KLINGER[®] Graphite Laminate SLF



KLINGER[®]Graphite Laminate SLF the quality material for many gasket applications.

Comprising two layers of flexible graphite and an 0.3 mm high-temperature resistant graphite and fiberbased insert, this material combines easy handling with superior long-term sealing performance. Compliant with the German Technical Instructions on Air Quality Control (TA Luft), this graphite gasket is the ideal choice for applications demanding minimal fugitive emissions.



Basis composition	Two layers of flexible graphite and a 0.3 mm thick high-temperature resistant graphite and fiber-based insert.			
Color	Grey			
Certificates	TA-Luft (Clean air)			

Sheet size	1000 x 1500 mm
Thickness	1.5 mm, 2.0 mm
Tolerances	
Thickness:	± 5 %
Length:	± 5 mm
Width:	± 5 mm

Industry

General industry / Chemical / Oil & Gas / Energy / Pulp & Paper / Marine / Automotive

TECHNICAL DATA - Typical values for a thickness of 2.0 mm

Density of the graphite layer	DIN 28090-2	g/cm ³	1.0
Purity of graphite	DIN 51903	%	> 99
Graphite and fibre based insert	Thickness	mm	0.3
	Number of sheets		1
Compressibility	ASTM F 36 A	%	40
Recovery	ASTM F 36 A	%	14
Compression creep DIN 52913	16 h/ 50 MPa/ 300°C	MPa	≥40
KLINGER cold/hot compression 50 MPa	Thickness decrease at 23°C	%	42
	Thickness decrease at 300°C	%	10
Specific leak rate	DIN 28090-2	mg/(s x m)	0.05
Chloride content of graphite layer	DIN 28090-2	ppm	≤ 40



P-T diagram - thickness 2.0 mm



The area of the P-T diagram

- (1) In area one, the gasket material is normally suitable subject to chemical compatibility.
- (2) In area two, the gasket material may be suitable but a technical evaluation is recommended.
- (3) In area three, do not install the gasket without a technical evaluation.
 - Always confirm the chemical resistance of the gasket to the media.

Chemical resistance chart

Simplified overview of the chemical resistance depending on the most important groups of raw materials:

KLINGER [®] Graphite Laminate SLF					A: small or no attack		B: weak till moderate attack			C: strong attack	
Paraffinic hydrocarbon	Motor fuel	Aromates	Chlorinated hydrocarbon fluids	Motor oil	Mineral lubricants	Alcohol	Ketone	Ester	Water	Acid (diluted)	Base (diluted)
Α	Α	В	В	Α	Α	Α	В	В	Α	В	В

For more information on chemical resistance please contact us

All information is based on years of experience in production and operation of sealing elements. However, in view of the wide variety of possible installation and operating conditions one cannot draw final conclusions in all application cases regarding the behaviour in gasket joint. The data may not, therefore, be used to support any warranty claims. This edition cancels all previous issues. Subject to change without notice.

Certified acc. to DIN EN ISO 9001:2015 Subject to technical alterations. Status: April 2020



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