

## Fast-Grip Gaskets **FT**



### Product Description

American Fast-Grip gaskets have proven to be a superior field-adaptable method of restraining 4"-30" ductile iron pipe or fittings.

The restraint provided by the patented<sup>1</sup> AMERICAN Fast-Grip gasket is due to the development of wedging action between pairs of high-strength stainless steel elements spaced around the gasket. The outer metal element, which has sharp teeth on its inner surface for gripping the spigot, acts as a bearing member for the wedge-shaped inner element.

Because of this wedging design, the force between the spigot and the socket of the joint is essentially constant at any given pressure thrust regardless of the "tightness" or "looseness" of the joint fit or the joint deflection.

The Fast-Grip gasket, which has the same basic shape as AMERICAN's Fastite gasket, can be used in any 4"-30" standard Fastite pipe or fitting socket. It is UL Listed and FM Approved for use in Fastite or Flex-Ring sockets with Fastite plain ends<sup>2</sup> in all sizes 4"-16". The UL Listing and FM Approval apply to all pressure classes and special thickness classes of ductile iron pipe.

In addition to the positive restraint achieved, Fast-Grip gaskets offer ergonomically friendly advantages compared to other restrained joints for fittings and pipe requiring bolts, lugs, segments, wrenches, etc. Joints can easily be assembled with current tools and methods used for many years in the assembly of standard Fastite joints.

<sup>1</sup> U.S. Patent No. 5,067,751.

<sup>2</sup> Because the pressure rating of the joint cannot exceed that of the pipe, the 350 psi rating for 14"-18" sizes and the 250 psi rating for 24" size are limited by the pressure class of pipe with which they are used. For example, an 18" Fast-Grip gasket used with pressure class 250 pipe would carry a rating of 250 psi instead of 350 psi. Consult AMERICAN for higher working pressure applications.

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The Fast-Grip gasket has the same basic shape as AMERICAN's Fastite gasket, so it can be used in any 4"-30" standard Fastite pipe or fitting socket. The gasket rubber is standard Styrene Butadiene Rubber (SBR), which meets all the material requirements of ANSI/AWWA C111/A21.11. SBR rubber gaskets are ANSI/NSF Standard 61 certified for contact with potable water.

Gaskets made of SBR are standard with all joint types. Consult AMERICAN for information or recommendations on gaskets made of special types of rubber, for applications involving air or liquid temperatures in excess of 150° F, or for chemical, hydrocarbon or other special service applications, and for installations in contaminated soils where permeation through gaskets might be a concern.

In the table below, temperature capability refers to conveyed fluid. **Lubricating oil in air can adversely affect SBR and EPDM performance. SBR, Nitrile and Neoprene are not recommended for hot air exposure in wastewater treatment systems.**

All gaskets made from the materials as shown are suitable for use with water containing normal concentrations of chloramine. Where increased resistance to chloramine is desired, neoprene or fluoroelastomer materials should be considered. Consult AMERICAN.

Common Name or Trade Name <sup>1</sup>	Chemical Name	Common Uses	Maximum Service Temperature <sup>2</sup> (°F)	
			Water & Sewer	Air
Plain Rubber	Styrene Butadiene Copolymer(SBR)	Fresh Water, Salt Water Sanitary Sewage	150	150
EPDM	Ethylene Propylene Diene Monomer	Water, Sewage, Ketones, Dilute Acids and Alkalies, Vegetable Oil, Alcohols, Air	212	200
Neoprene	Polychloroprene(CR)	Fresh Water, Sewage	200	180
Nitrile Buna-N	Acrylonitrile Butadiene(NBR)	Non-Aromatic Hydrocarbons, Petroleum Oil, Hydraulic Fluids,	150	150

Common Name or Trade Name <sup>1</sup>	Chemical Name	Common Uses	Maximum Service Temperature <sup>2</sup> (°F)	
			Water & Sewer	Air
		Fuel Oil, Fats, Oil, Grease <sup>4</sup>		
Fluoroelastomer Fluorel Viton® <sup>3</sup>	FKM	Aromatic Hydrocarbons, Gasoline, Refined Petroleum Products, most Chemicals and Solvents, High Temp., Air (Least permeable of all available Fastite gasket rubbers)	212	300

<sup>1</sup> AMERICAN reserves the right to furnish any trade or brand rubber for the chemical formulation specified.

<sup>2</sup> Temperature is in reference to conveyed fluid. Lubricating oil in air can adversely affect SBR and EPDM performance. SBR, Nitrile and Neoprene are not recommended for hot air exposure in wastewater treatment systems.

<sup>3</sup> Viton® is a registered trademark of DuPont Dow Elastomers.

<sup>4</sup> This gasket rubber is chemically resistant in the non-potable water uses shown but is not as resistant to permeation in potable water applications as FKM.

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Fast-Grip gaskets are suitable for an allowable working pressure of 350 psi for 4"-18" pipe and 250 psi for 20" and 24" sizes. The 30" size is suitable for a 150 psi working pressure. The joint has a maximum allowable deflection of 5° in the 4"-12" size range, 4° in the 14" size range, 3° in the 16"-24" size range, and 2 1/2° in the 30" size range.

Because the pressure rating of the joint cannot exceed that of the pipe, the 350 psi rating for 14"-18" sizes and the 250 psi rating for 24" size are limited by the pressure class of pipe with which they are used. For example, an 18" Fast-Grip gasket used with pressure class 250 pipe would carry a rating of 250 psi instead of 350 psi. Consult AMERICAN regarding higher working pressure applications.