#### **tuco** Fire Suppression & Building Products

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## Model G1, G4 Sprinkler Guards and Model G1/S1, G4/S3 Guards with Shields for Series TY-B, TY-FRB, TY-L, and TY-FRL Sprinklers

# General Description

TYCO Model G1 and G4 Sprinkler Guards are designed for use with specific types of Series TY-B, TY-FRB, TY-L, and TY-FRL Sprinklers that may be located in areas that make them susceptible to mechanical or physical damage. Table A provides compatibility details.

Model G1/S1 and G4/S3 Sprinkler Guards with Shields (Figure 2), in addition to providing protection from mechanical or physical damage, protects the sprinkler from water spray of higher elevation sprinklers (for example, rack storage sprinkler installations). When the Model G1/S1 and G4/S3 are used with the Series TY-B, TY-FRB, TY-L, and TY-FRL Sprinklers shown in Table A, the assemblies form Upright Intermediate Level Sprinklers intended for use in fire sprinkler systems designed in accordance with the standard installation rules recognized by the applicable Listing agency (that is, UL Listing is based on NFPA requirements).

- Model G1 and G4 Guards are a redesignation for the Gem F938 and F937 respectively.
- Model G1/S1 and G4/S3 Guards are a re-designation for the Gem F938/Q-76 and F937/Q-75 respectively.

#### NOTICE

Model G1 and G4 Sprinkler Guards and Model G1/S1 and G4/S3 Sprinkler Guards with Shields described herein must be installed and maintained in compliance with this document and with the applicable standards of the National Fire Protection Association, in addition to the standards of any Authorities Having Jurisdiction. Failure to do so may impair the performance of these devices. Owners are responsible for maintaining their fire protection system and devices in proper operating condition. The installing contractor or sprinkler manufacturer should be contacted with any questions.

#### Technical Data

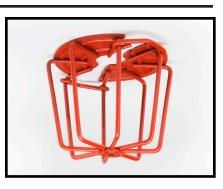
Approvals UL and C-UL Listed FM Approved Refer to Table A.

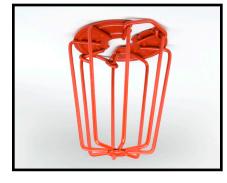
Finishes Red Painted and Zinc Chromate

**Physical Characteristics** Welded assembly fabricated from carbon steel

# Design Criteria

In accordance with the requirements of the NFPA, sprinkler guards shall be listed. Guards are only listed for use with specified sprinklers; therefore, the Model G1, G4, G1/S1, and G4/S3 must only be used with the Series TY-B, TY-FRB, TY-L, and TY-FRL Sprinklers shown in Table A.









Sprinkler Series	TFP SIN	GEM SIN	STAR SIN	Sprinkler Type	Sprinkler K-Factor	Mounting Location	Guard Model Approvals	Guard with Shield Model Approvals
TY-B	TY1151	G7530	-	Upright	2.8	Thread Relief	G1 <sup>(1)</sup>	N/A
	TY1251	G7531	-	Pendent	2.8	Thread Relief	G1 <sup>(1)</sup>	N/A
	TY3151	G7570	-	Upright	5.6	Thread Relief	G1 <sup>(1, 2)</sup> , G4 <sup>(2)</sup>	G1/S1 <sup>(1, 2)</sup>
	TY3251	G7571	-	Pendent	5.6	Thread Relief	G1 <sup>(1, 2)</sup> , G4 <sup>(2)</sup>	N/A
	TY4851	G7560	-	Upright	8.0 (1/2" NPT)	Thread Relief	G1 <sup>(1, 2)</sup>	N/A
	TY4951	G7561	-	Pendent	8.0 (1/2" NPT)	Thread Relief	G1 <sup>(1, 2)</sup>	N/A
	TY4151	G7590	-	Upright	8.0 (3/4" NPT)	Thread Relief	G1 <sup>(1, 2)</sup>	G1/S1 <sup>(1, 2)</sup>
	TY4251	G7591	-	Pendent	8.0 (3/4" NPT)	Thread Relief	G1 <sup>(1, 2)</sup>	N/A
	TY3351	G7578	-	HSW	5.6	Thread Relief	G4 <sup>(1, 2)</sup>	N/A
	TY3451	G7575	-	VSW	5.6	Thread Relief	G4 <sup>(1)</sup>	N/A
TY-FRB	TY1131	G7330	-	Upright	2.8	Thread Relief	G1 <sup>(1)</sup>	N/A
	TY1231	G7331	-	Pendent	2.8	Thread Relief	G1 <sup>(1)</sup>	N/A
	TY3131	G7370	-	Upright	5.6	Thread Relief	G1 <sup>(1, 2)</sup> , G4 <sup>(2)</sup>	G1/S1 <sup>(1)</sup>
	TY3231	G7371	-	Pendent	5.6	Thread Relief	G1 <sup>(1, 2)</sup> , G4 <sup>(2)</sup>	N/A
	TY4131	G7390	-	Upright	8.0 (3/4" NPT)	Thread Relief	G1 <sup>(1, 2)</sup>	G1/S1 <sup>(1)</sup>
	TY4231	G7391	-	Pendent	8.0 (3/4" NPT)	Thread Relief	G1 <sup>(1)</sup>	N/A
	TY3331	G7378	-	HSW	5.6	Thread Relief	G4 <sup>(1)</sup>	N/A
	TY3431	G7375	-	VSW	5.6	Thread Relief	G4 <sup>(1)</sup>	N/A
TY-L	TY3111	G3111	S1800	Upright	5.6	Wrench Area	G1 <sup>(2)</sup> , G4 <sup>(1)</sup>	G4/S3 <sup>(1)</sup>
	TY3211	G3112	S1801	Pendent	5.6	Wrench Area	G1 <sup>(2)</sup> , G4 <sup>(1)</sup>	N/A
	TY3311	G3113	S1803	HSW	5.6	Wrench Area	-	N/A
	TY4811	-	S1805	Upright	8.0 (1/2" NPT)	Wrench Area	G4 <sup>(1, 2)</sup>	G4/S3 <sup>(1)</sup>
	TY4911	-	S1806	Pendent	8.0 (1/2" NPT)	Wrench Area	G4 <sup>(1)</sup>	N/A
	TY4111	G3101	S1810	Upright	8.0 (3/4" NPT)	Wrench Area	G4 <sup>(1, 2)</sup>	G4/S3 <sup>(1)</sup>
	TY4211	G3102	S1811	Pendent	8.0 (3/4" NPT)	Wrench Area	G4 <sup>(1)</sup>	N/A
TY-FRL	TY1121	G8973	S1879	Upright	2.8	Wrench Area	G4 <sup>(1)</sup>	N/A
	TY1221	G8971	S1880	Pendent	2.8	Wrench Area	G4 <sup>(1)</sup>	N/A
	TY3121	G8974	S1864	Upright	5.6	Wrench Area	G4 (1, 2)	G4/S3 <sup>(1)</sup>
	TY3221	G7375	S1865	Pendent	5.6	Wrench Area	G4 <sup>(1)</sup>	N/A
	TY3321	G8972	S1878	HSW	5.6	Wrench Area	G4 <sup>(1)</sup>	N/A
		0.0010					0.1 (1.0)	a

1. Listed by Underwriters Laboratories Inc.

2. Approved by Factory Mutual Research Corporation.

G8946

G8174

S1866

S1867

N/A Not Applicable for noted sprinkler. — No SIN, Listing or Approval

TY4121

TY4221

#### TABLE A LABORATORY LISTINGS AND APPROVALS

Upright

Pendent

8.0 (3/4" NPT) Wrench Area

Wrench Area

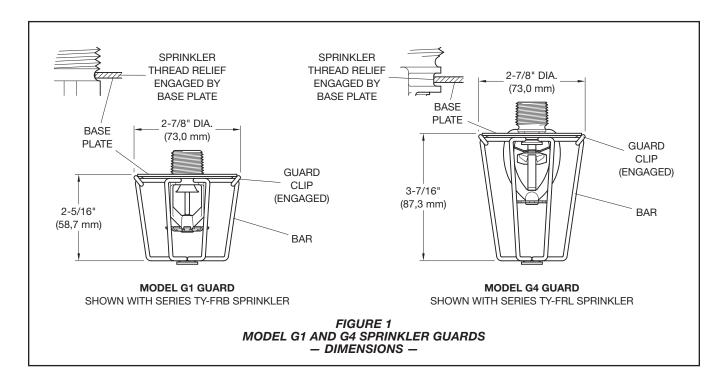
8.0 (3/4" NPT)

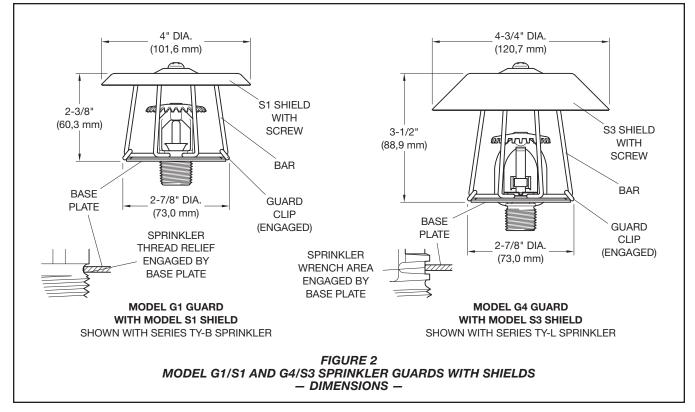
G4/S3<sup>(1)</sup>

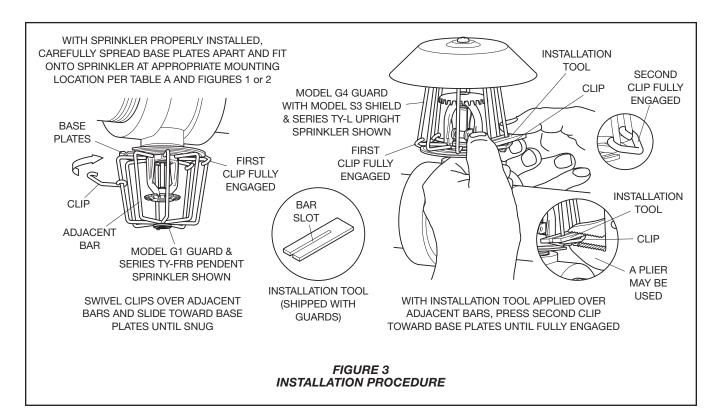
N/A

G4 <sup>(1, 2)</sup>

G4 (1)







## Installation

TYCO Models G1, G4, G1/S1, and G4/S3 Guards must be installed in accordance with the following instructions.

- 1. Install the sprinkler in accordance with the applicable technical data sheet.
- 2. Mount the Model G1, G4, G1/S1, or G4/S3 Guard on the sprinkler.
- 3. With the Clips loose, spread the two halves of the Sprinkler Guard enough to pass by the sprinkler deflector from the side.
- 4. Spread the two halves of the Sprinkler Guard enough to pass over the sprinkler "thread relief" or "wrenching area", as applicable, portion of the sprinkler. Refer to Table A, as well as Figures 1 and 2.
- 5. With the Sprinkler Guard positioned on the "thread relief" or "wrenching area" portion of the sprinkler, as applicable, engage the Clips and then slide the Clips until they seat against the Base, completing the installation as shown in Figures 1 and 2.

To help assist with the sliding of the Clips, use the Guard Installation Tool as shown in Figure 3. Additionally, pliers can be used to facilitate the final seating of the Clips.

#### NOTICE

The Clips must seat against the Base to be fully seated and in order to complete the installation. The Model G1, G4, G1/S1, and G4/S3 Guards may be located in any position relative to the sprinkler frame arms.

## Care and Maintenance

TYCO Models G1, G4, G1/S1, and G4/ S3 Guards do not require any regularly scheduled maintenance; however, proper installation of the Sprinkler Guards should be verified during the annual visual inspection of the sprinklers.

#### NOTICE

Before closing a fire protection system main control valve for maintenance work on the fire protection system that it controls, obtain permission to shut down the affected fire protection system from the proper authorities and notify all personnel who may be affected by this action.

Responsibility lies with sprinkler owners for the inspection, testing, and maintenance of their fire protection system and devices in compliance with this document, as well as with the applicable standards of the National Fire Protection Association (for example, NFPA 25), in addition to the standards of any other authorities having jurisdiction. Contact the installing contractor or sprinkler manufacturer regarding any questions.

Automatic sprinkler systems are recommended to be inspected, tested, and maintained by a qualified Inspection Service in accordance with local requirements and/or national codes.

Owners must assure that the sprinklers are not used for hanging of any objects and that the sprinklers are only cleaned by means of gently dusting with a feather-duster. Otherwise, non-operation in the event of a fire or inadvertent operation may result.

## Limited Warranty

Products manufactured by Tyco Fire Suppression & Building Products (TFSBP) are warranted solely to the original Buyer for ten (10) years against defects in material and workmanship when paid for and properly installed and maintained under normal use and service. This warranty will expire ten (10) years from date of shipment by TFSBP. No warranty is given for products or components manufactured by companies not affiliated by ownership with TFSBP or for products and components which have been subject to misuse, improper installation, corrosion, or which have not been installed, maintained, modified or repaired in accordance with applicable Standards of the National Fire Protection Association, and/or the standards of any other Authorities Having Jurisdiction. Materials found by TFSBP to be defective shall be either repaired or replaced, at TFSBP's sole option. TFSBP neither assumes, nor authorizes any person to assume for it, any other obligation in connection with the sale of products or parts of products. TFSBP shall not be responsible for sprinkler system design errors or inaccurate or incomplete information supplied by Buyer or Buyer's representatives.

In no event shall TFSBP be liable, in contract, tort, strict liability or under any other legal theory, for incidental, indirect, special or consequential damages, including but not limited to labor charges, regardless of whether TFSBP was informed about the possibility of such damages, and in no event shall TFSBP's liability exceed an amount equal to the sales price.

The foregoing warranty is made in lieu of any and all other warranties, express or implied, including warranties of merchantability and fitness for a particular purpose.

This limited warranty sets forth the exclusive remedy for claims based on failure of or defect in products, materials or components, whether the claim is made in contract, tort, strict liability or any other legal theory.

This warranty will apply to the full extent permitted by law. The invalidity, in whole or part, of any portion of this warranty will not affect the remainder.

## Ordering Procedure

Contact your local distributor for availability. When placing an order, indicate the full product name and Part Number (P/N).

#### Model G1 Sprinkler Guard

Specify: Model G1 Sprinkler Guard with (finish), and P/N (below).

Red Painted ..... P/N 56-938-1-001 Zinc Chromate ..... P/N 56-938-9-001

#### Model G4 Sprinkler Guard

Specify: Model G4 Sprinkler Guard with (finish) and P/N (below).

Red Painted ..... P/N 56-937-1-001 Zinc Chromate ..... P/N 56-937-9-001

#### Model G1/S1 Guard with Shield

Specify: Model G1/S1 Sprinkler Guard with Shield, (finish) and P/N (below).

Red Painted ..... P/N 56-938-1-066 Zinc Chromate ..... P/N 56-938-9-066

#### Model G4/S3 Guard with Shield

Specify: Model G4/S3 Sprinkler Guard with Shield, (finish) and P/N (below).

Red Painted ..... P/N 56-937-1-066 Zinc Chromate ..... P/N 56-937-9-066

### Additional\* Guard Installation Tools

Specify: Guard Installation Tool for Model G1 and G4 Sprinkler Guards, P/N (56-000-8-597).

\* The Guard Installation Tool is included with orders in original carton quantities.

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