Reliable®

Model GXLO Series Sprinklers

Storage and Non-Storage Sprinklers
K11.2 (160 metric)

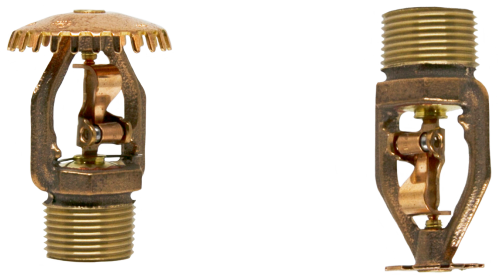
Product Description

Reliable Model GXLO (extra-large orifice) upright and pendent sprinklers are standard coverage standard-response sprinklers that utilize a robust center strut, solder in compression thermal element. These sprinklers are intended for use in hydraulically calculated control mode density area (CMDA) storage and non-storage occupancies in accordance with the area/density curves of NFPA 13 or other applicable standards.

The Model GXLO sprinkler is FM Approved as a standard-response storage and non-storage sprinkler when used in accordance with FM Global Property Loss Prevention Data Sheets.

For new installations, the sprinkler is provided with either 3/4-inch NPT or ISO 7-R3/4 threads. The upright version is also available with 1/2-inch NPT or ISO 7-R1/2 threads for retrofit installations only. Sprinklers without guards are installed using the Model H wrench.

For use as an intermediate level sprinkler, the Model GXLO upright sprinkler is available with a factory installed water shield. Various other water shields, guards, or guard/shield options are also available for both upright and pendent models (please refer to Technical Specifications on following pages). Sprinkler guards or guard/shields may be installed in the field or factory installed. Use of the Model JV sprinkler wrench is required for installation where a guard is added to the sprinkler prior to threading the assembly into a fitting.



Upright Pendent

Model GXLO Series Sprinklers

Upright with Factory Installed Shield
(Factory Installed water shield)

Model GXLO Specifications **Table A**

Style	Sprinkler Identification Number (SIN)	Listings and Approvals	Sensitivity	K-Factor
Upright Intermediate Upright	R2921	cULus, FM	Standard Response	11.2 (160 metric)
Pendent	R2916	FM		

Model GXLO Upright Sprinkler — SIN R2921

Technical Specifications
Style: Upright, Intermediate Upright
Threads: 3/4” NPT or ISO 7-1R3/4*
Nominal K-Factor: 11.2 (160 metric)
Max. Working Pressure: 175 psi (12 bar)

Material Specifications
Thermal Sensor: Solder Capsule
Sprinkler Frame: Brass Alloy
Button/Cup: Brass Alloy
Sealing Assembly: Brass with PTFE
Load Screw: Bronze
Deflector: Bronze Alloy
Levers: Bronze Alloy
Ejection Spring: Stainless Steel

Sprinkler Finishes
See Table C

Sensitivity
Standard Response

Temperature Ratings
See Table D

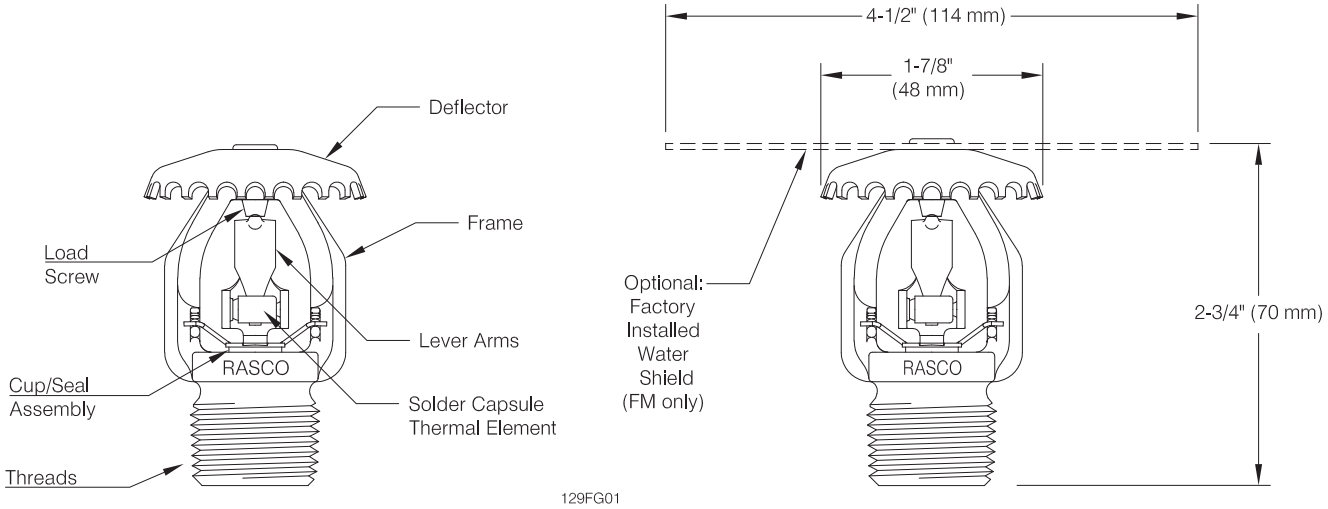
Guards & Shields
D-6 Guard & Water Shield (cULus)
D-7 Guard & Water Shield (FM)
D-8 Guard (FM)
Water Shield (factory installed; FM)

Sprinkler Wrench
Model H
Model JV (with guard installed)

Listings and Approvals
cULus Listed
FM Approved

***Note:** 1/2” NPT and ISO 7-R1/2 threads available for RETROFIT APPLICATIONS ONLY on upright sprinkler. This sprinkler will be identified with a pintle on the deflector. Not available on intermediate upright sprinkler.

Model GXLO Upright Components and Dimensions — Figure 1



COMPONENTS **DIMENSIONS**

Model GXLO Pendent Sprinkler — SIN R2916

Technical Specifications
Style: Pendent
Threads: 3/4” NPT or ISO 7-1R3/4
Nominal K-Factor: 11.2 (160 metric)
Max. Working Pressure: 175 psi (12 bar)

Material Specifications
Thermal Sensor: Beryllium Nickel Solder Link
Sprinkler Frame: Brass Alloy
Button/Cup: Brass Alloy
Sealing Assembly: Brass Alloy with PTFE
Load Screw: Bronze
Deflector: Bronze Alloy
Levers: Bronze Alloy

Sprinkler Finishes
See Table C

Sensitivity
Standard Response

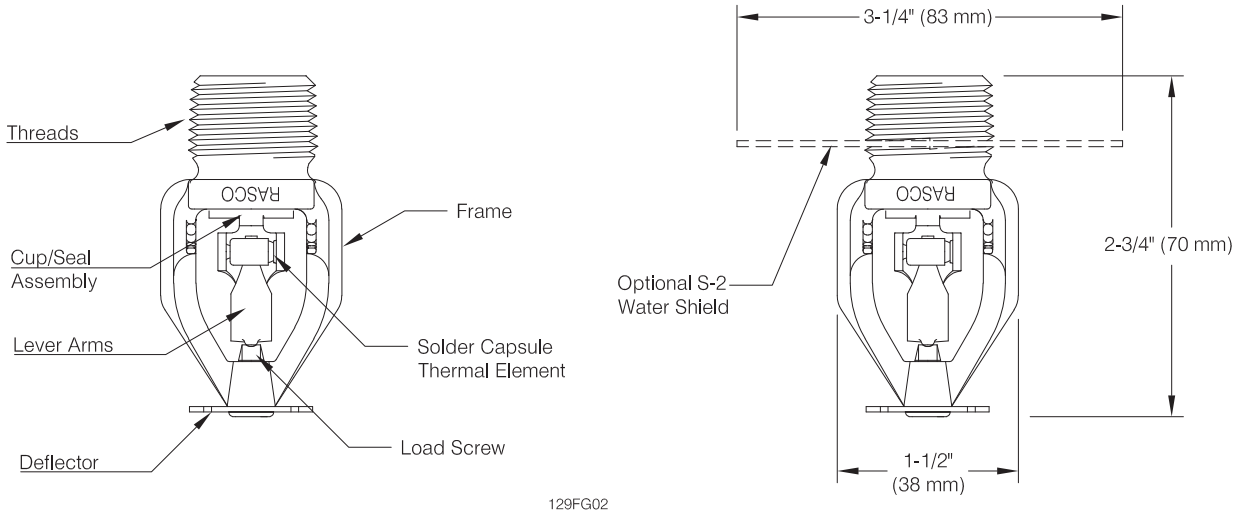
Temperature Ratings
See Table D

Guards & Shields
D-8 Guard
D-9 Guard & Water Shield
S-2 Water Shield

Sprinkler Wrench
Model H
Model JV (with guard installed)

Listings and Approvals
FM Approved

Model GXLO Pendent Components and Dimensions — Figure 2



COMPONENTS **DIMENSIONS**

Model GXLO Commodity Selection and Design Criteria Overview **Table B**

Storage Type	NFPA	FM GLOBAL
Sprinkler Type	CMDA	Storage
Response Type	SR	SR
System Type	Pendent - Wet Upright - Wet, Dry, Preaction	Pendent - Wet Upright - Wet, Dry, Preaction
Temperature Rating °F (°C)	165, 212, 286 (74, 100, 141)	165, 212, 286 (74, 100, 141)
Roof Construction	See NFPA 13	See FM Global 2-0
Ceiling Slope	See NFPA 13	See FM Global 2-0
Maximum Coverage Area	See NFPA 13	See FM Global 2-0
Minimum Coverage Area	See NFPA 13	See FM Global 2-0
Maximum Spacing	See NFPA 13	See FM Global 2-0
Minimum Spacing	See NFPA 13	See FM Global 2-0
Minimum Clearance to Commodity	See NFPA 13	See FM Global 2-0
Sprinkler Distance to Ceiling	See NFPA 13	See FM Global 2-0
Open Frame, Single, Double, Multiple Row, or Portable Rack Storage of Class I - IV Commodity and Group A Plastic	See NFPA 13	See FM 2-0 & 8-9
Solid Pile or Palletized Storage of Class I - IV Commodity and Group A Plastic	See NFPA 13	See FM 2-0 & 8-9
Idle Pallet Storage	See NFPA 13	See FM 2-0,8-9 & 8-24
Rubber Tire Storage	See NFPA 13	See FM 8-3
Rolled Paper Storage	See NFPA 13	Pendent - N/A Upright - See FM 8-21
Flammable Liquid Storage	See NFPA 30	See FM 7-29 and 8-9
Aerosol Storage	See NFPA 13	See FM 7-31
Auto Components in Portable Racks	N/A	N/A

Finishes — **Table C**

Upright (R2921)	Pendent (R2916)
Bronze	Bronze
Chrome [1]	
Lead[1][2]	
Wax[1][2][3]	
Wax over Lead[1][2][3]	

Notes:
1. Not available with factory attached water shield
2. cULus listed as corrosion resistant
3. 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).

Temperature Ratings — **Table D**

Classification	Sprinkler Rating		Maximum Ambient Temperature		Frame Color
	°F	°C	°F	°C	
Ordinary	165	74	100	38	Uncolored
Intermediate	212	100	150	66	White
High	286	141	225	107	Blue

Installation

Model GXLO sprinklers must be installed according to appropriate NFPA Standards, FM Global Loss Prevention Data Sheets, and/or the requirements of the authority having jurisdiction.

Use only the Model H sprinkler wrench for sprinkler installation or use the Model JV wrench to install the sprinkler/guard assembly (Figure 3). Any other type of wrench may damage the sprinkler. Damaged sprinklers must be replaced immediately.

A leak tight joint should be obtained with a torque of 14 to 20 lb-ft (19 to 27 N.m) for 3/4 inch NPT and ISO 7-R3/4 thread sprinklers. For 1/2 inch NPT and ISO 7-R1/2 thread sprinklers the recommended installation torque is 8 to 18 lb-ft (11 to 24 N.m). Exceeding the maximum recommended torque may cause leakage or impairment of the sprinklers.

Wrenches — **Figure 3**

Model H Wrench (sprinkler)

Model JV Wrench (with guard installed)

Maintenance

Reliable Model GXLO 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.

Guarantee

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

Ordering Information

Specify the following when ordering.

Model GXLO Sprinkler
- Upright
- Intermediate Upright
- Pendent

Threads
- 3/4” NPT
- ISO 7-R3/4
- 1/2” NPT (Retrofit installations only, upright only)
- ISO 7-R1/2 (Retrofit installations only, upright only)

Temperature Rating
- 165°F (74°C)
- 212°F (100°C)
- 286°F (141°C)

Finish
See Table C

Guards/Shields
See Technical Specifications

Wrench
- Model H
- Model JV (with guards installed)

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