



# KLINGER®milam PSS engineered for highly demanding operating conditions.

Featuring a high-temperature Mica-based material with perforated stainless steel reinforcement, KLINGER® milam PSS gaskets are specifically designed for hot, dry gas applications at up to 900 °C and 5 bar. Their outstanding chemical resistance also makes them suitable for a wide range of other applications. This product is also available as Milam H, a high-quality homogeneous mica sheet.

Basis composition	Mica-based sealing material with a perforated 0.1 mm thick stainless steel reinforcement.				
Color	Brown				
Certificates	German Lloyd				



Sheet size	1000 x 1200 mm
Thickness	PSS 130 = 1.3 mm, PSS 200 = 2.0 mm, PSS 300 = 3.2 mm

#### **Tolerances**

Thickness:  $\pm 10\%$ Length:  $\pm 5 \text{ mm}$ Width:  $\pm 5 \text{ mm}$ 

#### Industry

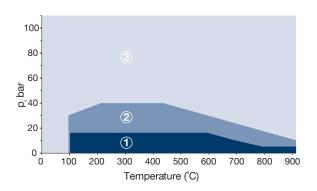
General industry / Chemical / Oil & Gas / Energy / Pulp & Paper / Marine / Automotive

# **TECHNICAL DATA** - Typical values for different thicknesses

		PSS 130	PSS 200	PSS 300	
Compressibility ASTM F 36 J	%	12 - 20	15 - 23	18 - 26	
Recovery ASTM F 36 J	%	30 - 45	32 - 42	28 - 38	
Stress relaxation DIN 52913, 50 MPa, 16 h/300°C	MPa	33	33	30	
Ignition loss	%	<5	<5	<15	
Sealability for nitrogen at 30 MPa and 6 bar,					
temperature within 100 to 400°C	ml/min	0.20	0.20	1.0	
(Sample size 90 x 50 mm) max					
Thickness increase ASTM F 146, Oil IRM 903: 5 h/150°C	%	12	12	5	
Weight increase ASTM F 146, Oil IRM 903: 5 h/150°C	%	26	26	28	
Max. gasket load	MPa	100	80	80	
Density	g/cm3	2.1	2.1	1.8	
Max. temperature	°C	900	900	900	
Thickness	mm	1.3	2.0	3.2	
Number of stainless steel reinforcements		1	1	2	
Material Tanged stainless steel		ASI 316 (L)			



#### P-T diagram - thickness 2.0 mm

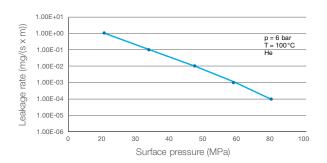


## The area of the P-T diagram

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

## Tightness performance



# The tightness performance graph

The graph shows the required stress at assembling to seal a certain tightness class. The determination of the graph is based on EN13555 test procedure with Helium at 100 °C. The sloping curve indicates the ability of the gasket to increase tightness with raising gasket

# Chemical resistance chart

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

KLINGER® milam PSS					A: small or no attack		B: weak till moderate attack		tack	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	Α	В	Α	Α	Α	Α	Α	Α	В	В

For more information on chemical resistance please visit www.klinger-ag.ch.

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.

