

# GORE Joint Sealant DE GORE Joint Sealant



# Gasket for irregularly shaped flanges OUTSTANDING SEALING RELIABILITY

**GORE™ Joint Sealant DE** is manufactured from 100% pure, ePTFE (expanded polytetrafluoroethylene)using Gore's process and is available on spools.

To facilitate installation on the flange face the sealant carries an adhesive backing strip.

The material has a uniform density over the whole cross section in combination with a high profile. By choosing the correct size it is possible to achieve a tight seal in many applications including those where the flange faces are badly pitted.

Sizes DE 10 to DE 40 are particularly suitable for narrow flanges and very uneven surfaces with low boltloads under low pressure (e. g. air or air-conditioning plant).

Sizes DE 04 and DE 06 have been specially developed for sealing installations with smooth surfaces (e. g. pump casings).

# TECHNICAL DATA MATERIAL

 $100\,\%$  expanded PTFE with a mono-directionally oriented fibrous 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**

- T < 150°C\*
- p = full vacuum to 40 bar\*

### **RESISTANCE TO AGEING**

Within the permitted temperature range of the product the ePTFE is not subject to ageing.

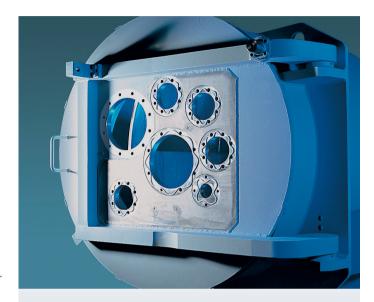
#### PHYSIOLOGICAL SAFETY

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

#### **SEALING VALUES**

(for pressures up to 40 bar):

- $K_0 \times k_D = 22,0 \times b_D$
- $k_1 = 1,6 \times b_0$



# TYPICAL APPLICATIONS

# Flange Types

- Flat flanges
- Tongue and groove flanges (be careful of power series connection or mounting)
- Narrow raised-face flanges

# Equipment

 Agitators, pumps, tank farms, machine housings, covered receptacles, sight glasses, air and air-conditioning plant

### Sealing Faces/Flange Material

· Aluminium, graphite, GRP, steel

# **QUALITY ASSURANCE**

This forms the basis of the high level of quality of GORE products. The GORE Quality Control system is certified according to DIN EN ISO 9001 by DQS. Component suppliers are also integrated into this system.

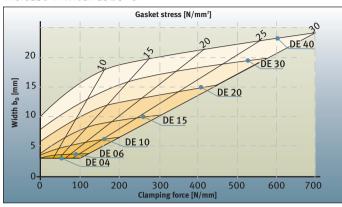




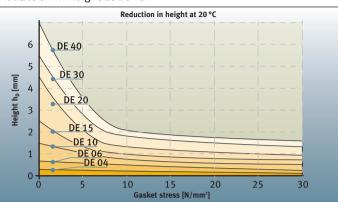
# GORE™ Joint Sealant DE

#### **COMPRESSION DATA DE**

Increase in width at 20°C



Reduction in height at 20°C



#### **SELECTION RECOMMENDATIONS**

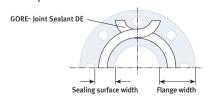
Туре	Availablility meters/spool			Sealing of flanges with minimum gap requirements	Sealing surface width	Nominal dimensions of the sealant w x h [mm]
	10	25	50			
DE 04		Х	Х	very smooth sealing surfaces, minimal imperfections, e. g. on pump casings	> 3 mm	3,2 x 0,3
DE 06		Х	Х	normal sealing surfaces, minimal imperfections e. g. on used pump casings	> 3 mm	3,2 x 0,7

Туре	Availablility meters/spool			Gasket size recommendation according to flange diameter for common flanges	Sealing surface width	Nominal dimensions of the sealant w x h [mm]
	10	25	50			
DE 10		Х	Х	small components, good sealing surfaces	up to 15 mm	4,0 x 1,5
DE 15		Х	Х	standard flanges, rough flange faces, up to nominal width 500 mm	15 – 20 mm	4,0 x 2,5
DE 20		Х	Х	standard flanges, slightly distorted, sealing surfaces, with nominal width 500 to 1000 mm	20 – 30 mm	6,0 x 4,6
DE 30		Х	Х	standard flanges, very uneven flanges, nominal width 1000 to 1500 mm	30 – 40 mm	8,0 x 5,5
DE 40	Х	Х	Х	warped flanges and/or with severely defective sealing surfaces, nominal width > 1500 mm	→ 40 mm	10,0 x 7,0

Depending on the condition of the flange and sealing surface, a larger or smaller sealant size may be used.

#### **INSTALLATION WITH OVERLAP**

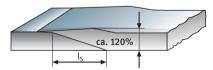
Clean flange faces; begin by laying sealant in front of a bolt hole. For DE 10 to DE 40 when gasket stress >20 N/mm<sup>2</sup> is available. Always overlap DE 04 and DE 06.





#### INSTALLATION WITH SKIVED CUT

Clean flange faces; begin by laying sealant in front of a bolt hole. For DE 10 to DE 40 where gasket stress is less than 20 N/mm<sup>2</sup>.



# **ORDERING DETAILS**

Type, total quantity, number of spools.

Europe/Middle East/Africa

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