

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 or 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.

IMPORTANT

Always refer to Technical Data Sheet TFP700 for the “INSTALLER WARNING” that provides cautions with respect to handling and installation of sprinkler systems and components. Improper handling and installation can permanently damage a sprinkler system or its components and cause the sprinkler to fail to operate in a fire situation or cause it to operate prematurely.

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.

Technical Data

This section provides technical data for these gaskets:

- Standard “C” Shape Pre-Lubricated Grade “A” EPDM Gaskets
- Center-Stop, Push-On 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.

Standard “C” 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.

Sizes

1 to 12 Inch (DN25 to DN300)

Approvals

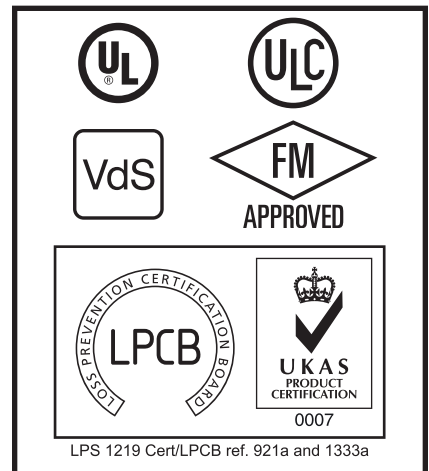
UL and ULC Listed
 FM Approved

NOTICE

Standard C-Shape Grade “A” gaskets are 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 to 66°C).



Grade	Temperature Range	Compound	Color Code	General Service Application
"A" Pre-Lubricated Standard "C" Shape	-30°to 150°F (-34°C to 66°C)	EPDM	Violet	Fire Protection Systems: Not recommended for hot water systems
"A" Pre-Lubricated Center-Stop, Push-On	-30°to 150°F (-34°C to 66°C)	EPDM	Violet	Fire Protection Systems: Can be used for dry pipe or freezer 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 A
GENERAL GASKET SERVICE RECOMMENDATIONS

Center-Stop, Push-On Pre-Lubricated Grade "A" EPDM Gaskets (for Figure 579 couplings only)

Figure 579 couplings are provided with a Pre-Lubricated Grade "A" EPDM Gasket that has a proprietary coating that eliminates the need for installers to apply a lubricant during the assembly process. These gaskets are slightly over-sized for ease of installation and have a center leg that acts as a stop to ensure correct placement of the gasket. They are approved for all types of fire protection systems including dry pipe, freezer applications, and vacuum services greater than 10" Hg.

Sizes
 2 to 8 Inch (DN50 to DN200)

Approvals
 UL and ULC Listed
 FM Approved

NOTICE
For dry pipe and freezer applications, the addition of a petroleum free lubricant is required.

Gasket
 Pre-Lubricated Grade "A" EPDM Gaskets, Violet color coded, have a temperature rating of -30 to 150°F (-34 to 66°C).

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

NOTICE
For dry pipe and freezer applications, the addition of a petroleum free silicone lubricant is required.

Gasket
 Grade "E" EPDM Gaskets, Green color coded, have a temperature rating of -30 to 230°F (-34 to 110°C).

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. These gaskets are used primarily for dry pipe fire protection systems, freezer applications, and vacuum services greater than 10" Hg.

Sizes
 1 to 12 Inch (DN25 to DN300)

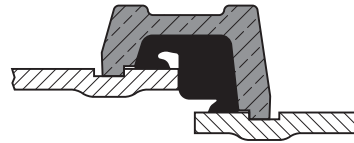
Approvals
 UL and ULC Listed
 FM Approved

Gasket
 Tri-Seal Grade "E" EPDM Gaskets, Green color coded, have a temperature rating of -30 to 230°F (-34 to 110°C).

Dry Pipe and Freezer Applications
 The Center-Stop, Push-On Gasket with the GRINNELL G-FIRE Figure 579 Coupling or the Tri-Seal Gasket with 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, a gasket with a center leg/rib, 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.



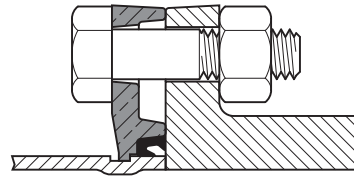
Standard Gasket: The standard style gasket, with a "C" shape configuration, is the most commonly used.



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.



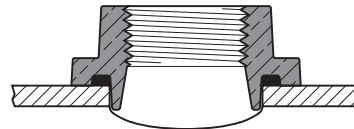
Tri-Seal Gasket: This gasket is designed to close off the gap or gasket cavity. This is accomplished by positioning the center "rib" of the gasket over the gap between the pipes. The tri-seal gasket has two tapered sealing edges in addition to the center rib for additional strength and sealing. This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



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.



Center-Stop, Push-On Style Gaskets: The Grade "A" EPDM Center-Stop, Push-On Style Gasket is specially designed for easy installation of the GRINNELL Figure 579 Coupling. This gasket is suitable for dry pipe and freezer systems.



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
- Center-Stop Push-On Pre-Lubricated Grade "A" EPDM (only available for Figure 579 coupling)
- Grade "E" EPDM
- Tri-Seal Grade "E" EPDM