTFE
- Load Screw: Bronze Alloy
- Towers: Copper Alloy
- Pins: Stainless Steel
- Deflector: Stainless Steel
- Cup: Steel

Sprinkler Temperature Ratings
- 165°F (74°C)
- 212°F (100°C)

Sensitivity
- Standard Response

Cover Plates
- Model G4/G5
- Model G4/G5 SR Gasket

Cover Plate Finishes
- See Table I

Sprinkler Wrench
- Model W3
- Model FC

Listings and Approvals
- FM Approved

Model G5-80F Sprinkler Components and Dimensions

Model G5-80F Sensitivity

<table>
<thead>
<tr>
<th>Cover Plate Model</th>
<th>Listing or Approval Agency</th>
</tr>
</thead>
<tbody>
<tr>
<td>G4/G5</td>
<td>FM</td>
</tr>
<tr>
<td>G4/G5SR Gasket</td>
<td>SR</td>
</tr>
</tbody>
</table>

SR: Standard-response
## Installation Dimensions and Cover Plate Information

<table>
<thead>
<tr>
<th>Cover Plate Model</th>
<th>Cover Plate Diameter (mm)</th>
<th>Minimum Recommended Hole Diameter in Ceiling (mm)</th>
<th>Cover Plate Adjustment (mm)</th>
<th>Min. to Max. Face of Fitting to Ceiling (mm)</th>
<th>Min. to Max. Dropped Deflector Distance below Ceiling (mm)</th>
<th>Cover Plate Temperature Rating °F (°C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>G4/G5</td>
<td>84</td>
<td>2-5/8 (67)</td>
<td>3/4 (19)</td>
<td>1-1/2 to 2-1/4 (38 to 57)</td>
<td>1/4 to 1 (6 to 26)</td>
<td>135°F (57°C) or 165°F (74°C)</td>
</tr>
<tr>
<td>G4/G5 QR Gasket</td>
<td>94</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G4/G5 SR Gasket</td>
<td>101 mm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Notes:
1. Face of fitting to ceiling dimensions are based on nominal thread make up. Verify dimensions based on fitting and thread sealing method prior to installation. A 1/2” x 1/2” brass nipple extension (Reliable P/N 6999991900) is available to assist with replacement of Reliable Model G4A sprinklers.
2. Model G4/G5 QR Gasket and Model G4/G5 SR Gasket cover plates are sold as assembled units including both the cover plate and gasket. Model G4/G5 QR Gasket and Model G4/G5 SR Gasket cover plates and gaskets are not interchangeable.
3. For use with 165°F (74°C) temperature rated sprinklers where the Maximum Ceiling Temperature does not exceed 100°F (38°C).
4. For use with 212°F (100°C) temperature rated sprinklers where the Maximum Ceiling Temperature does not exceed 150°F (66°C).

### Cover Plate Finishes

<table>
<thead>
<tr>
<th>Standard Finishes</th>
<th>Special Application Finishes</th>
</tr>
</thead>
<tbody>
<tr>
<td>White Paint</td>
<td>Off-White Paint</td>
</tr>
<tr>
<td>Chrome</td>
<td>Black Paint</td>
</tr>
<tr>
<td>Custom Color Paint – Specify</td>
<td>Bright Brass</td>
</tr>
<tr>
<td></td>
<td>Finished Bronze</td>
</tr>
<tr>
<td></td>
<td>Black Plated</td>
</tr>
<tr>
<td></td>
<td>Satin Chrome</td>
</tr>
<tr>
<td></td>
<td>Stainless Steel Clad</td>
</tr>
</tbody>
</table>

### Listing & Approval Agencies

Individual Model G5 series sprinkler may be listed or approved by the following agencies:
- Underwriters Laboratories, Inc. and UL Canada (cULus)
- FM Approvals (FM)
- Loss Prevention Certification Board (LPCB)
- VdS Schadenverhütung GmbH (VdS)
- EC-Certificate of Conformity 0832-CPD-2062 (CE)

See Table A and the individual sprinkler data sheets in this Bulletin for listings and approvals applicable to each sprinkler.

### Installation

Model G5 series sprinklers are intended to be installed in accordance with NFPA 13, FM Global Property Loss Prevention Data Sheets, and the requirements of applicable authorities having jurisdiction. Model G5 series sprinklers must not be installed in ceilings with positive pressure in the space above. Ensure that the 4 slots in the cup are open and unobstructed following installation. Model G5 series sprinklers are shipped with a wrench-able protective cap that should remain on the sprinkler until the sprinkler system is placed in service following construction. Model G5 series sprinklers can be installed without removing the wrench-able protective cap using the Model W3 wrench. Alternatively, Model G5 series sprinklers can be installed using the Model FC wrench by temporarily removing the protective cap during installation of the sprinkler. The use of any other wrench to installed Model G5 series sprinklers is not permitted and may damage the sprinkler. Fully insert the Model W3 wrench over the cup until it reaches the bottom of the cup, or the
Model FC wrench over the sprinkler until the wrench engages the body. Do not wrench any other part of the sprinkler/cup assembly. The Model W3 and FC wrenches are designed to be turned with a standard ½” square drive. Tighten the sprinkler into the fitting after applying a PTFE based thread sealant to the sprinkler’s threads. Recommended installation torque is specified in Table J.

<table>
<thead>
<tr>
<th>Installation Torque</th>
<th>Table J</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sprinkler Threads</td>
<td>Recommended Installation Torque (min. – max.)</td>
</tr>
<tr>
<td></td>
<td>ft.lb</td>
</tr>
<tr>
<td>½” NPT or ISO7-1R1/2</td>
<td>8-18</td>
</tr>
<tr>
<td>¾” NPT or ISO7-1R3/4</td>
<td>14-20</td>
</tr>
</tbody>
</table>

Do not exceed the maximum recommended torque. Exceeding the maximum recommended torque may cause leakage or impairment of the sprinkler. Use care when inserting or removing the wrench from the sprinkler to avoid damage to the sprinkler.

Install the cover plate by hand, pushing and then turning the cover in the clockwise direction until it is tight against the ceiling. For Model G4/G5 QR Gasket and Model G4/G5 SR Gasket cover plates, the gasket should be attached to the flange of the cover plate skirt only. Do not glue the gasket in place or allow the gasket to overlap both the cover plate and the flange of the skirt.

**Maintenance**

Reliable Model G5 series sprinkler 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 or cover plate which has been painted (other than factory applied). Properly installed Model G5 cover plates will have an air gap that is required for proper operation, do not seal the gap or paint the cover plates. Model G5 series sprinklers have holes in the cup that must remain unobstructed.

Replace any sprinkler which has been damaged. 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.

**Guarantee**

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

**Patents**

Model G5 series sprinklers may be covered by one or more of the following patents:
- U.S. Patent 6,554,077
- U.S. Patent 7,275,603
- U.S. Patent 8,776,903
- U.S. Patent 9,248,327

**Ordering Information**

Specify the following when ordering.

**Sprinkler**
- Model [G5-28] [G5-42] [G5-56] [G5-56 300] [G5-80] [G5-80F]
- Temperature Rating [165°F (74°C)] [212°F (100°C)]
- Threads [NPT or ISO 7-1]

**Cover Plate**
- Finish (See Table I)

**Sprinkler Wrench**
- Model W3
- Model FC