Gasket for high temperatures application CLINSIL NEXT[™] TC

G-T-302rev2

TOMBO™ No.1155

A sheet gasket that exhibits stable and high sealing performance for a long period of time at high temperatures.

Product features

1) Excellent heat resistance

TOMBO No.1155 demonstrates stable sealing performance even under hot conditions. Stable sealing performance can be obtained even at 300°C.

2) Excellent compression breakage characteristics

TOMBO No.1155 is a gasket that has high strength and is extremely unlikely to be damaged by excessive tightening.

3) Excellent handling

Since TOMBO $\[Mathbb{M}\]$ 1155 does not use a thermosetting material such as rubber, it does not easily stick and can be retightened.

■Sealing performance at high temperature (200°C)

TOMBO No.1155 has a small decrease in surface pressure even at high temperatures and leakage is unlikely to occur over the long term.



Compression breakage test result

Compared to other companies' products, TOMBO No.1155 does not break even when tightened with a high load.

	Seating stress[N/mm ²]						
	68.6 (σ ₃ ×2.0)	85.8 (σ ₃ ×2.5)	102.9 (σ ₃ ×3.0)				
TOMBO No.1155 (PTFE-based high-temperature sheet gasket)	No Breakage	No Breakage	No Breakage				
Competitor A	No Breakage	Cracking	Cracking				

[Test condition] •Flange : JPI300Lb×1/2B(SO) •Gasket : thickness3.0mm • No washer •Seating stress : Min. seating stress of gas seal(σ_3 = 34.3N/mm²) with safety factor (×2~×3) •Paste : No





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■ 310°C thermal cycle seal test result

TOMBO No.1155 has extremely high heat resistance, so it does not easily leak even at 300°C.



Cycle

[Test condition] · Sample dimension : JIS10K 25A **3.0t** · Flange : JIS10K 25A-RF, ·Initial seating stress : 34.3N/mm² •Temp. Pressure : N₂ gas, 0.98MPa •Seal test method : Pressure drop •Heating temperature : 310° ×18 hrs. 10 cycles

Recommended Service range · Fluid

Service temperature : - 2 0 0 \sim 3 0 0 $^{\circ}$

Service pressure : \sim 3 . 5 M P a

Pressure [MPa]	4	- Water type fluid - Oil type fluid	Fluid	TOMBO N0.1155	
		Gas type fluid	Water / oil / alcohol		
	3		Organic solvent		
			Cryogenic	Usable	
	2		Flammable gas	USable	
			Inert gas / Non-		
			flammable gas		
	-200 -29 0 100 200	300	Alkali/acid	Can be used depending on conditions. Please inquire for details.	
	Temperature [°C]		L I		

Design criteria

Gasket thickness	Max. outer diameter	Gasket coefficient	Min. design seating stress y	Min. seating stress [N/mm ²]		Allowable seating
[mm]	[mm]	m [N/mm²]	[N/mm ²]	Water/oil type fluid	Gas type fluid	stress [N/mm²]
1.5	1,250	2.75	25.5			
2.0	1,250	2.75	25.5	14.7	34.3	150
3.0	1,250	2.00	11.0			

A Product handling precautions

• Do not use for fluids and toxic gases that attack PTFE.(Melted alkali metal, high temperature fluorine, chlorine trifluoride, etc.)

Do not incinerate as toxic gas is generated.

• For other precautions, refer to the catalog "TOMBO Brand Gasket".



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Precautions regarding the catalog 1. Do not use for any purpose other than those listed in this

catalog. 2. Even for the applications listed in this catalog, the condition: may differ when actually using it. It is recommended to carry out a actual condition confirmation test.

3. The contents are subject to change without notice.

Contact

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