novapress® MULTI II
The high-pressure gasket for use under changing loads.

Material profile

The patented combination of aramide fibres, high-quality graphite filler and particularly oil-resistant **n**itrile **b**utadiene **r**ubber (**NBR)** gives novapress® MULTI II the following special properties:

- **Gas tightness as specified in the standard**
- **Excellent stress relaxation**
- **Excellent safety reserves under changing loads**
- **High adaptability**
- **Graphite structure gives the material unique flexibility**

Identification colour: blue

novapress® MULTI II is also available with a wire mesh (material no. 25/018) under the name novapress® MULTI II EG.

Application areas

novapress® MULTI II is the ideal choice for use with saturated steam up to 250 °C and 40 bar – it is considered to be – the "steam gasket". Good resistance to oils, petrol, lubricants and gaseous media make it suitable for other applications as well.

- **Power stations (gas and water supply)**
- **General industry**
- **Plant engineering and equipment manufacturing**
- **Chemical industry**

Good for people and the environment

Frenzelit has obtained certification that the company complies with the requirements of both ISO/TS 16949 and ISO 14001. This means complete transparency in all areas and a high degree of security for our customers.

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

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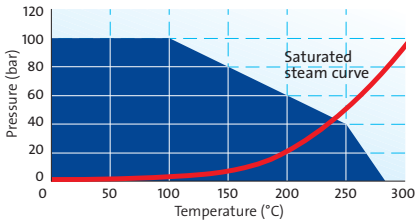
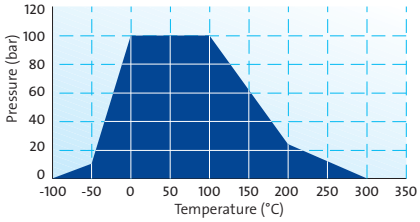
Technical information about novapress® MULTI II

Recommendations for use
according to the pressure and temperature

Water/steam



Other Media*



The temperature and pressure recommendations in the graphs apply to gaskets with a thickness of 2.0 mm and smooth flanges. Higher stresses are possible when thinner gaskets are used!

*Exampple for most common other media. Exact data for specific individual cases are available in the Frenzelit novaDISC programme or contact our application engineering specialists.

Warranty exclusion
In view of the variety of different installation and operation conditions and application and process engineering options, the information given in this prospectus can only provide approximate guidance. There is as a result no basis for warranty claims.

Material data

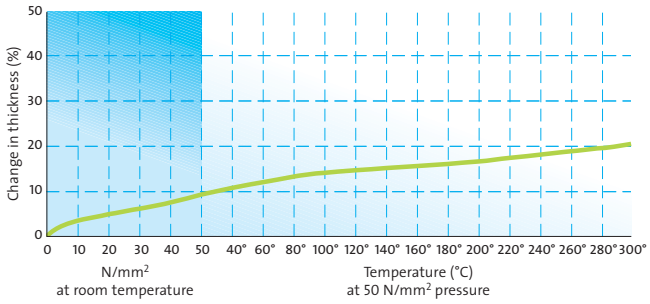
General data

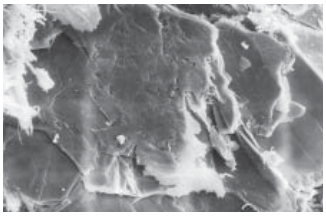
Binders	NBR
Approvals	DVGW, BAM (up to max. 60°C/130 bar)
Colour	both sides blue
Anti-stick coating	both sides A 310
Sheet size and thickness tolerance	according 28 091-1

Physical properties Gasket thickness 2.0 mm	**Standard**	**Unity**	**Value***
Density	DIN 28 090-2	[g/cm³]	1.50
Tensile strength	DIN 52 910		
longitudinal		[N/mm²]	28
transverse		[N/mm²]	12
Residual stress $\sigma_{dE/16}$	DIN 52 913		
175 °C		[N/mm²]	32
300 °C		[N/mm²]	22
Compressibility	ASTM F 36 J	[%]	7
Recovery	ASTM F 36 J	[%]	60
Cold compressibility ε_{KSW}	DIN 28 090-2	[%]	6
Cold recovery ε_{KRW}	DIN 28 090-2	[%]	3
Hot creep $\varepsilon_{WSW/200}$	DIN 28 090-2	[%]	10
Hot recovery $\varepsilon_{WRW/200}$	DIN 28 090-2	[%]	2
Recovery R	DIN 28 090-2	[mm]	0.040
Specific leakage rate	DIN 3535-6	[mg/(s·m)]	≤ 0.100
Specific leakage rate $\lambda_{-2,0}$	DIN 28 090-2	[mg/(s·m)]	0.100
Fluid resistance	ASTM F 146		
ASTM IRM 903	5h/150°C		
Weight change		[%]	6
Thickness increase		[%]	2
ASTM Fuel B	5h/23°C		
Weight change		[%]	8
Thickness increase		[%]	4
Leachable Chloride content	FZT PV-001-133	[ppm]	≤ 150

* Mode (typical value)

Deformation under temperature 2.0 mm





novapress® MULTI II magnified 400 times shows the blend of fibrous and flaky elements and the layering associated with them that leads to the achievement of special slip effects as a precondition for dynamic stress.

Product data

- Dimensions in mm: 1000 x 1500
  1500 x 1500
  3000 x 1500
- Thicknesses in mm: 0.3/0.5/0.75/1.0/1.5/2.0/3.0/4.0
- Further dimensions and thicknesses are available on request

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

FL/13/07.08/02/FL

GASKETS
TECHNICAL TEXTILES
EXPANSION JOINTS
INSULATION
NEW MATERIALS

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Frenzelit

creating hightech solutions

Technical Data Sheet

Frenzelit

novapress® MULTI II

Material profile:
- Oil resistant gasket material with low permeability to gas and a good stress relaxation, contains graphite.

Typical applications:
- Application in steam (saturated steam up to max. 250°C)
- Jointing material for dynamic stresses

Supply data:
- Sheet sizes in mm: 1000x1500 / 1500x1500 / 3000x1500
- Thickness in mm: 0.30 / 0.50 / 0.75 / 1.00 / 1.50 / 2.00 / 3.00 / 4.00
- Special sheet sizes upon request
- Other thicknesses upon request

General data	Binders:	NBR		
	Approvals:	DVGW / BAM (max. 60°C / 130 bar) / GL		
	Anti-stick coating:	both sides A310		
	Colour:	both sides blue		
	Sheet size and thickness tolerance:	acc. DIN 28091-1		
Physical properties (Gasket thickn. 2.00 mm)	**Property**	**Standard**	**Unity**	**Value ***
	Density	DIN 28 090-2	[g/cm³]	1.50
	Tensile strength	DIN 52 910		
	longitudinal		[N/mm²]	28
	transverse		[N/mm²]	12
	Residual stress $\sigma_{dE/16}$	DIN 52 913		
	175°C		[N/mm²]	32
	300°C		[N/mm²]	22
	Compressibility	ASTM F 36 J	[%]	7
	Recovery	ASTM F 36 J	[%]	60
	Cold compressibility ε_{KSW}	DIN 28 090-2	[%]	6.0
	Cold recovery ε_{KRW}	DIN 28 090-2	[%]	3.0
	Hot creep $\varepsilon_{WSW/200}$	DIN 28 090-2	[%]	10.0
	Hot recovery $\varepsilon_{WRW/200}$	DIN 28 090-2	[%]	2.0
	Recovery R	DIN 28 090-2	[mm]	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)]	0.100
	Fluid resistance	ASTM F 146		
	ASTM IRM903	5h/150°C		
	Weight change		[%]	6
	Thickness increase		[%]	2
	ASTM Fuel B	5h/23°C		
	Weight change		[%]	8
	Thickness increase		[%]	4
	Leachable Chloride content	FZT PV-001-133	[ppm]	≤ 150

* = Mode (typical value)

Ausgabe: 07.10

Modifications: 12

Supersedes all prior versions

The technical data stated has been determined with standard material under laboratroy conditions. With the variety of installation and operating conditions no guarantee claim can be inferred regarding the behaviour of a flanged joint.

We reserve the right to product changes which serve the purpose of technical progress.

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