novapress[®] FLEXIBLE/815 The adaptable high-pressure gasket with excellent oil resistance.



| GASKETS |
|--------------------|
| |
| TECHNICAL TEXTILES |
| |
| EXPANSION JOINTS |
| |
| INSULATION |

NEW MATERIALS

Material profile

The larger proportion of **n**itrile **b**utadiene **r**ubber (**NBR**) than normal combined with aramide fibres gives novapress® FLEXIBLE/ 815 the following special properties:

- Superior oil resistance
- Minimum swelling in oils and fuels
- Ideal adaptability
- Lowest gas leakage at minimum surface pressure

Identification colour: green/natural colour

Application areas

novapress[®] FLEXIBLE/815 is the ideal choice for use in "light" flange structures as well as for all applications where particularly good oil resistance is a high priority. Furthermore novapress[®] FLEXIBLE/815 provides outstanding tightness even under low surface pressure conditions.

- Gas and water supply
- Plant engineering and equipment manufacturing
- Pipeline construction

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

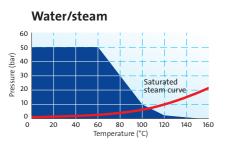


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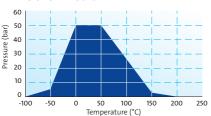
Technical information about novapress® FLEXIBLE/815

Recommendations for use

according to the pressure and temperature

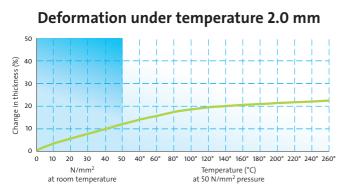


Other Media*



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 *Example 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, SVGW, BAM (up to max. 75°C/100 bar), HTB | | |
| Colour | one side green, one side natural coloured | | |
| Anti-stick coating | non standard | | |
| Sheet size and thickness tolerance | according DIN 28 091-1 | | |
| Physical properties | Standard | Unity | Value* |
| Density | DIN 28 090-2 | [g/cm ³] | 1.50 |
| Tensile strength | DIN 52 910 | [8, 511] | 1150 |
| longitudinal | 511152 510 | [N/mm ²] | 26 |
| transverse | | $[N/mm^2]$ | 9 |
| Residual stress $\sigma_{dE/16}$ | DIN 52 913 | [] | 2 |
| 175 °C | 0111 92 919 | [N/mm ²] | 30 |
| 300 °C | | $[N/mm^2]$ | 19 |
| Compressibility | ASTM F 36 J | [%] | 10 |
| lecovery | ASTM F 36 J | [%] | 64 |
| Cold compressibility <i>e</i> _{KSW} | DIN 28 090-2 | [%] | 9 |
| Cold recovery e _{KRW} | DIN 28 090-2 | [%] | 4 |
| Hot creep ε _{WSW/200} | DIN 28 090-2 | [%] | 16 |
| Hot recovery ε _{WRW/200} | DIN 28 090-2 | [%] | 2.5 |
| Recovery R | DIN 28 090-2 | [mm] | 0.050 |
| specific leakage rate | DIN 3535-6 | [mg/(s·m)] | 0.050 |
| Specific leakage rate λ_{20} | DIN 28 090-2 | [mg/(s·m)] | 0.020 |
| Fluid resistance | ASTM F 146 | | |
| ASTM IRM 903 | 5h/150°C | | |
| Weight change | | [%] | 9 |
| Thickness increase | | [%] | 3 |
| ASTM Fuel B | 5h/23°C | | |
| Weight change | | [%] | 11 |
| Thickness increase | | [%] | 5 |
| Leachable Chloride content | FZT PV-001-133 | [ppm] | ≤ 150 |
| | | | e (typical value) |

Product data

| Dimensions in mm: | 1000 |) |
|-------------------|------|---|
| | 1500 |) |
| | | |

x 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.

Frenzelit

creating hightech solutions

GASKETS

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Technical Data Sheet



novapress[®] FLEXIBLE/815

Material profile:

 Gasket material highly resistant to oils and fuels with extraordinary tightness, excellent adaptability and elasticity

Typical applications:

- gas and water supply
- plant and apperatus construction
- pipeline construction

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 | Binders: | NBR | | | |
|------------------------------|--|---|-------------------|----------|--|
| data | Approvals: | DVGW / SVGW / E | AM (max. 75℃ / 10 | 0 bar) / | |
| | | HTB / GL | | | |
| | Anti-stick coating: | non standard | | | |
| | Colour: | one side green, one side natural coloured | | | |
| | Sheet size and thickness tolerance: | acc. DIN 28 091-1 | | N - 1 + | |
| Physical | Property | Standard | Unity | Value * | |
| properties | | | | | |
| (Gasket thickn. | Density | DIN 28 090-2 | [g/cm³] | 1.50 | |
| (Gasket Inickii. 2.00 mm) | | | [9/011] | ••••• | |
| , | Tensile strength | DIN 52 910 | | | |
| | longitudinal | | [N/mm²] | 26 | |
| | transverse | | [N/mm²] | 9 | |
| | | | | | |
| | Residual stress ode/16 | DIN 52 913 | | | |
| | 175℃ | | [N/mm²] | 30 | |
| | 300 °C | | [N/mm²] | 19 | |
| | Compressibility | ASTM F 36 J | [%] | 10 | |
| | Recovery | ASTM F 36 J | [%] | 64 | |
| | - | | | | |
| | Cold compressibility ε_{KSW} | DIN 28 090-2 | [%] | 9.0 | |
| | Cold recovery ε _{KRW} | DIN 28 090-2 | [%] | 4.0 | |
| | Hot creep ε _{WSW/200} | DIN 28 090-2 | [%] | 16.0 | |
| | Hot recovery ε _{WRW/200} | DIN 28 090-2 | [%] | 2.5 | |
| | Recovery R | DIN 28 090-2 | [mm] | 0.050 | |
| | Specific leakage rate | DIN 3535-6 | [mg/(m₊s)] | 0.050 | |
| | Specific leakage rate $\lambda_{2,0}$ | DIN 28 090-2 | [mg/(m.s)] | 0.030 | |
| | Specific leakage rate A2,0 | 1211N 20 090-2 | [mg/(m•s)] | 0.020 | |
| | Fluid resistance | ASTM F 146 | | | |
| | ASTM IRM903 | 5h/150℃ | | | |
| | Weight change | | [%] | 9 | |
| | Thickness increase | | [%] | 3 | |
| | ASTM Fuel B | 5h/23 °C | | | |
| | Weight change | | [%] | 11 | |
| | Thickness increase | | [%] | 5 | |
| | Leachable Chloride content | FZT PV-001-133 | toomi | | |
| | | FZ1 FV-001-133 | [ppm] | ≤ 150 | |

* = Mode (typical value) Issue: 07.10 Modifications: 16 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.