

KLINGER® Graphite Laminate PDM

KLINGER® Graphite Laminate PDM is suitable for high-pressure applications, hot water and steam at high temperatures up to 450°C.

Glueless gasket material consisting of expanded graphite and two 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:

- » 2 mechanically bonded tanged stainless steel inserts
- » Free of organic resins or toxic risks
- » Excellent chemical resistance
- » Excellent high temperature resistance

Benefits:

- » Stable physical properties over the whole temperature range
- » Very good tightness
- » Suitable for high pressure applications

Certificates and approvals:

- » DIN-DVGW

Properties: referring to Graphite product range

SUPERIOR	[Shaded]			
EXCELLENT	[Shaded]	[Shaded]	[Shaded]	[Shaded]
VERY GOOD	[Shaded]	[Shaded]	[Shaded]	[Shaded]
GOOD	[Shaded]	[Shaded]	[Shaded]	[Shaded]
MODERATE	[Shaded]	[Shaded]	[Shaded]	[Shaded]
	MECHANICAL RESISTANCE	THERMAL RESISTANCE	SEALABILITY	CHEMICAL RESISTANCE

Industries:



INDUSTRY

CHEMICAL

OIL & GAS

ENERGY

INFRASTRUCTURE

PULP & PAPER

TRANSPORT

 FOOD &
BEVERAGES

PHARMA

Typical technical data for KLINGER® Graphite Laminate PDM:

			1.0 mm	1.5 mm	2.0 mm
Density of the graphite layer	DIN 28090-2	g/cm ³	1.3	1.3	1.3
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		2	2	2
Compressibility ASTM F36 J	ASTM F36 J	%	15 - 25	15 - 25	15 - 25
Recovery ASTM F36 J	ASTM F36 J	%	35 - 45	35 - 45	35 - 45
Stress relaxation DIN 52913	16 h/ 50 MPa/ 300°C	MPa	≥ 48	≥ 48	≥ 48
Klinger cold/hot compression 50 MPa	Thickness decrease at 23°C	%	20 - 28	20 - 28	20 - 28
	Thickness decrease at 300°C	%	1 - 3	1 - 3	1 - 3
Specific leakrate λ	DIN 28090-2	mg/ s x m	< 0.08	< 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, 2000 x 1000 mm, 1500 x 1500 mm

Thicknesses:

1.0 mm, 1.5 mm, 2.0 mm, 3.0 mm

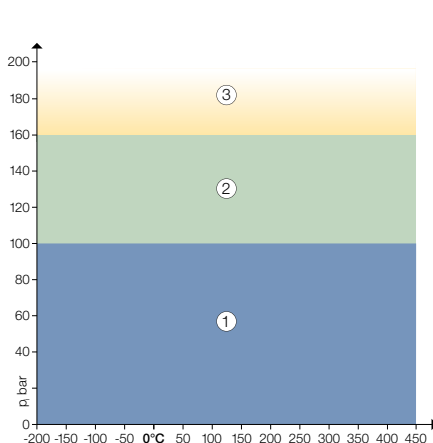
Tolerances:

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.

All information and recommendations contained in this data sheet are to the best of our knowledge correct. Since conditions of use are beyond our control, users must satisfy themselves that the products are suitable for the intended processes and uses. No warranty is given or implied in respect of information or recommendations or that any use of products will not infringe rights belonging to other parties. In any event or occurrence our liability to our invoice value of the goods delivered by us to you. We reserve the right to change product design and properties without notice.

Certified acc. to DIN EN ISO 9001:2008 Subject to technical alterations. Status: June 2016





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