



# Gore® GR

## SHEET GASKETING

New & Improved

## 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  $P_{0R}$  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 with multidirectionally oriented fibril structure. The material is asbestos-free and contains no lung-damaging components.

#### TEMPERATURE RESISTANCE OF PTFE

-240 °C to +270°C; Intermittent up to +315 °C

#### CHEMICAL RESISTANCE

Resistant to all media in the pH range 0 – 14, except for molten or solute alkali metals and elementary fluorine, particularly at elevated temperatures and pressures.

#### AGEING RESISTANCE

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

#### PHYSIOLOGICAL SAFETY

Physiologically safe as per VDE/VDI 2480 in continuous use up to +260 °C; complies with FDA requirements (21CFR 177.1550 PTFE).

#### RECOMMENDED RANGE OF APPLICATIONS FOR GORE® GR SHEET GASKETING

- Vacuum up to 40 bar
- -240 °C to +230°C;

Please contact your GORE product specialist regarding applications other than the recommended range of applications.



### KEY FEATURES

- Multidirectionally oriented ePTFE
- Manufactured from 100% pure PTFE
- 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

- EN 13555
- DIN 28091-3
- TA Luft (“high-quality seal”), VDI 2440
- Blow-out resistance VDI 2200 (draft 06-2005)

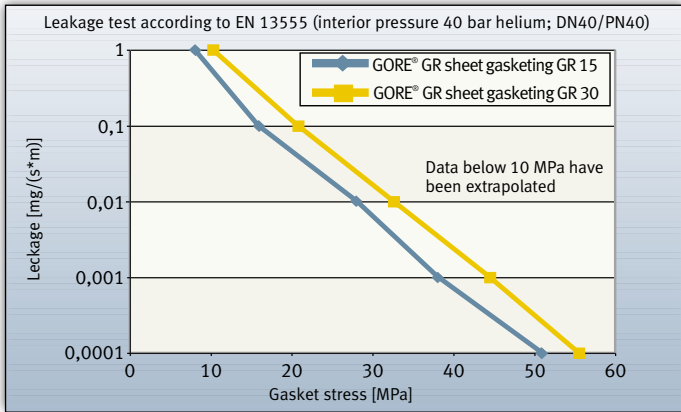
US standards: HOBT2-cycling, ARLA, ROTT



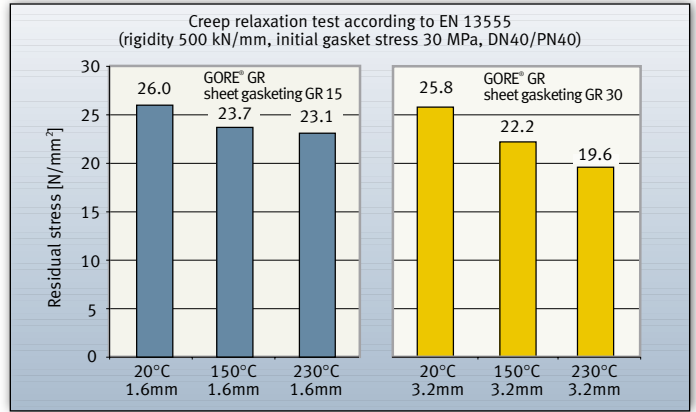
# Gore GR

SHEET GASKETING

## LEAKAGE RATES



## RESIDUAL STRESS



## 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

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

	P <sub>QR</sub> data			Q <sub>Smax</sub>	Q <sub>min (0,1)</sub>	Q <sub>Smin *</sub>
	20°C	150°C	230°C	230°C		
GR 15	0.87	0.79	0.77	240 N/mm <sup>2</sup>	16 N/mm <sup>2</sup>	5 N/mm <sup>2</sup>
GR 30	0.86	0.74	0.65	240 N/mm <sup>2</sup>	21 N/mm <sup>2</sup>	5 N/mm <sup>2</sup>

\* 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 is certified according to standard DIN EN ISO 9001 by the DQS. The suppliers are also integrated into this system.



## ORDER TEXT

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

Supplied by:

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All the technical information and advice given here is based on our previous experience. 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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