

Reliable®

Model G Recessed Automatic Sprinkler

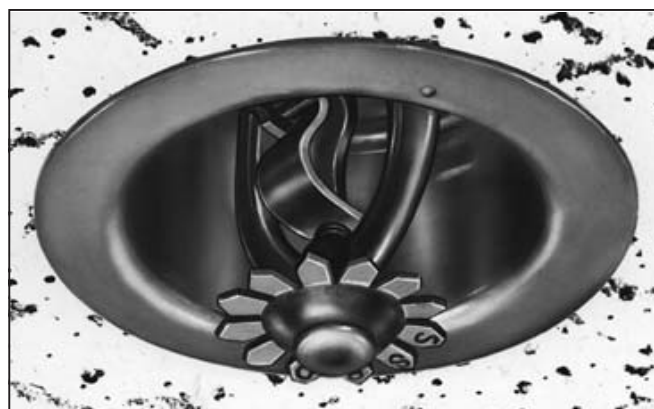
The Most Compact Attractive and Easily Installed Sprinkler Ever Designed!

Features

1. 1½" (38mm) Total adjustment provided by adjustable inlet versions.
2. ½" (13mm) Total adjustment provided by economical standard inlet version.
3. Adjustable inlet version available with either 1" NPT male or female threads eliminating costly reducing coupling.
4. Small diameter escutcheon.
5. Available in brass, chrome or white finish.
6. Multiple orifice sizes for design flexibility.
7. Listed by Underwriters Laboratories Inc. & Underwriters' Laboratories of Canada. Approved by Factory Mutual Research Corp. & Loss Prevention Council, NYC BS&A No., 587-75-SA.

Product Description

Today's modern buildings demand that a sprinkler not only provide the best fire protection but also achieve an attractive appearance. Reliable's Model G Recessed Sprinkler meets both criteria. It combines the fire fighting capability of a proven sprinkler with the smallest practicable recessing unit. Its small profile does not disrupt the overhead aesthetics, and yet one vertical glance upward gives a visual assurance of the finest in fire protection, an automatic sprinkler system.



The Model G Recessed Sprinkler's threaded two-piece construction makes initial field installation a very easy task. It allows ceilings panels to be removed without shutting down the fire protection thus facilitating maintenance of above ceiling services. The adjustable one inch NPT inlet versions have one and one half inches of adjustment which eliminates both the normally required reducing coupling and the need to accurately cut drop nipples. This sprinkler can be adjusted after the ceiling is in place and even while the system is pressurized eliminating the final corrections to pipe hangers or ceilings that might otherwise be required.

The Reliable Model G Automatic Sprinkler is the heart of the Recessed Sprinkler. This sprinkler utilizes the center strut solder in compression principle of construction. The fusible alloy, captured in the cylinder of a small solder capsule by stainless steel ball, acts as the trigger of the sprinkler. When the fusible alloy melts, the sprinkler operating parts springle free from the sprinkler clearing the waterway and allowing the deflector to distribute the discharging water.

Installation

The Reliable Model G Recessed Sprinkler has been designed with ease of installation in mind. A choice of three inlets with up to one inch adjustment coupled with the 1/2" (13mm) escutcheon adjustment enables most systems to be installed using pre-cut drop nipples. The adjustment can be accomplished after the ceiling installation and while the system is pressurized thereby providing sprinkler protection before construction is completed.

The Non-Adjustable inlet version (Figure 1) Consists of the Reliable Model G Sprinkler with an attached cup recessed in the ceiling. A ceiling hole of 2 1/2" (67mm) diameter is recommended.

The Adjustable inlet version uses the same sprinkler as the Non-Adjustable inlet type except the 1 of additional adjustment is provided by a telescoping sprinkler inlet section that threads in or out of a stationary Coupling Reducer (either 1 male or 1 female) as shown in figures 2 or 3. The Sprinkler-Cup assembly comes attached to the inlet Coupling Reducer Comes attached to the inlet Coupling Reducer and is retained from separation past its maximum adjustment length by a snap ring. This combination is simply installed after the system drop nipple, elbow or tee has been "roughed in" to the dimensions shown in figures 2 or 3. Wrenching means are provided by hex flats on the coupling reducer as depicted in the figures-do not wrench on any other part of the sprinkler. After the ceiling tiles have been cut and installed in place (a 2 1/4" {57mm} hole is recommended), the sprinkler can be adjusted using the RC-1 Concealed Wrench.

When using the wrench in this application, however, do not over-torque beyond the adjustment stops.

Figure 4 shows a 1/2" NPT (R1/2) non-adjustable inlet sprinkler, with the attached sprinkler cup combination in-

serted into the special Reliable Model RC-1 Installation Wrench. This wrench must be used. The wrenching pads of the sprinkler easily slip into the rectangular cut-outs of the wrench as the outside diameter locates the threaded cup. A 1/2" (13mm) drive ratchet can then be used for installation and tightening.

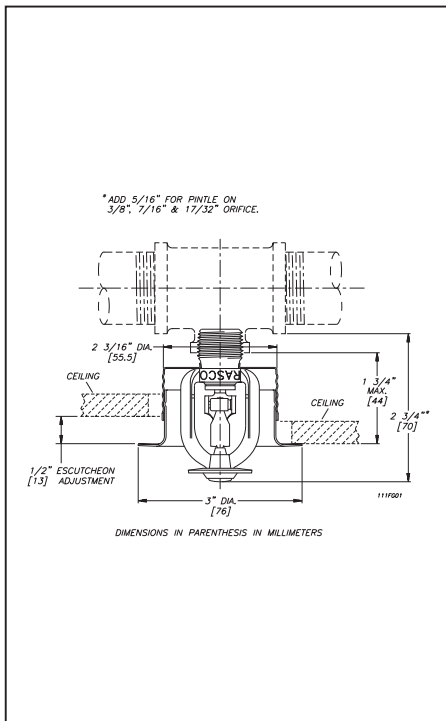
Figure 5 shows the removal of the wrench. Care should be taken during this procedure to avoid hitting the deflector with the wrench. The wrench should be lowered until it clears the sprinkler. The installation completed by threading the escutcheon on until it contacts the ceiling. To avoid leaving smudge marks on the ceiling, the Reliable Model FEA Flush Sprinkle Escutcheon Wrench should be used. See Bulletin 205

Note:

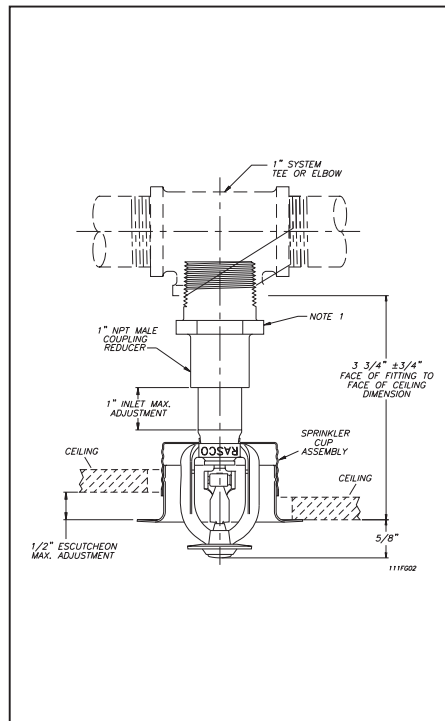
1. Use hex wrench on Coupling Reducer to tighten Adjustable Sprinkler into fittings. Do not use RC-1 Wrench for this purpose.
2. Do not install the Model G Recessed Sprinkler in ceilings which have positive pressure in the space above.

Maintenance

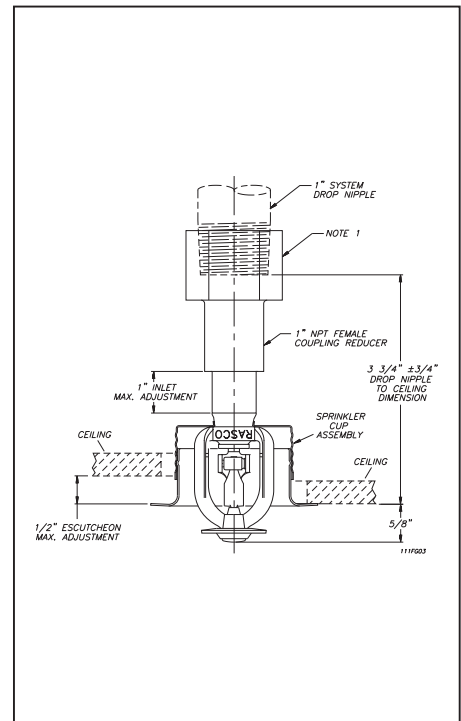
The Model G Recessed Pendent Sprinklers should be inspected quarterly and the sprinkler system maintained in accordance with NFPA 20. Do not clean sprinklers with soap and water, ammonia or any other cleaning fluid. Remove any sprinkler that has been painted (other than factory applied) or damaged in any way. A stock of spare sprinklers should be maintained to allow quick replacement of damaged or operated sprinklers. Prior to installation, sprinklers should be maintained in the original cartons and packaging until used to minimize the potential for damage to sprinklers that would cause improper operation or non-operation.



1/2" NPT Non-Adjustable Inlet
Figure 1



1" NPT Male-Adjustable Inlet
Figure 2



1" NPT Female-Adjustable Inlet
Figure 3

Technical Data

Sprinkler Inlet	Total Adjustment	Nominal Orifice	"K" Factor		Thread	Approval Organizations	Sprinkler Identification Number (SIN)
			U.S.	Metric			
Non-Adjustable	1/2" (13mm)	1/2" (15mm)	5.62	81.0	1/2" NPT (R1/2)	1, 2, 3, 4, 5,	R1015
Non-Adjustable	1/2" (13mm)	7/16" (11mm)	4.24	61.0	1/2" NPT (R1/2)	1, 3, 4	R1013
Non-Adjustable	1/2" (13mm)	3/8" (10mm)	2.82	40.6	1/2" NPT (R1/2)	1, 3, 4	R1011
Non-Adjustable	1/2" (13mm)	17/32" (20mm)	7.96	114.7	1/2" NPT (R1/2)	1, 3	R1016
Adjustable	1 1/2" (38mm)	1/2" (15mm)	5.53	79.7	1" NPT Male or Female	1, 2, 3, 4	R1118
Adjustable	1 1/2" (38mm)	7/16" (11mm)	4.24	61.0	1" NPT Male or Female	1, 3, 4	R1113
Adjustable	1 1/2" (38mm)	3/8" (10mm)	2.75	39.2	1" NPT Male or Female	1, 3, 4	R1117
Adjustable	1 1/2" (38mm)	15mm	5.53	79.7	R1 Male or Female	5	R1118

* Sprinkler escutcheon provides 1/2" (13mm) of the total adjustment. Adjustable inlets, when used, provide 1" (25mm) of the total adjustment.

⁽¹⁾ Identified by pintle extending above the deflector.

Temperature Ratings

Classification	Sprinkler Rating		Maximum Ambient Temperature	
	°F	°C	°F	°C
Ordinary	135	57	100	38
Ordinary	165	74	100	38
Intermediate	212	100	150	66

Approval Organizations

- Underwriters Laboratories Inc.
- Factory Mutual Research Corp.
 - Light Hazard Occupancies - No limitations
 - Ordinary Hazard Occupancies - Groups 1 & 2, Wet Systems Only
- Underwriters Laboratories of Canada
- NYC BS & A No. 587-75-SA
- Loss Prevention Council
 - XLH, OHI and OHII Occupancies Only
- NYC MEA 258-93-E

Note: Unless otherwise indicated, Ordinary hazard approvals are without limitations. 7/16" (11mm) and 3/8" (10mm) orifice sprinklers are limited to light hazard occupancies.

Ordering Information

Specify:

- Temperature Rating
- Nominal Orifice
- Sprinkler Finish
- Escutcheon Finish
- Sprinkler Type: Either Non-Adjustable Inlet (Fig. 1); 1" Male Adjustable Inlet (Fig. 2); 1" Female Adjustable Inlet (Fig.3)

Finishes ⁽¹⁾

Standard Finishes	
Sprinkler	Escutcheon
Bronze	Brass
Chrome	Chrome
White Painted ⁽²⁾	White Painted
Special Application	
Sprinkler	Escutcheon
Bright Brass ⁽²⁾	Bright Brass
Black Plated ⁽²⁾	Black Plated
Satin	Satin
Polyester Coated ⁽³⁾	Polyester Coated

⁽¹⁾ Other color Finishes available upon request. Consult Factory for details.

⁽²⁾ Only frame, deflector and cap are plated

⁽³⁾ Only frame and deflector are painted or coated. Operating parts are chrome plated. UL Listed and MEA Approved only.



Figure 4

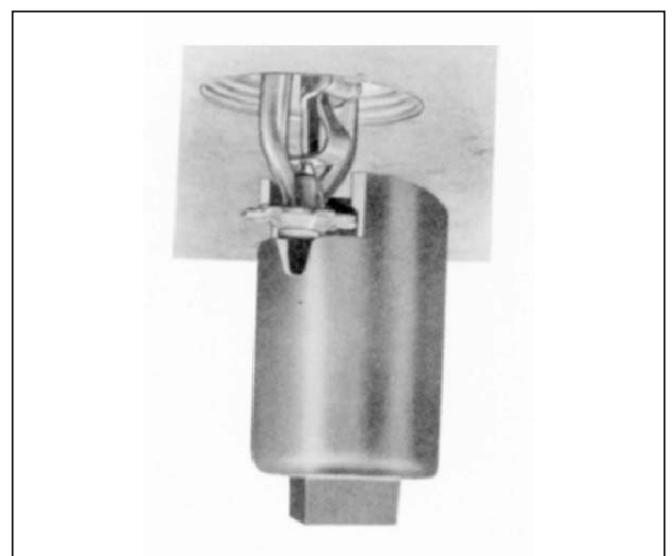


Figure 5

Reliable...For Complete Protection

Reliable offers a wide selection of sprinkler components. Following are some of the many precision-made Reliable products that guard life and property from fire around the clock.

- Automatic sprinklers
- Flush automatic sprinklers
- Recessed automatic sprinklers
- Concealed automatic sprinklers
- Adjustable automatic sprinklers
- Dry automatic sprinklers
- Intermediate level sprinklers guards
- Open sprinklers
- Spray nozzles
- Alarm valves
- Retarding chambers
- Dry pipe valves
- Accelerators for dry pipe valves
- Mechanical sprinkler alarms
- Electrical sprinkler alarm switches
- Water flow detectors
- Deluge valves
- Detector check valves
- Check valves
- Electrical system
- Sprinkler emergency cabinets
- Sprinkler Wrenches
- Sprinkler escutcheons and
- Inspectors test connections
- Sight drains
- Ball drips and drum drips
- Control valve seals
- Air maintenance devices
- Air compressors
- Pressure gauges
- Identification signs
- Fire department connection

The equipment presented in this bulletin is to be installed in accordance with the latest pertinent Standards of the National Fire Protection Association, Factory Mutual Research Corporation, or other similar organizations and also with the provisions of governmental codes or ordinances whenever applicable. Products manufactured and distributed by Reliable have been protecting life and property for over 90 years, and are installed and serviced by the most highly qualified and reputable sprinkler contractors located throughout the United States, Canada and foreign countries.

Manufactured by

Reliable[®]

The Reliable Automatic Sprinkler Co., Inc.

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Revision lines indicate updated or new data

EG. Printed in U.S.A. 12/00

P/N9999970006