

Specification

Klinger Graphite Laminate Type PSM...

with tang stainless steel insert

Typical values			PSM...A	PSM...B	PSM...C
Density of graphite	g/cm ³		1.0 ± 5%	1.0 ± 5%	1.0 ± 5%
Ash content, DIN 51903	%		max. 0.2	max. 2	max. 2
Leachable chloride content	ppm		max. 20	max. 40	max. 50
Sulfur content	ppm		max. 600	max. 800	max. 1100
Tang insert	Thickness	mm	0.1		
	Quality		AISI 316		
	Number of insert		1		
Stress relaxation DIN 52913 (300°C, 50MPa)	MPa		min. 48		
Gasket factors DIN 28090-1 (Specimen width 10mm)					
S _{vu}	MPa		25		
S _{vo}	MPa		180		
S _{BO} (300°C)	MPa		140		
Deformation factors DIN 28090-2 (Specimen width 10mm)					
Compressibility	e _{KSW}	%	31 - 33		
Recovery	e _{KRW}	%	4.9 - 5.1		
Creep compression at elevated temperatures	e _{WSW}	%	1.1 - 1.2		
Recovery at elevated temperatures	e _{WRW}	%	4.2 - 4.3		
Recovery	R	mm	0.064 - 0.066		
Continuous service temperature	°C		max. 450	max. 450	max. 350
Thicknesses	mm		0.60, 0.80, 1.00, 1.50, 2.00, 3.00		
Thickness tolerance	%		± 5% of nominal thickness		
Dimensions	mm		1000 x 1000	1000 x 1000	1000 x 1000
			1000 x 2000	1000 x 2000	1000 x 2000
			1500 x 1500	1500 x 1500	1500 x 1500
Sheet tolerance	mm		± 5 mm of nominal size		

Typical value at 1.5mm thickness.

Other thicknesses and sizes on request.

Anti-stick coating (AS)

The foils and sheets mentioned above are available with Klinger antistick, a coating which keeps its stability even at high temperature and causes no organic contamination of the pure graphite.

Klinger hot and cold compression test method

The Klinger hot compression test was developed by Klinger as a method to test the load bearing capabilities of gasket materials under hot and cold conditions. In contrast to the BS7531 and DIN52913 tests, the Klinger compression test maintains a constant gasket stress throughout the entire test. This subjects the gasket to more severe conditions.

The thickness decrease is measured at 25°C after applying the gasket load. This simulates assembly. Temperature up to 400°C are then applied and the additional thickness decrease is measured. This simulates the first start up phase.

