



Environment friendly gasket material with excellent resistance to steam and long-term steam sealability.

BAM 6000 is a first-rate gasket material based on a combination of aramide fibers and mineral wool fibers exonerated from classification as a carcinogen according to Note Q in EU Commission Directive 97/69/EC. The carefully selected components in this material assure that it is free of harmful nitrosoamines (certified by MRPRA). Gasket material BAM 6000 exhibits an outstanding thermal and steam resistance. When it is applied at higher temperatures no significant emission of hazardous degradation products has been detected. Low leakage rates in application additionally contribute to a significant decrease of fugitive emission levels. The material has also excellent creep-relaxation properties, and it is likewise in compliance with DIN 28091-2 and BS 7531 Grade X requirements.

## PROPERTIES AND APPLICATION

Due to its superior resistance to steam and long-term steam sealability BAM 6000 is particularly recommended for all applications where thermal cycling, saturated or overheated steam are applied, e.g. heat exchangers, boilers, radiators, steam supply, power generation, etc. Special surface treatment provides simple replacement after use, while excellent torque retention properties, good chemical properties and sealability enable low maintenance costs and high gasket safety. BAM 6000 can be also used for sealing oils, fuels, gases, Freons, solvents, non-aggressive chemicals, hot water and other media in a variety of flanged joints.

### Basis

Composition	<b>Biosoluble mineral fibres, NBR</b>
DIN 28091-2	<b>FA-M1-0</b>
Colour	<b>Greenish blue / Gray</b>
Approvals	<b>BAM (oxigen), DIN-DVGW, DIN 35356, CRS, DVGW VP 401 (HTB), DVGW KTW, TA-LUFT (VDI 2440), TARC/MRPRA, WRAS/WQc</b>

## SURFACE TREATMENT

The standard version has a non-stick top and bottom layer. Additional surface treatment is generally unnecessary. Special treatment with graphite, silicone or PTFE on one or both sides is available on request.

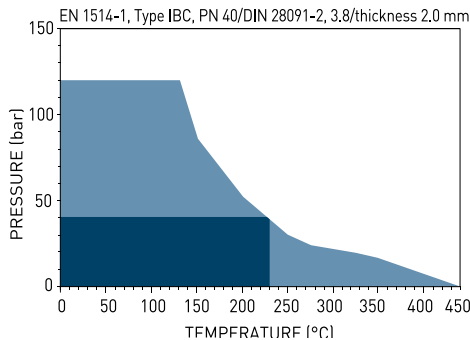
## DIMENSIONS OF STANDARD SHEET

Sheet size (mm): 1000 x 1500 | 1500 x 1500 | 3000 x 1500 | 4500 x 1500  
 Thickness (mm): 0.5 | 0.8 | 1.0 | 1.5 | 2.0 | 3.0  
 Other dimensions and thicknesses on request

## TECHNICAL DATA

Typical values for a thickness of 2 mm

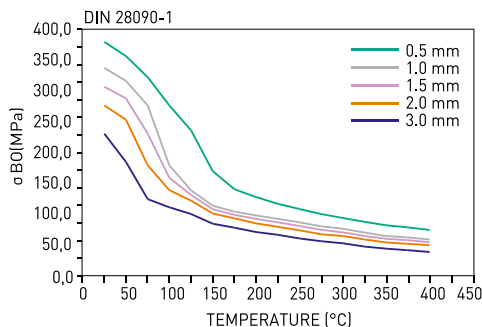
<b>Density</b>	DIN 28090-2	g/cm <sup>3</sup>	1,7–1,9
<b>Compressibility</b>	ASTM F36J	%	6–9
<b>Recovery</b>	ASTM F36J	%	> 55
<b>Tensile strength</b>	DIN 52910	MPa	≈ 9
<b>Stress resistance</b>	DIN 52913		
16h, 300°C, 50MPa		MPa	≈ 30
16h, 175°C, 50MPa		MPa	≈ 35
<b>Thickness increase</b>	ASTM F 146		
Oil IRM 903, 5h, 150°C		%	≤ 5
ASTM Fuel B, 5h, 23°C		%	≤ 5
<b>Specific leak rate</b>	DIN 35356	mg/(s.m)	≈ 0,05
<b>Compression modulus</b>	DIN 28090-2		
At room temperature: Eksw		%	5,5 – 9,4
At elevated temperature: Ewsw/200°C		%	6,5 – 11,0
<b>Percentage creep relaxation</b>	DIN 28090-2		
At room temperature: εKRW		%	> 4,0
At elevated temperature: Ewrrw/200°C		%	≈ 1,0
<b>Recovery R</b>	DIN 28090-2	mm	≈ 0,019
<b>Max. operating conditions</b>			
<b>Peak temperature</b>		°C/F	440/824
Continuous temperature		°C/F	350/662
- with steam		°C/F	300/572
Pressure		bar/psi	120/1740



## P-T DIAGRAM

- General suitability using common installation practices under the condition of chemical compatibility.
- Max. performance is ensured through appropriate measures for joint design and gasket installation. Consultation is recommended.
- Limited application area - Technical consultation is mandatory.

The Pressure - Temperature charts are the most current method of determining the suitability of a gasket material in a known application. Maximum figures for temperature and pressure can be misleading. Max. temperature and max. pressure represent maximum values and should not be used simultaneously. They are given only for guidance, since this max. values depend not only on the type of gasket material but also on the assembly conditions. Use the pressure and temperature graphs to check suitability of chosen gasket material for your application (combination of pressure and temperature)..



## σ<sub>BO</sub> DIAGRAM

This diagram describes characteristic values of gasket materials for static seal for use in flanged applications. Given the wide range of gasket applications, these values should merely be considered as a means of assembling the sealing behaviour of gasket under service condition. Sigma diagram shows you maximal allowed surface stress (maximum in service compressive stress) on gasket by operating service temperature for different material thickness.