

GORE-SEALANTS

GORE-TEX[®] DE sealant PRODUCT INFORMATION



Technical Data

Material

100% pure expanded PTFE, free of asbestos or any other lung damaging component.

Operating Temperature Range

-240°C to +270°C, to +315°C for short periods (33 K to 543 K, to 588 K for short periods).

Chemical Resistance

Resistant to all media in the range 0-14 pH, except molten alkali metals such as elemental fluorine at high temperatures and pressures.

Physiological Safety

Physiologically harmless in prolonged installation at temperatures up to +260°C according to VDE/VDI 2480; meets FDA requirements.

Pressure Limit

To 250 bar according to operating parameters and installation conditions.

Ageing Characteristics

GORE-TEX® DE sealant, installed according to recommended conditions, is not subject to ageing and can be stored indefinitely.

Sealing Values (for pressures up to 40 bar):

 $K_0 x k_D = 22,0 x b_D$ $k_1 = 1,6 x b_D$ GORE-TEX® DE sealant 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).

Typical Applications

Flange Types

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

Equipment

Agitators, columns, pumps, industrial ovens, tank farms, machine housings, glass and graphite equipment, covered receptacles, sight glasses, air and air-conditioning plant

Sealing Faces / Flange Material

Aluminium, glass, graphite, GRP, ceramic, steel, rubber components

Quality Assurance

This forms the basis of the high level of quality of $\mathsf{GORE}^{\texttt{®}}$ products.

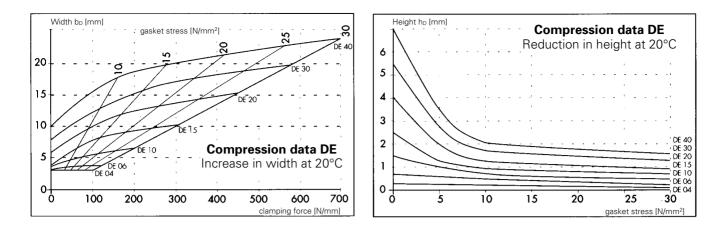


The GORE Quality Control system is certified according to DIN EN ISO 9001 by DQS. Component suppliers are also integrated into this system.

W.L. GORE & ASSOCIATES GMBH WERNHER-VON-BRAUN-STR. 18 D-85640 PUTZBRUNN TEL. (0.89) 46.12-0 FAX (0.89) 46.12-23.00 All the technical information and advice we give 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 be judged only where all necessary operating data are available. Our product special list shall be glad to help you.



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Selection Recommendations

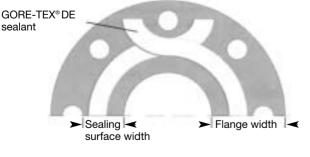
Туре	Availablility meters / spool			Sealing of flanges with minimum gap requirements	Sealing surface width	Nominal dimensions of the sealant w x h [mm]
	10	25	50			
DE 04		Х	Х	very smooth sealing surfaces, minimal imperfections, e.g. on pump casings	> 3 mm	3,2×0,3
DE 06		Х	X	normal sealing surfaces, minimal imperfections e.g. on used pump casings	> 3 mm	3,2×0,7
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	4,0×1,5
DE 15		Х	Х	standard flanges, rough flange faces, up to nominal width 500 mm	15–20 mm	4,0×2,5
DE 20		Х	X	standard flanges, slightly distorted, sealing surfaces, with nominal width 500 to 1000 mm	20-30 mm	6,0×4,6

DE 30 standard flanges, very uneven flanges, 30-40 mm Х Х 8,0 x 5,5 nominal width 1000 to 1500 mm DE 40 Х Х Х warped flanges and/or with severely 10,0×7,0 > 40 mm defective sealing surfaces, nominal width > 1500 mm

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 $>20 \text{ N/mm}^2$ is available. Always overlap DE 04 and DE 06.

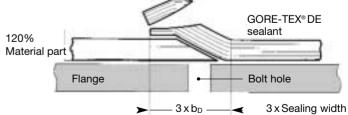


Supplied by:

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^2 .



Detailed advice is available separately in "Installation Instructions for GORE-TEX® DE Sealant".

Ordering Details

Type, total quantity, number of spools.