

DPS SUBMITTAL - Gasket Overview

Dresser Compounded Rubber Gaskets

Pipe joints must be able to absorb pipe stress caused by natural forces and allow for expansion, contraction, vibration and deflection while the line is in service.

The sealing capabilities and extreme flexibility of a Dresser coupled joint is made possible by the resilience of the rubber-compounded gaskets. Resiliency is the property that enables the gaskets to maintain pressure against the followers that confine it and, at the same time, allow for flexibility not found in rigid piping connections. Without it, a flexible joint is not possible! Simply put, the absorption of pipeline stress permits each section of the pipeline to “float” in the joint ensuring a flexible piping system. The information below is provided as a general review of various gaskets available when installing Dresser products.

BUNA-S Grade 27 (Styrene) Max. Temp. 212°F¹

The compound most generally used for plain gaskets is BUNA-S styrene rubber. This gasket has wide applications and is accepted as standard for most pipeline use. It is recommended for use on lines transporting both fresh water and salt water, natural and other gases, air, most acids, alkaline and sugar solutions and some refrigerants.

BUNA-N Grade 42 (Nitrile) Max. Temp. 212°F¹

BUNA-N gaskets are resistant to oil, most aromatic and aliphatic hydrocarbons, natural gas fogging oil, condensates and gasoline.

Armored® Gaskets

Armored gaskets can be used to great advantage where low electrical-resistant joints are desired. The armor “bites” into the pipe providing metal to metal contact allowing easy passage of current where cathodic protection is a necessity.

The armor—an elastic, practically indestructible brass coil or helix—is molded into the gasket tip becoming an integral part of the gasket. When used with the proper grade/compound rubber, the armor shields the gasket material from the line content without interfering with the sealing efficiency of the gasket.

Butyl - Max. Temp. 250°F; PSI to middle ring yield strength.

Butyl gaskets are resistant to hot air service, steam, hot water and miscellaneous aqueous solutions. They are also suitable for vegetable oils, organic chemicals, oxidizing acids and alkalies.

EPDM - Max. Temp. 300°F; MAX PSI: 250

EPDM gaskets provide excellent resistant to aging factors such as ozone, oxygen and elevated temperatures. This includes service in hot water, steam and dry heat. They are also suitable for handling popular chemicals such as ketones, alcohols, phosphate ester hydraulic fluids, glycols, vegetable oils, inorganic salt solutions, diluted acids and alkalies.

VITON* (Fluorocarbon) Max. Temp. 350°F; MAX PSI: 100

Fluorocarbon gaskets are resistant to hydrocarbons, aromatic hydrocarbons, alcohols, organic acids, nitrogen-containing compounds, vegetable oils and greases.

High Temperature - Max. Temp. 1200°F; NO PSI RATING

These braided, flexible gaskets are designed specifically for high temperature and abrasive atmospheres associated with services such as fly ash handling systems. As a replacement for asbestos, these gaskets are manufactured of a pure homogenous graphite bonded to a fiberglass carrier for strength and thermal durability. The braid over braid construction is die-formed and cut to length to fit proper coupling configurations resulting in a uniform tolerance which has proven itself as a reliable asbestos replacement.

Note: The non-resilient characteristic of this particular gasket material may result in a non leak-proof seal. This should be taken into consideration for this application.

WARNING: Temperature recommendations are for reference purposes only. Please consult Dresser Inside Sales for specific recommendations, product style, line content, working pressure and temperature ranges.

¹NOTE: For Dresser Styles 65, 88 and 90 compression fittings, the maximum Temperature is 150°F

*VITON is a registered trademark of Dupont.

GASKET GRADE	TYPE RUBBER	MAXIMUM TEMP	MAXIMUM PSI	MOLD PAINT CODE	SHORE A DUROMETER
27 (Spec 35)	SBR - BUNA-S	212°F ¹	Per Prod. Spec	White	75 ± 5
29 - Spec 328	SBR - BUNA-S	212°F	Per Prod. Spec	Light Green	70 ± 3
41	Natural	212°F	Per Prod. Spec	Dark Green	75 ± 5
42	BUNA-N Nitrile	212°F ¹	Per Prod. Spec	Yellow	75 ± 5
169	Butyl	250°F	Per Prod. Spec	Blue	75 ± 5
199	EPDM	300°F	250 PSI	Light Gray	75 ± 5
224	Fluorocarbon (VITON*)	350°F	100 PSI	Brown/Tan	75 ± 5

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