

TECHNICAL MATERIAL DATA SHEET

TESNIT® BA-KTW-G



DESCRIPTION

Tesnit® BA-KTW-G is a material with high-quality specially formulated for use with hot and cold drinking water and gas supply. It has good thermomechanical properties and chemical resistance, which makes it a general-purpose gasket material.

Composition	Aramid fibers, Inorganic fillers, NBR binder
Color	Off-white (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 / EN 16421 (W270) FDA 21CFR177.2600 / FDA 21CFR180.22 / FDA 21CFR181.32 KTW-BWGL / WRAS / ZP 5123

PROPERTIES

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

APPLICATIONS

Potable water	Refrigerant & Cooling	Heating
Food & Beverage	Hydrocarbons	Petrochemical
Gas	Shipbuilding	Automotive

DIMENSIONS

Standard format (mm)	1500 x 1500 (+/-5%)
Other formats on demand (mm)	1000 x 1500 - 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%

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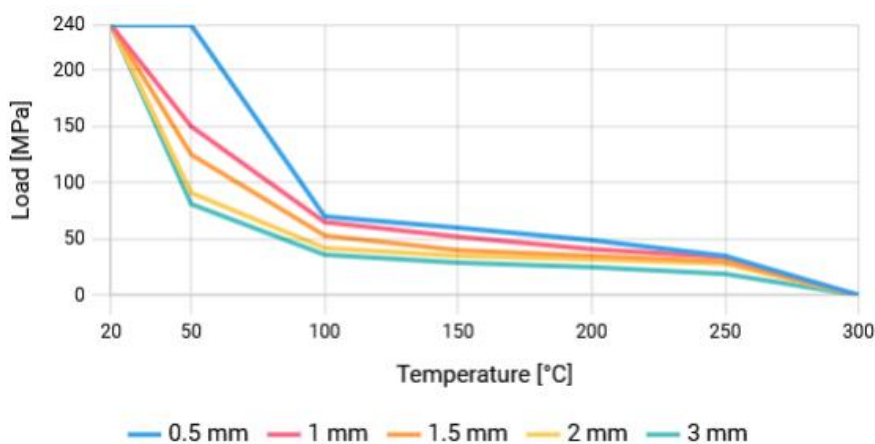
TECHNICAL DATA

Typical value for a thickness of 2mm

Test description	Standard	Unit	Value
Density	DIN 28090-2	g/cm ³	1.70
Compressibility	ASTM F36J	%	13
Recovery	ASTM F36J	%	60
Tensile strength	ASTM F152	MPa	11
Stress resistance	DIN 52913		
16h, 50 MPa, 175°C		MPa	30
16h, 50 MPa, 300°C		MPa	22.5
Specific leak rate	DIN 3535-6		0.02
Thickness increase	ASTM F146		
Oil IRM 903, 5h, 150°C		%	4
ASTM Fuel B, 5h, 23°C		%	8
Compression modulus	DIN 28090-2		
At room temperature ϵ_{KSW}		%	10
At elevated temperature $\epsilon_{WSW/200^\circ C}$		%	15
Percentage creep relaxation	DIN 28090-2		
At room temperature ϵ_{KRW}		%	7
At elevated temperature $\epsilon_{WRW/200^\circ C}$		%	3
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

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.