

TESNIT® BA-55

TESNIT® BA-55 is specifically manufactured for heating systems that utilise steam or mineral oils, however it is also suitable for other applications. TESNIT® BA-55 has very good thermal and chemical resistance.



Composition	Aramid fibers, Engineered bio-soluble mineral fibers, Inorganic fillers, Mineral fibers, NBR binder
Color	Dark green
Approvals and compliances	BAM (oxygen), BS 7531 Grade X, DVGW DIN 30653 HTB (1bar), DVGW DIN 30653 HTB (5bar), DVGW DIN 3535-6, EC 1935/2004, ELL, EN 16421 (W270)
Sheet dimensions	Sizes (mm):1500 x 1500 3000 x 1500 4500 x 1500 Thicknesses (mm):0.5 1 1.5 2 3 Rolls:/ Other sizes and thicknesses available on request
Tolerances	± 5 % on length and width On thickness up to 1.0 mm ± 0.1 mm On thickness above 1.0 mm ± 10 %
Surface finish	Standard: 4AS. Optional: graphite or PTFE.

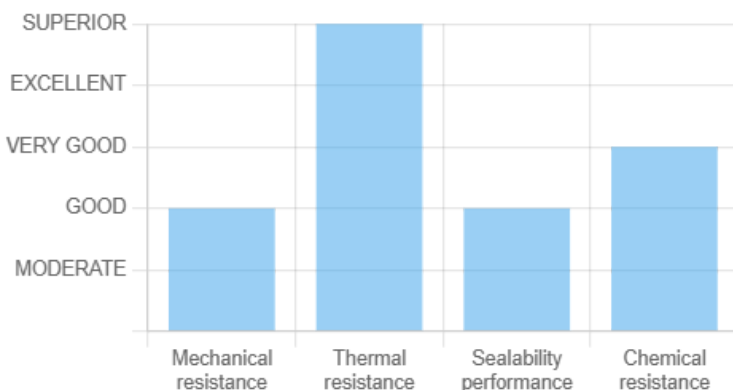
TECHNICAL DATA for 2 mm

Density	DIN 28090-2	g/cm3	1.8
Compressibility	ASTM F36J	%	7
Recovery	ASTM F36J	%	55
Tensile strength	ASTM F152	MPa	7
Residual stress	DIN 52913		
50 MPa, 175°C, 16 h		MPa	35
50 MPa, 300°C, 16 h		MPa	30
Specific leak rate	DIN 3535-6	mg/(s·m)	0.06
Thickness increase	ASTM F146		
Oil IRM 903, 150°C, 5 h		%	8
ASTM Fuel B, 23°C, 5 h		%	10
Compression modulus	DIN 28090-2		
At room temperature: εKSW		%	7.6
At elevated temperature: εWSW/200°C		%	11.4
Creep relaxation	DIN 28090-2		
At room temperature: εKRW		v	3.2
At elevated temperature: εWRW/200°C		%	0.8
Maximum operating conditions			
Peak temperature		°C/°F	350/662
Continuous temperature		°C/°F	270/518
Continuous temperature with steam		°C/°F	230/446
Pressure		bar/psi	100/1450

APPROPRIATE INDUSTRIES & APPLICATIONS

-  FOOD INDUSTRY
-  GAS SUPPLY
-  GENERAL PURPOSE
-  HEATING SYSTEMS
-  POTABLE WATER SUPPLY
-  SHIPBUILDING
-  STEAM SUPPLY
-  WATER SUPPLY

PROPERTIES



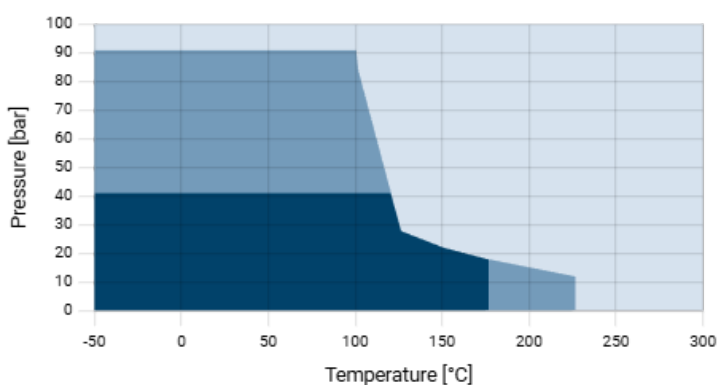
CHEMICAL RESISTANCE CHART

EN 13555

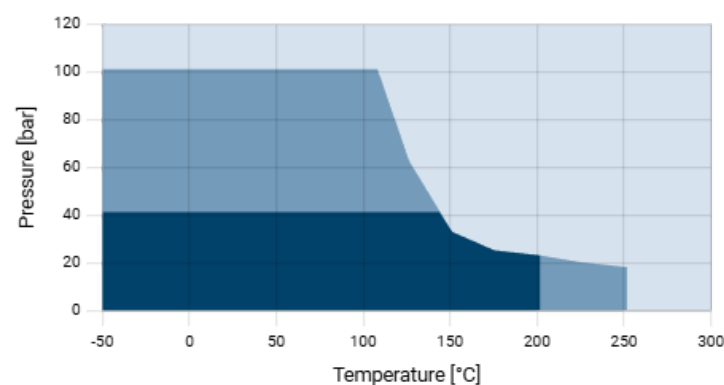


P-T DIAGRAMS EN 1514-1, Type IBC, PN 40, DIN 28091-2 / 3.8, 2 mm

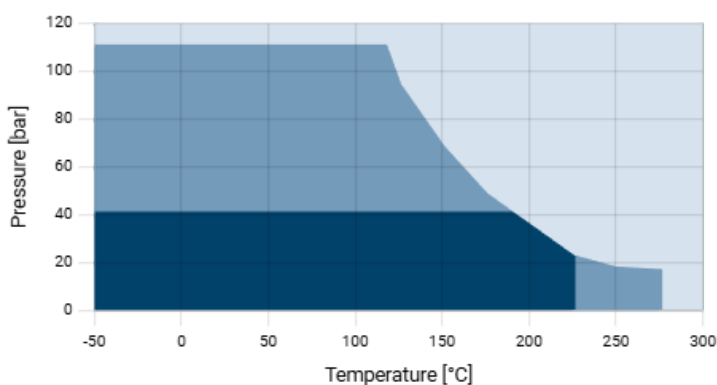
Aggressive gasses



Steam or gasses



Liquids

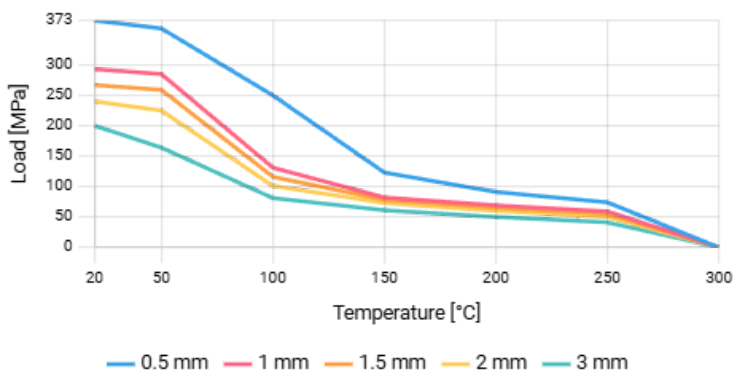


Legend:

- General suitability - Under common installation practices and chemical compatibility.
- Conditional suitability - Appropriate measures ensure maximum performance for joint design and gasket installation. Technical consultation is recommended.
- Limited suitability - Technical consultation is mandatory.

P-T diagrams indicate the maximum permissible combination of internal pressure and service temperature which can be simultaneously applied to a given gaskets thickness, size and tightness class. Given the wide variety of gasket applications and service conditions, these values should only be regarded as a guidance for the proper gasket assembly. In general, thinner gaskets exhibit better P-T properties.

σBO DIAGRAM DIN 28090-1



σBO diagrams represent σBO values for different gasket material thicknesses. These values indicate the maximum in-service compressive pressures which can be applied on the gasket area involved without destructing or damaging the gasket material.

All information and data quoted are based upon decades of experience in the production and operation of sealing elements. This data may not be used to support any warranty claims. With its publication this latest edition supersedes all previous issues and is subject to change without further notice.

