

DESCRIPTION

Tesnit® BA-SOFT has been specially developed for demanding applications where only low bolt loads are permissible and flange irregularities need to be compensated. It offers high compressibility and increased recovery in addition to improved mechanical and thermal performances. It can be used for sealing mineral oils, fuels, lubricants, refrigerants, steam, air, and many other media.

Composition	Synthetic fibers, special fillers, NBR
Color	Lemon (both sides)
Surface finish	Standard : 4AS On demand : Graphite, PTFE
Approvals	DVGW DIN 30653 HTB (1bar) / DVGW DIN 30653 HTB (5bar) DVGW DIN 3535-6 / EC 1935/2004 / FDA 21CFR177.2600 FDA 21CFR180.22 / FDA 21CFR181.32 / TA-Luft (VDI 2440) / WRAS ZP 5123

PROPERTIES

Mechanical resistance	Very good
Thermal resistance	Excellent
Sealability performance	Excellent
Chemical resistance	Good

APPLICATIONS

Oil	Air
Fuel	Steam
Lubricants	Shipbuilding

DIMENSIONS

Standard format (mm)	1500 x 1500 (+/-5%)
Other formats on demand (mm)	1000 x 1500 - 1500 x 3000 - 1500 x 4500 (+/-5%)
Thickness (mm)	0.50 - 1.00 - 1.50 - 2.00 - 3.00 (+/-10%)
Other thicknesses on demand (mm)	4.00 - 5.00 (+/-10%)
Tolerances	On length and width : +/-5% On thickness up to 1.00 mm : +/-0.10 mm On thickness above 1.00 mm : +/-10%

TECHNICAL DATA

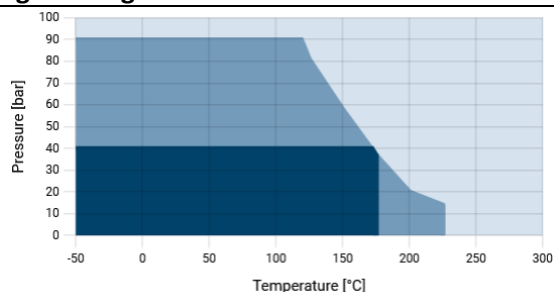
Typical value for a thickness of 2mm

Test description	Standard	Unit	Value
Density	DIN 28090-2	g/cm ³	1.50
Compressibility	ASTM F36J	%	25
Recovery	ASTM F36J	%	64
Tensile strength	ASTM F152	MPa	6
Stress resistance	DIN 52913		
16h, 50 MPa, 175°C		MPa	30
16h, 50 MPa, 300°C		MPa	20
Specific leak rate	DIN 3535-6		0.009
Thickness increase	ASTM F146		
Oil IRM 903, 5h, 150°C		%	2
ASTM Fuel B, 5h, 23°C		%	6
Compression modulus	DIN 28090-2		
At room temperature ϵ_{KSW}		%	18.4
At elevated temperature $\epsilon_{WSW/200^\circ C}$		%	14.6
Percentage creep relaxation	DIN 28090-2		
At room temperature ϵ_{KRW}		%	10
At elevated temperature $\epsilon_{WRW/200^\circ C}$		%	1.6
Max. operating conditions			
Peak temperature		°C/°F	350/662
Continuous temperature		°C/°F	250/482
- with steam		°C/°F	200/392
Pressure		bar/psi	100/1450

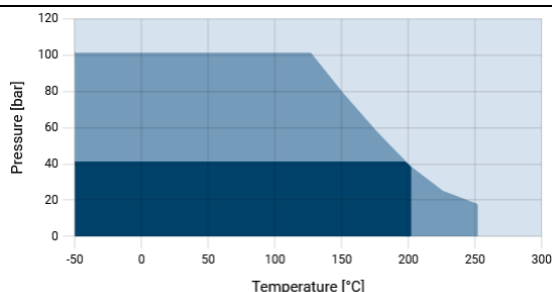
P-T DIAGRAM

EN 1514-1, Type IBC, PN40, DIN 28091-2 / 3.8, 2.0mm

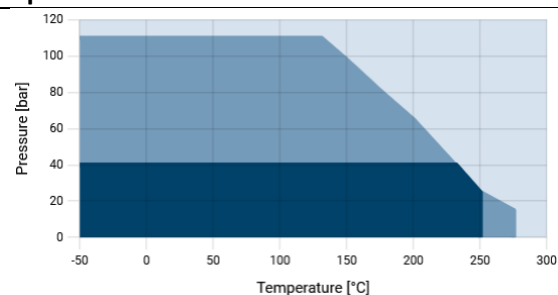
Aggressive gasses



Steam & Gas



Liquids



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.

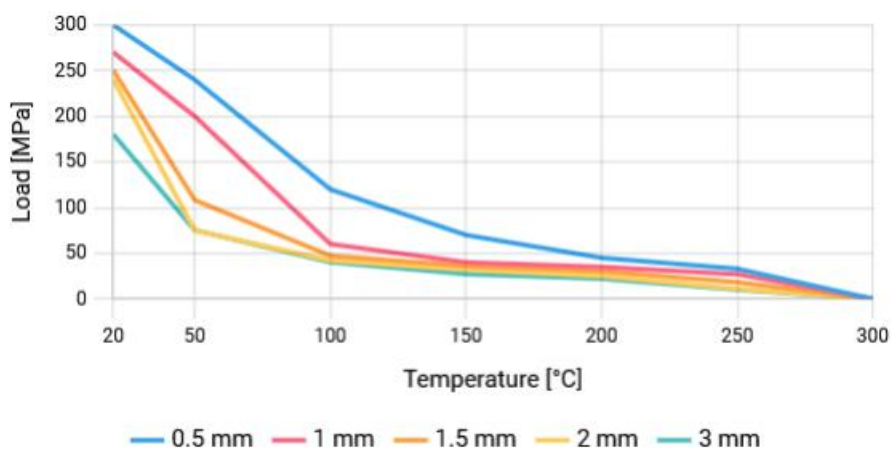


Limited suitability – Technical consultation is mandatory.

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

σ_{Bo} DIAGRAM

DIN 28090-1



σ_{Bo} diagrams represent σ_{Bo} 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.

The technical specifications mentioned above are typical average values obtained using the test methods indicated and may therefore be subject to normal manufacturing variations.

They are provided for guidance only. They do not constitute a guarantee, and we recommend that you carry out a test before final implementation.