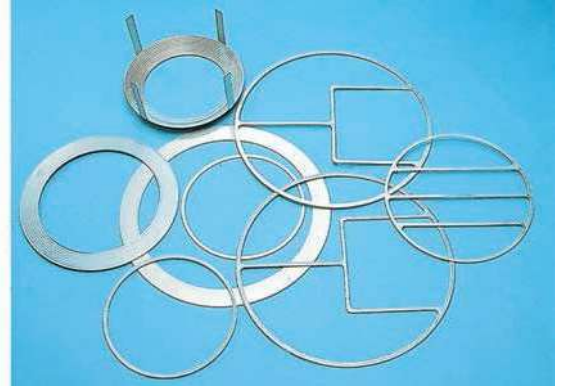


METAL JACKETED GASKETS

A highly heat resistant core is completely covered with a thin metal jacket.

Double jacket type as per diagram below is standard, but other jacketing methods are also available.

These gaskets are used for heat exchangers, pressure vessels, tanks, equipment, valves, high-temperature joint flanges, and so on.



Types

TOMBO No.	Product name	Cross section ⁽¹⁾	Core material	Standard thickness mm	Maximum service temperature ⁽²⁾ °C	Maximum service pressure MPa
1841	NA Metal Jacketed Gasket		Non-asbestos mill board	3.0	530	6.0
1841-Fi	NA Metal Jacketed Gasket for High-temperature applications		Ceramic fiber felt	3.0	1300	
1861	NA Corrugated Metal Jacketed Gasket		Non-asbestos mill board	3.0	530	
1861-Fi	NA Corrugated Metal Jacketed Gasket for High-temperature applications		Ceramic fiber felt	3.0	1300	

Notes: (1) Other types of gaskets with different cross section are also available upon request.

(2) Indicates the heat resistance of the core. The values may become lower, depending on the jacket metal material.

⚠ Cautions

- (1) The use of expanded graphite tape (TOMBO No. 1220 or TOMBO No. 1221) on the sealing surface is recommended for more reliable sealing performance at temperatures of 400°C and below. High-temperature gasket paste (Never Seize® nickel special grade) is recommended at temperatures higher than 400°C.
- (2) Metal Jacket Gaskets are not recommended for standard pipe flanges because it is difficult to obtain enough seating stress. However, if used even so, gaskets with hangers are recommended for centering.

■ Metal types and available dimensions

Metal type ⁽³⁾	Material code	Old material code	Maximum service temperature °C	Maximum dimensions ⁽⁴⁾ mm
Carbon steel	S	SS	535	1480
Type 304 stainless steel	E	304	800	1180
Type 316 stainless steel	G	316	800	1180
Type 310S stainless steel	V	310S	1150	1180
Aluminum	A	Al	400	980
Copper	C	Cu	400	1180
Monel	M	M	800	890

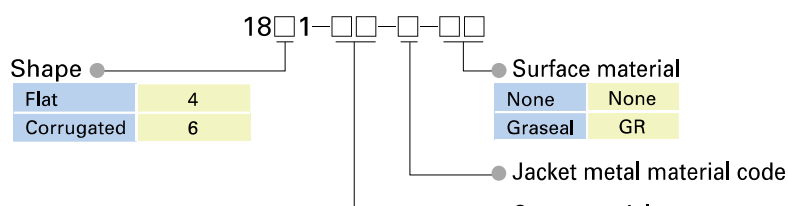
Notes: (3) Other metal materials are also available upon request.

(4) Indicates the maximum diameter that can be fabricated in one piece without welding. For larger sizes, welded types are also available.

■ Applicable standards

ASME B16.20 Jacketed Gaskets

■ Indications

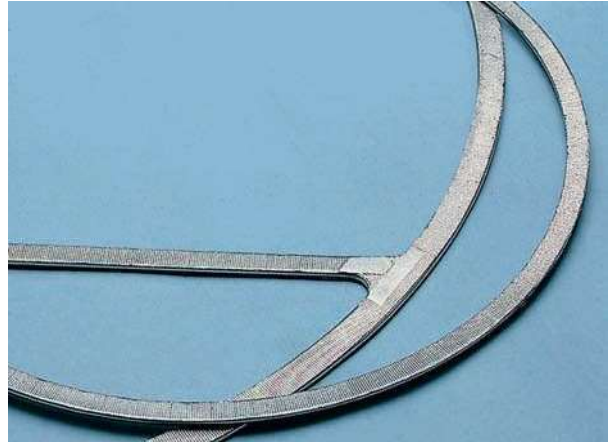


METAL JACKETED GASKETS

Metal Jacketed Gaskets with GRASEAL™ Tape

Expanded graphite tape is adhered to the surface of gaskets.

When ordering, please add the code of "GR" to the end of products number as an indication of surface material.

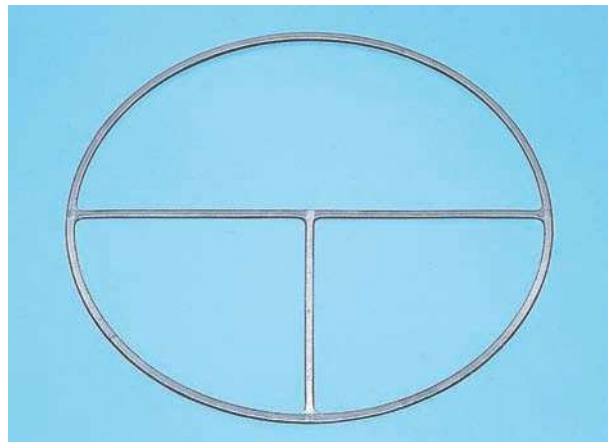


Heat Exchanger Gasket

We manufacture gaskets for heat exchangers in various shapes. Please specify gasket shapes and dimensions based on the drawings and codes shown on the next page.

The folded face of the gasket should touch the bottom of the groove on the flange.

If the gasket is installed upside-down, the gasket may not fit with the partition or the sealing performance of the gasket may decrease.



Standards for designing dimensions

For flat gaskets (TOMBO No. 1841, etc.)

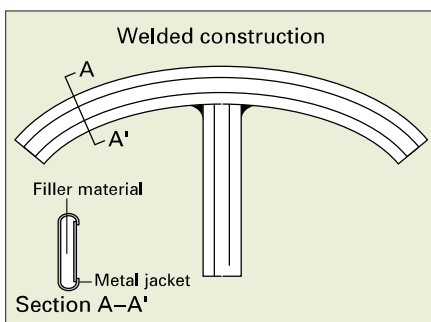
1. The rib width (W) must be 7mm or over.
2. The corner radius (R) must be 8mm or over.

For corrugated type gaskets (TOMBO No. 1861, etc.)

1. The gasket width (N) must be 15mm or over.
2. The rib width (W) must be 7mm or over. (Ribs cannot be provided with corrugation.)
3. The corner radius (R) must be 8mm or over.

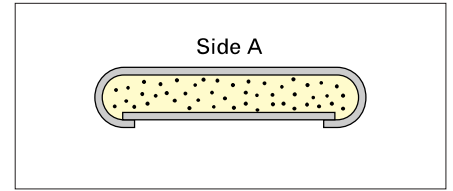
In some cases, gasket may be supplied with welded pass ribs. (Please refer sketch below.)

Welded pass rib does not affect sealing performance.



Heat Exchanger Gasket Standard Shape Codes

Please indicate the shape code and dimensions when ordering.
This shape is top view from Side A of right diagram.



Heat Exchanger Gasket Standard Shape Codes

[HE1] 	[HE2] 	[HE3] 	[HE4] 	[HE5]
[HE6] 	[HE7] 	[HE8] 	[HE9] 	[HE10]
[HE11] 	[HE12] 	[HE13] 	[HE14] 	[HE15]
[HE16] 	[HE17] 	[HE18] 	[HE19] 	[HE20]
[HE21] 	[HE22] 	[HE23] 	[HE24] 	[HE25]
[HE26] 	[HE27] 	[HE28] 		