

GRINNELL G-FIRE Gasket Service Recommendations for Fire Grooved Products

General Description

Gaskets for fire protection services are provided in Pre-lubricated Grade "A" EPDM, Grade "E" EPDM, or Tri-Seal Grade "E" EPDM.

NOTICE

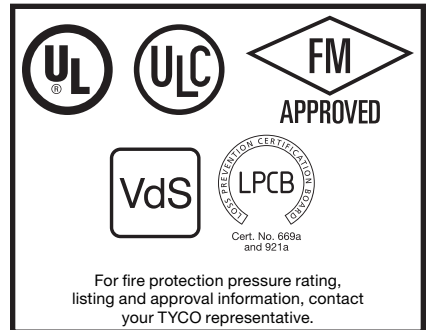
Never remove any piping component nor correct or modify any piping deficiencies without first de-pressurizing and draining the system. Failure to do so may result in serious personal injury, property damage, and/or impaired device performance.

It is the designer's responsibility to select products suitable for the intended service and to ensure that pressure ratings and performance data are not exceeded. Verify material and gasket selection for compatibility with the specific application. Always read and understand the installation instructions.

The properties and applications listed herein are typical. Final selection of gasket material for a specific application should not be undertaken without independent study and evaluation for suitability. Failure to select the proper rubber compound could result in product failure, property damage, or serious personal injury.

Install and maintain the gaskets described herein in compliance with this document, in addition to the standards of any other authorities having jurisdiction. Failure to do so may result in serious personal injury or impair the performance of these devices.

The owner is responsible for maintaining their fire protection system and devices in proper operating condition. Contact the installing contractor or product manufacturer with any questions.



Grade	Temperature Range	Compound	Color Code	General Service Application
"A" Pre-Lubricated	-30° to 150°F (-34°C to 66°C)	EPDM	Violet	Fire Protection Systems; Not recommended for hot water systems
"E"	-30°F to 230°F (-34°C to 110°C)	EPDM	Green	Fire Protection Systems
"E" Tri-Seal	-30°F to 230°F (-34°C to 110°C)	EPDM	Green	Fire Protection Systems; For dry pipe or freezer systems

TABLE 1
GENERAL GASKET SERVICE RECOMMENDATIONS

Technical Data

This section provides technical data for these gaskets:

- Pre-Lubricated Grade "A" EPDM Gaskets
- Grade "E" EPDM Gaskets
- Tri-Seal Grade "E" EPDM Gaskets

Proper pipe end preparation and grooving are mandatory to prevent leakage. For steel and other IPS pipe, refer to Technical Data Sheet TFP1898 for roll and cut groove specifications. The gasket seat surface must be free from score marks, ridges, indentations, projections, loose paint, flaking galvanizing, scale, dirt chips, grease, rust, etc. which would prevent a positive seal.

Pre-Lubricated Grade "A" EPDM Gaskets

Pre-lubricated Grade "A" EPDM Gaskets are provided with a proprietary coating that eliminates the need for installers to apply a lubricant during the assembly process. These gaskets are available as "C" shape style gaskets only.

Sizes

1 to 12 Inch (DN25 to DN300)

Approvals

UL and ULC Listed
 FM Approved

Not UL and ULC Listed for dry pipe systems

Gasket

Pre-Lubricated Grade "A" EPDM Gaskets, Violet color coded, have a temperature rating of -30° to 150°F (-34°C to 66°C) and are rated for fire protection systems.

Grade "E" EPDM Gaskets

Couplings, Mechanical Tees, Figure 40-5 Straps, Figure 71 Flange Adapters, and Figure 716 Reducing Couplings are provided with Grade "E" EPDM Gaskets.

Sizes

1 to 12 Inch (DN25 to DN300)

Approvals

UL and ULC Listed
 FM Approved
 VdS Approved
 LPCB

Gasket

Grade "E" EPDM Gaskets, Green color coded, have a temperature rating of -30°F to 230°F (-34°C to 110°C). For dry pipe and freezer applications, the use of a petroleum-free silicone lubricant is required.

NOTICE

Figure 716 Reducing Couplings, which use Grade "E" EPDM Gaskets, are not recommended for dry pipe and freezer applications.

Tri-Seal Grade "E" EPDM Gaskets

The Tri-Seal Gasket differs from standard gaskets by closing off the gap between the pipes or gasket cavity. This closure is accomplished by positioning the center "rib" of the gasket over the gap between the pipes. The Tri-Seal Gasket has two tapered sealing edges, in addition to the center rib, for additional strength and sealing.

The Tri-Seal Gasket and a rigid coupling such as a GRINNELL G-FIRE Figure 577 Coupling are the best choice for dry-pipe and freezer systems. Such systems are unique applications that benefit from proper pipe preparations, Tri-seal gaskets, and the use of a petroleum-free silicone-based lubricant. Standard lubricant is not recommended for these applications as it may freeze and has reduced lubrication properties at low temperatures.

Sizes

1 to 12 Inch (DN25 to DN300)

Approvals

UL and ULC Listed
 FM Approved

Manufacturing Source

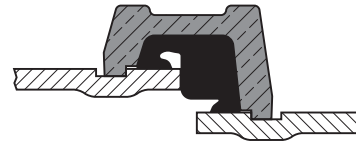
Domestic or Imported

Gasket

Tri-Seal Grade "E" EPDM Gaskets, Green color coded, have a temperature rating of -30°F to 230°F (-34°C to 110°C). These gaskets are used primarily for dry pipe fire protection systems, freezer applications, and vacuum services greater than 10" Hg.



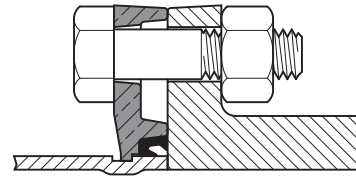
Standard Gasket: The standard style gasket, with a “C” shape configuration, is the most commonly used.



Reducing Coupling Gasket: This gasket is provided with ribs used to position the larger pipe so that the sealing lip is located on the sealing surface of the pipe. This gasket is used only with the GRINNELL Figure 716 Reducing Coupling.



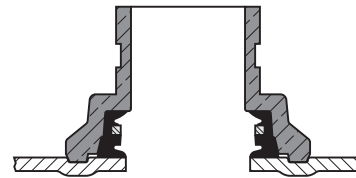
Tri-Seal Gasket: This gasket is designed to close off the gap or gasket cavity. This is accomplished by positioning the center “rib” of the gasket over the gap between the pipes. The tri-seal gasket has two tapered sealing edges in addition to the center rib for additional strength and sealing.



Flange Adapter Gasket: This gasket is specifically designed for use with GRINNELL Flange Adapters. The gasket has an optimal amount of rubber to provide a dependable seal between both the pipe and mating surface.



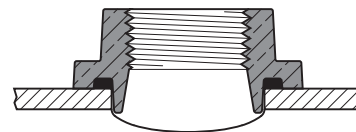
Plain End Coupling Gasket: This gasket is designed for use with all GRINNELL Plain End Couplings.



Outlet Coupling Gasket: This gasket is specifically designed for use with the GRINNELL Figure 702 Outlet Coupling.



Center-Stop, Push-On Style Gaskets: The Grade “EHT” EPDM Center-Stop, Push-On Style Gasket is specially designed for easy installation of the GRINNELL Figures 640 and 740 Pivot-Bolt Coupling.



Mechanical Tee Gasket: This gasket provides a compression type seal, which is designed to conform to the exterior curve (OD) of the pipe. Use this type of gasket ONLY with Figure 730 Mechanical Tees and Crosses.

FIGURE 1
GRINNELL GASKET STYLES

Care and Maintenance

The owner is responsible for the inspection, testing, and maintenance of their fire protection system and devices in accordance with the applicable standards of the National Fire Protection Association (such as, NFPA 25), in addition to the standards of any authority having jurisdiction. Contact the installing contractor or product manufacturer with any questions. Any impairment must be immediately corrected.

Automatic sprinkler systems are recommended to be inspected, tested, and maintained by a qualified Inspection Service.

Limited Warranty

For warranty terms and conditions, visit www.tyco-fire.com.

Ordering Procedure

GRINNELL G-FIRE Products are available globally through a network of distribution centers. For the nearest distributor, visit www.tyco-fire.com.

When placing an order, indicate the full product name. Specify the quantity, figure number, and type of gasket:

- Pre-lubricated Grade "A" EPDM
- Grade "E" EPDM
- Tri-Seal Grade "E" EPDM