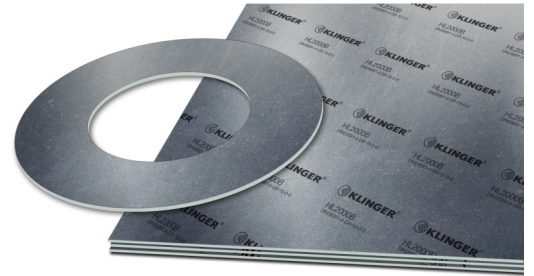


# KLINGER® Graphite Laminate HL

Graphite laminate sheet without reinforcement

KLINGER® Flexible Graphite HL is a homogeneous sheet made from flexible graphite foil layers. HL is the standard industrial grade graphite sheeting with superior chemical resistance. The flexible graphite material is highly compressible and compactable allowing for low gas permeability with low electrical resistance. The grade is especially superior working with enamel surface as well as against strongly corrosive media.



In order to prevent the gasket material from sticking to the flange surface (even at high temperatures), the graphite surface can be given a non-stick coating at the customer's request. With this process, the gasket material's surface is coated and not impregnated.

## TYPICAL VALUES REFER TO 2.0 MM THICK MATERIAL UNLESS NOTED

Density DIN28090-2	1.0 g/cm <sup>3</sup>
Purity of Graphite DIN 51903	≥ 99.0 %
Compressibility ASTM F36A	40 - 50 %
Recovery ASTM F36A	8 - 15 %
Creep relaxation DIN 52913 16h/50 MPa/300°C	≥ 46 MPa
KLINGER cold/hot compression 50 MPa	
Thickness decrease at 23°C	35 - 50 %
Thickness decrease at 300°C	2 - 5 %
Specific leak rate DIN 28090-2	< 0.10 mg/s x m
Chloride content of graphite layer DIN 28090-2	≤ 50 ppm
Color	Grey
Non-stick coating	Upon request

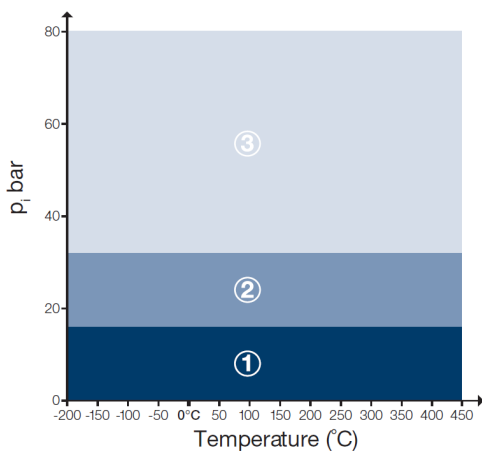
## KLINGER® Graphite Laminate HL

### KEY FEATURES AND BENEFITS

- » Standard Industrial Grade Graphite
- » Superior Chemical Resistance
- » Highly Compressible & Compactible
- » Low Gas Permeability
- » Low Electrical Resistance

The pressure/temperature graphs shown are the most current method of determining the suitability of a gasket material in a known environment. However, chemical compatibility must also be considered.

pT diagram for thickness 2.0 mm:



In area ① the gasket material is suitable using common installation practices subject to chemical compatibility.

In area ② appropriate measures are necessary for installation of the gasket to ensure maximum performance. Please call or refer to KLINGERexpert for assistance.

In area ③ do not install gaskets in these applications without first referring to KLINGERexpert or contacting Thermoseal Inc.'s technical support service.

The ability of a gasket to make and maintain a seal depends not only on the style and quality of the gasket material, but also on medium being sealed, the flange design, the amount of pressure applied to the gasket by the bolts and how the gasket is assembled onto the flanges and tightened. These factors are beyond the manufacturer's control.



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