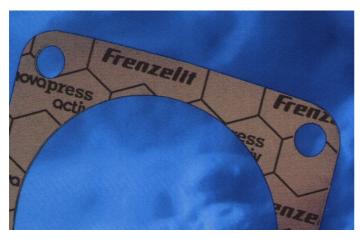
novapress® ACTIV - Special composite material with controlled swelling properties



Material profile

New material combination of high-grade aramid fibres and fillers bonded with **NBR** rubber (**N**itrile **B**utadiene **R**ubber).

The material compound consists of an oil-resistant, hard core and very soft covering layers on both sides having controlled swelling properties in oil.

A special material profile results from the different properties of the material layers:

- excellent adaptability
- controlled swelling in oil, fuels and greases in critical ranges
- very good stress relaxation
- low permeability to gas

Applications

This special gasket material can be applied where the surface pressure between the bolts is insufficient, but partially excessive pressure is found directly under the bolts. This irregular distribution of pressure is balanced by the swelling capability of the gasket material in contact with oil and additionally the special material construction.

Typical applications are as follows:

- Plant, apparatus and transformer construction
- General machine building industry
- Accessories for the automotive industry

Surface coating

An additional surface coating would adversely affect the swelling function of the covering layers. The same applies to the use of sealing acids, such as graphite paste, silicone or copper grease which reduce the frictional resistance between gasket and flange.

Material data

General Data

Binders	Core: NBR; Cov	Core: NBR; Cover: NR/NBR		
Colour	one side brown, one side red			
Anti-stick coating	non standard			
Sheet sizes and thickness tolerance	according to DIN 28 091-1			
Physical properties Gasket thickness 2.0 mm	Standard	Unity	Value *	
Density	DIN 28 090-2	[g/cm³]	1.45	
Tensile strength	DIN 52 910			
longitudinal		[N/mm ²]	32	
transverse		[N/mm ²]	9	
Residual stress σ _{dE/16}	DIN 52 913			
175 °C		[N/mm ²]	32	
300 °C		[N/mm ²]	24	
Compressibility	ASTM F36 J	[%]	8	
Recovery	ASTM F36 J	[%]	66	
Cold compressibility $\epsilon_{ extsf{KSW}}$	DIN 28 090-2	[%]	9	
Cold recovery ε _{KRW}	DIN 28 090-2	[%]	5	
Hot creep ε _{WSW/200}	DIN 28 090-2	[%]	12	
Hot recovery ε _{WRW/200}	DIN 28 090-2	[%]	2	
Recovery R	DIN 28 090-2		0.040	
Specific leakage rate	DIN 3535-6	[mg/(m+s)]	0.100	
Specific leakage rate $\lambda_{2,0}$	DIN 28 090-2	[mg/(m·s)]	0.150	
Fluid resistance	ASTM F 146			
ASTM IRM 903	5h / 150 °C			
Weight change		[%]	23	
Thickness increase		[%]	12	
ASTM Fuel B	5h / 23 °C			
Weight change		[%]	18	
Thickness increase		[%]	10	
* = Mode (ty			typical valu	

Product data

- Dimensions in mm: 1000 x 1500, 1500 x 1500, 3000 x 1500
- Thicknesses in mm: 1.0/1.5/2.0/3.0
- Further dimensions and thicknesses are available on request

Quality Management

ISO 9001 ISO/TS 16949

Environmental Management

ISO 14001

Do you have any questions about your application? The gasket information service will help you: gaskets@frenzelit.de

GASKETS

TECHNICAL TEXTILES

EXPANSION JOINTS

INSULATION

NEW MATERIALS



creating hightech solutions Z/12/08.10/001/FZ

All previous versions of this prospectus cease to apply. Subject to technical amendment