

Reliable®

Model GXLO Standard Spray Standard Response Storage and Non-storage Sprinkler

K11.2 (160 metric) (SIN R2921) Upright (SIN R2916) Pendent

Features

1. Upright cULus Listed as a Control Mode Density Area (CMDA) sprinkler for storage & non-storage protection.
2. Upright and Pendent FM Approved as Standard-response, storage and non-storage sprinklers.
3. Standard 3/4-inch NPT or ISO 7-R3/4 threads; optional 1/2-inch NPT or ISO 7-R1/2 threads for upright retrofit applications only.

Listings & Approvals:

The following organizations provide Listings or Approvals for Model GXLO sprinklers. See the Technical Data table for listing and approvals applicable to each sprinkler.

1. Underwriters Laboratories, Inc. and Underwriters Laboratories of Canada (cULus) - Upright only.
2. Approved by Factory Mutual (FM) as a storage and non-storage sprinkler - Upright and Pendent.

UL Guide Number

VNIV

UL Listing Category

Sprinklers, Automatic and Open; Sprinklers for Storage Protection (Control Mode Density Area)

Technical Data

Sprinkler Type	Nominal K Factor		Sprinkler Height	Approvals	Sprinkler Identification Number (SIN)
	US	Metric			
Upright 0.64 Orifice with 3/4" NPT (R3/4)	11.2	160	2.71" (68.8mm)	cULus, FM	R2921
Upright Retrofit 0.64 Orifice with 1/2" NPT (R1/2)	11.2	160	2.82" (71.6mm)	cULus, FM	R2921
Pendent 0.64 Orifice with 3/4" NPT (R3/4)	11.2	160	2.71" (68.8mm)	FM	R2916

Note: This product has been tested and listed for storage applications to qualify its use in lieu of 5.6K or 8.0K Factor sprinklers for the protection of high-piled storage.

Product Description

The Reliable Model GXLO sprinkler is a center strut, solder in compression, extra large orifice sprinkler that has been designed for storage and non-storage applications. The Model GXLO sprinkler is available in either an upright or pendent configuration. The Model GXLO sprinkler is available with either 3/4-inch NPT or ISO 7-R3/4 threads. The Model GXLO Upright is optionally available with either 1/2-inch NPT or ISO 7-R1/2 threads for retrofit applications only.



Model GXLO Upright



Model GXLO Pendent

Design Criteria

The Model GXLO sprinkler is intended for use as a standard response standard spray sprinkler in hydraulically designed sprinkler systems with a minimum pressure of 7 psi (0.5 bar) in accordance with the area/density curves of NFPA 13 or in accordance with FM Property Loss Prevention Data Sheets.

The Model GXLO sprinkler is not a "Large Drop" or "ESFR" sprinkler.

Temperature Ratings

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

Optional Guards and Water Shields

Sprinkler	Guard or Water Shield	Listings & Approvals
GXLO Upright	D-6 Guard & Water Shield	cULus
	D-7 Guard & Water Shield	FM
	Water Shield (factory installed)	
GXLO Pendent	D-8 Guard	FM
	D-9 Guard & Water Shield	

Installation

Reliable's Model GXLO sprinkler must be installed according to NFPA Standards or the appropriate Factory Mutual Loss Prevention Data Sheets for all area/density methods of design as well as requirements of the Authority Having Jurisdiction.

Model GXLO sprinklers must be installed with the Reliable Model H sprinkler wrench. Any other type of wrench may damage the sprinkler.

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). Do not tighten sprinklers over the maximum recommended installation torque, because it may cause leakage or impairment of the sprinklers.

Model H Wrench



Use only the Model H sprinkler wrench for sprinkler removal and installation. Any other type of wrench may damage the sprinkler.

Maintenance

Model GXLO Sprinklers should be inspected and the sprinkler system maintained in accordance with NFPA 25. Do not clean sprinklers with soap and water, ammonia or any other cleaning fluids. Remove dust by using a soft brush or gentle vacuuming. Replace any sprinkler which 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.

Ordering Information

Specify:

1. Sprinkler: Model GXLO
2. Orientation: [Upright] [Pendent]
3. Temperature Rating: [Ordinary, 165°F] [Intermediate, 212°F] [High 286°F]
4. Finish: (See Finishes Chart)
5. Threads: [3/4-inch NPT] [ISO 7-R3/4] [1/2-inch NPT (Upright only)] [ISO 7-R1/2 Upright only]
6. Optional Guard or Water Shield

Finishes

Standard Finishes	
Bronze	
Chrome ⁽³⁾	
Special Application Finishes	
Lead Plated ⁽¹⁾⁽³⁾	- 165°F (74°C), 212°F (100°C) and 286°F (141°C) Temp. Ratings
Wax ⁽¹⁾⁽²⁾⁽³⁾	- 165°F (74°C) Clear Wax, 212°F (100°C) Brown Wax
Wax/Lead ⁽¹⁾⁽²⁾⁽³⁾	- 165°F (74°C) Clear Wax, 212°F (100°C) Brown Wax

⁽¹⁾ cULus.

⁽²⁾ 212°F (100°C) Brown wax may be used on 286°F (141°C) Sprinklers when maximum ambient temperatures do not exceed 150°F (66°C).

⁽³⁾ Upright only.

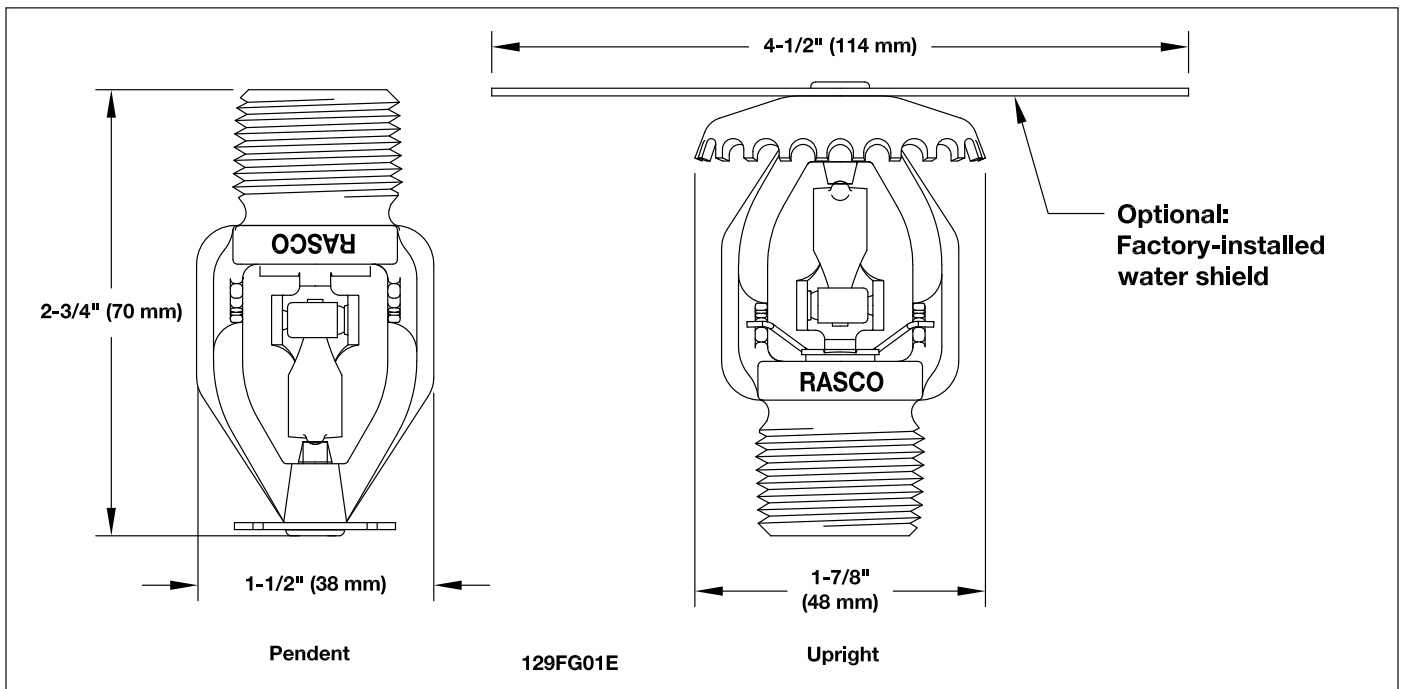


Fig. 1

ITEM	DESCRIPTION
Sprinkler Identification Number (SIN)	R2921 (Upright), R2916 (Pendent)
K-factor US (Metric)	11.2 (160)
Thread Size	3/4" (ISO 7-R3/4), 1/2" (ISO 7-R1/2) Retrofit Upright
Sprinkler Orientation	Upright; Pendent
Maximum Working Pressure, PSI (bar)	175 PSI (12 bar)

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 and Group A or B Plastics	See NFPA 13	See FM 2-0 & 8-9
Solid Pile or Palletized Storage of Class I - IV and Group A or B Plastics	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	N/A Pendent See FM 8-21 for Upright
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

The equipment presented in this bulletin is to be installed in accordance with the latest published 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.

Manufactured by



Reliable Automatic Sprinkler Co., Inc.
 (800) 431-1588 Sales Offices
 (800) 848-6051 Sales Fax
 (914) 829-2042 Corporate Offices
 www.reliablesprinkler.com Internet Address



Revision lines indicate updated or new data.