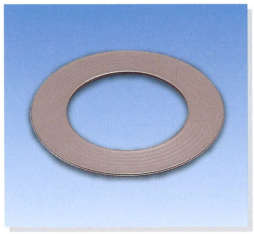
Semi Metallic Gasket

Semi-metallic gaskets are gaskets that combine metallic materials with non-metallic materials such as expanded graphite and millboard. Using cushion of composite material, we have both heat resistance close to that of metal gasket and high sealability. Expanded graphite coated metal corrugated gaskets and metal jacketed gaskets are available and are used in a very wide industrial fields range.

Pillar No. 1200G-H Expanded Graphite Coated Metal Corrugated Gasket

Pillar No.1200G-H is a gasket with a structure in which both surfaces of a metal plate (316L or equivalent) and the one subjected to corrugated (corrugated) are laminated with a PILLARFOIL® sheet. It has many excellent features such as high sealability at low tightening, high compression amount, and high followability respecting equipment precision.



Specifications

- Operating temperature ··· -200 ℃~+450℃ (In the case of oxidizing atmosphere, ~ 400℃)
- Max. pressure ··· 5.2MPaG (Class 300)

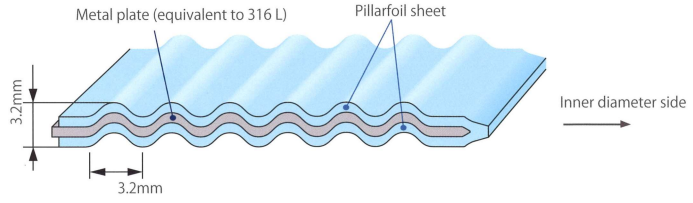
Main applications

Pipe flange / valve bonnet used for high temperature steam, oil etc.

Design specifications

Min. designed tightening stress y(N/mm²)	25.5
Gasket factor m	2
Min. tightening stress Y(N/mm²)	39.2※

※"Y" indicates the necessary minimum tightening stress which takes account of the contact area of the gasket.



Structure of Pillar No. 1200 G-H

※Please contact us for enquiries regarding 1.6 mm thickness lineup.

Semi Metallic Gasket

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Metal Jacket Gasket

The metal jacket gasket is a semi-metallic gasket in which the outer side of the mill board material, heat resistant thread etc., is covered with a thin metal plate. It can also cope with complicated plane shape and large diameter. Metal jacketed gasket with a superior sealing performance, surface treated with Pillarfoil is availabe.

● Cross-sectional shape of metal jacket gasket · List of metal materials

Metal jacket gaskets are characterized by their coated metallic materials. The gasket characteristics of each material are shown in the table below.

	Material		Pillar No.	Flange surface roughness(μmRa)	Max. temp. (℃)	Max. pressure (MPaG)	Min. designed tightening stress y(N/mm²)	Gasket factor m
Standard goods	Stainless steel	304 or equivalent	E	1.6	530	4.9	62.1	3.75
		316 or equivalent	G					
	Non ferrous Metal	Copper	C		400		44.8	3.50
	Carbon steel	Extreme mild steel	S		530		52.4	3.75
Nonstandard goods	Stainless steel	304L or equivalent	L				62.1	3.75
		316 or equivalent	H					
		316L or equivalent	F					
	Non ferrous metal	Aluminum	A		400		37.9	3.25
Pillarfoil application (1650/1654)				6.3	※530	9.8	39.2	3.00

※400 ℃ in case of oxidizing atmosphere

Number Display Method

Pillar Number **1050 C - E**

Product No. | Shape symbol | Metal material code

Pillar No.	1050	1054	1056	1150	1650	1654
Name	Single coating	Double coating	Corrugated coating	Round coating	Single coating with Pillarfoil	Double coating with Pillarfoil
Shape						
Standard core	Millboard	Millboard	Millboard	Heat resistant yarn	Millboard	Millboard
Surface material	None	None	None	None	Pillarfoil	Pillarfoil

Cover metal material		
	Code	Material
Standard goods	E	304 or equivalent
	G	316 or equivalent
	C	Copper
	S	Extreme mild steel

(Note) Please consult us in case of using special core materials other than the combinations above .

● Planar shape and shape symbol