

KLINGER® Graphite Laminate PSM

KLINGER® Graphite Laminate PSM is suitable for hot water and steam at high temperatures up to 450°C.

Glueless gasket material consisting of expanded graphite and a 0.1mm thick tanged stainless steel insert. The material is free from resins, impregnations or other organic compounds. Therefore it is free of eventual toxic risks. Stable physical properties over the whole temperature range.



Key features:

- » Mechanically bonded tanged stainless steel insert
- » Free of organic resins or toxic risks
- » Excellent chemical resistance
- » Excellent high temperature resistance

Benefits:

- » Stable physical properties over the whole temperature range
- » Provides excellent adaptability to any sealing surface
- » Very good tightness
- » Suitable for steam up to 450°C

Certificates and approvals:

- » DIN-DVGW
- » KTW
- » Fire Safe acc. to DIN EN ISO 10497
- » German Lloyd
- » BAM tested

Properties: referring to Graphite product range

SUPERIOR	_____			
EXCELLENT	█	█	█	█
VERY GOOD	█	█	█	█
GOOD	█	█	█	█
MODERATE	█	█	█	█
	MECHANICAL RESISTANCE	THERMAL RESISTANCE	SEALABILITY	CHEMICAL RESISTANCE

Industries:



Typical technical data for KLINGER® Graphite Laminate PSM:

			1.0 mm	1.5 mm	2.0 mm
Density of the graphite layer	DIN 28090-2	g/cm ³	1.0	1.0	1.0
Purity of graphite ¹⁾	DIN 51903	%	≥ 99.0	≥ 99.0	≥ 99.0
Metallic reinforcement	Tanged metal		1.4401 (or 1.4404)		
	Thickness	mm	0.10	0.10	0.10
	Number of sheets		1	1	1
Compressibility ASTM F36 J	ASTM F36 J	%	25 - 35	30 - 40	35 - 45
Recovery ASTM F36 J	ASTM F36 J	%	15 - 20	15 - 20	12 - 18
Stress relaxation DIN 52913	16 h/ 50 MPa/ 300°C	MPa	≥ 46	≥ 46	≥ 46
Klinger cold/hot compression 50 MPa	Thickness decrease at 23°C	%	30 - 40	35 - 45	35 - 45
	Thickness decrease at 300°C	%	1 - 3	1 - 3	1 - 3
Specific leakrate λ	DIN 28090-2	mg/ s x m	< 0.06	< 0.10	< 0.10
Chloride content of graphite layer ²⁾	DIN 28090-2	ppm	≤ 40	≤ 40	≤ 40

1) Nuclear quality with a purity of ≥99.8 available on request

2) Detailed specifications of the used graphite foils are found in our Graphite vade mecum, which will be sent to you on request with pleasure

Dimensions of the standard sheets:

Sizes:

1000 x 1000 mm, 1500 x 1500 mm, 2000 x 1000 mm

Thicknesses:

0.8 mm, 1.0 mm, 1.5 mm, 2.0 mm, 3.0 mm

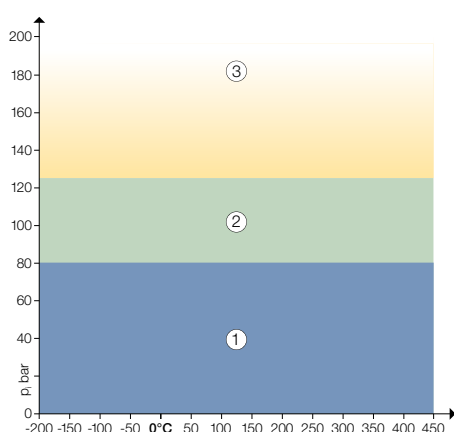
Tolerances:

Thickness ± 5%

Length ± 4 mm, width ± 4 mm

Other thicknesses, sizes and inserts on request.

pT diagram for thickness 2.0 mm:



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 refer to the chemical resistance of the gasket to the media.

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