



# GORE™ GR

## SHEET GASKETING



## Increased residual gasket stress and greater blow-out resistance

GORE™ GR sheet gasketing has been developed for a secure flange connection offering an enduring seal for all pipeline and apparatus flange connections made of steel. It consists of pure, high-quality expanded PTFE (ePTFE) that guarantees an almost unlimited chemical resistance of the seal.

GORE™ GR sheet gasketing is distinguished by its minimum loss of gasket stress (high  $P_{QR}$  value in accordance with EN 13555). This is particularly beneficial when gasketing material is subjected to the stress of temperature cycling, high temperatures and external forces, which can lead to leakage and/or blow-out.

The high strength of the material results in increased pressure and blow-out resistance. The higher rigidity of the material simplifies installation of the gasket. GORE™ GR sheet gasketing offers a long-lasting seal on an extremely wide range of steel flange geometries.

### TECHNICAL DATA

#### MATERIAL

100 % expanded PTFE (ePTFE) with multidirectionally oriented fibril structure. The material is asbestos-free and contains no lung damaging components.

#### TEMPERATURE RANGE OF THE MATERIAL

-268 °C to +315 °C

#### CHEMICAL RESISTANCE

Resistant to all media in the range of pH 0 – 14, except for molten or dissolved alkali metals and elemental fluorine at high temperatures and pressures.

#### RECOMMENDED OPERATING RANGE

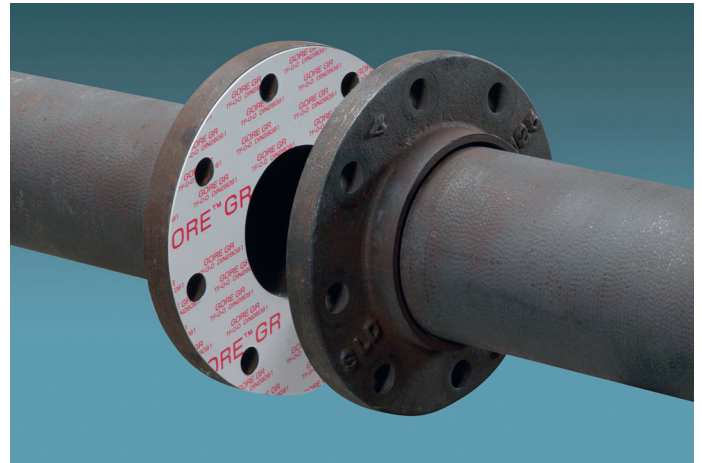
- Vacuum up to 40 bar\*
- -240 °C to +230 °C\*

#### RESISTANCE TO AGEING

The product is not susceptible to ageing in the permitted application range and can be stored indefinitely.

#### PHYSIOLOGICAL SAFETY

Physiologically harmless in prolonged installation at temperatures up to +260 °C according VDI/VDE 2480 guideline "Blatt 1"; complies with FDA 21 CFR 177.1550 (PTFE) and 21 CFR 175.105 (adhesive) for contact with food.



### KEY FEATURES

- Made from 100 % expanded PTFE (ePTFE)
- High chemical and thermal resistance
- Resistant to ageing
- Physiologically safe
- High strength

### KEY BENEFITS

- Increased residual gasket stress
- Greater blow-out resistance
- High operating safety
- Wide spectrum of applications
- Reliably seals practically all media in the pH range 0 – 14
- Highly conformable to the sealing surface
- Straightforward installation

### TYPICAL APPLICATIONS

- Steel flanges
- Complex flange shapes
- Aggressive media

### TESTS AND CERTIFICATES

- According to EN 13555
- DIN 28091-3
- TA Luft ("high quality seal") VDI 2440
- Blow-out resistance VDI 2200 (draft 06-2005)
- US standards: HOBT2-cycling, ARLA, ROTT



Data available  
**EN 13555**

**TA Luft**

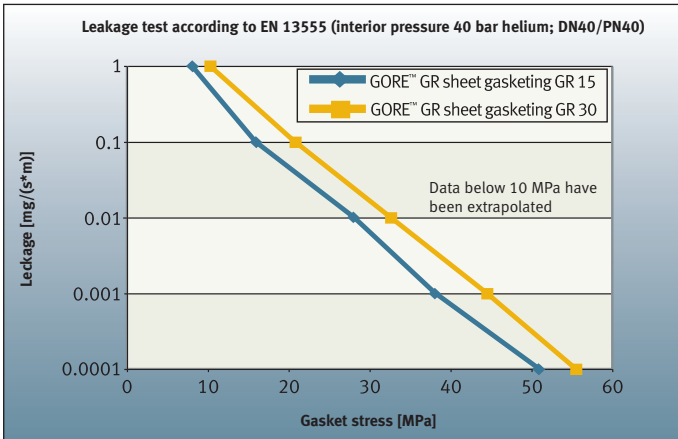
\* These figures depend on the individual application; should you have any questions regarding use at higher pressures and temperatures please consult the Gore specialists responsible.



# GORE™ GR

SHEET GASKETING

## LEAKAGE RATES



## INSTALLATION INSTRUCTIONS

The seals must be installed according to the currently applicable ESA guidelines. These guidelines, as well as the torque tables for standard flanges, are available on request.

## AVAILABLE SIZES AND SIZE SELECTION

GORE™ GR sheet gasketing is available in the following sizes.

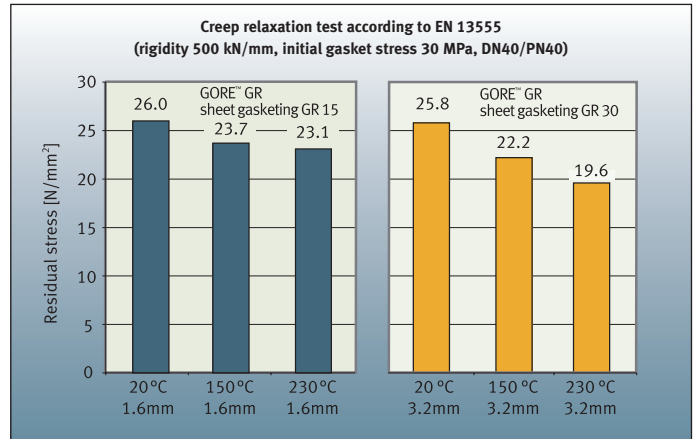
Type	Length x width (mm)	Thickness (mm)
GORE™ GR sheet gasketing GR 05	1524 x 1524	0.5
GORE™ GR sheet gasketing GR 10	1524 x 1524	1.0
GORE™ GR sheet gasketing GR 15	1524 x 1524	1.6
GORE™ GR sheet gasketing GR 20	1524 x 1524	2.0
GORE™ GR sheet gasketing GR 30	1524 x 1524	3.2
GORE™ GR sheet gasketing GR 50	1524 x 1524	5.0
GORE™ GR sheet gasketing GR 60	1524 x 1524	6.4

Supplied by: \_\_\_\_\_

All the technical information and advice given here is based on our previous experiences. We give this information to the best of our knowledge, but assume no legal responsibility. Customers are asked to check these details and results, since the performance of a sealant can only be judged when all the necessary operating data are available. Our product specialist would be glad to help you. Specifications are subject to change without notice.

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## RESIDUAL STRESS



	P <sub>QR</sub> data			Q <sub>Smax</sub> 230 °C	Q <sub>min</sub> (0,1)	Q <sub>Smin</sub> *
	20 °C	150 °C	230 °C			
GR 15	0.87	0.79	0.77	240 MPa	16 MPa	5 MPa
GR 30	0.86	0.74	0.65	120 MPa	21 MPa	5 MPa

\* The Q<sub>Smin</sub> test according to EN 13555 does not provide data < 10 N/mm<sup>2</sup>. The figures are based on additional tests and experience.

## QUALITY ASSURANCE

The GORE Quality Management System has been certified by DQS in accordance with DIN EN ISO 9001. Component suppliers are also integrated into this system.



## ORDERING TEXT

GORE™ GR sheet gasketing in accordance with EN 13555, DIN 28091-3, TF-0-0. Dimensions: 1524 x 1524 x thickness (in mm).

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