

WT-B ePTFE Gasket Tape

WT-B gasket tapes consist of 100 % pure virgin expanded PTFE, equipped with a self-adhesive back to facilitate installation. The specific multi-directional orientation given to **WT-B** gasket tapes in the manufacturing process leads to advantageous attributes: Even at elevated temperatures and higher surface pressures, **WT-B** gasket tapes, similar to **WT-A** gasket sheets, show nearly no increase in width, have an extremely low creep and feature an exceptional adaptability to unevenness and damages on the flange surface.



WT-B gasket tapes are typically used for sealing pressure vessels, heat exchangers, agitators, apparatus etc. They are used in the chemical industry, in power plants, in food and pharmaceutical applications, in plant engineering and construction.

Technical Data

Chemical Resistance of the Material

pH 0-14 - resistant to all media, except dissolved or molten alkali metals and elemental fluorine at higher temperatures and pressures.

Temperature Resistance of the Material

-240°C to +270°C, intermittent to 315°C

Physiological Inertness

Physiologically safe up to +260°C.

Resistance to Aging

Within the admissible range of application, **WT-B** gasket tapes are not subject to aging and may thus be stored and used indefinitely. Please note, that the adhesive strength may decline after 1-2 years.

Recommended Operating Ranges

Pressure: Vacuum up to 65 bar (glass, ceramic up to 6 bar)
Temperature: -240 °C to 230 °C

Depending on the application and assembly conditions, **WT-B** gasket tapes can be applied at higher temperatures and pressures. We gladly advise you.

Approvals

„TA-Luft“ VDI 2440 / TÜV Süd

FDA 21 CFR 177.1550(PTFE)
FDA 21 CFR 175.105(adhesive)

Technical Parameters

DIN 28090-1
 $VU(40\text{bar}; 0,01) = 26 \text{ Mpa}$
 $v_o = 150 \text{ MPa}$
 $BU = 5 \text{ MPa}$

DIN 28090-2
 $k_{SW} = 42\%$

AD-sheets B7
 $k_o \times k_D = 26 \times b_D \text{ N/mm}^2 \times \text{mm}$
 $k_1 = 2,4 \times b_D \text{ mm}$

Advantages and Possible Applications

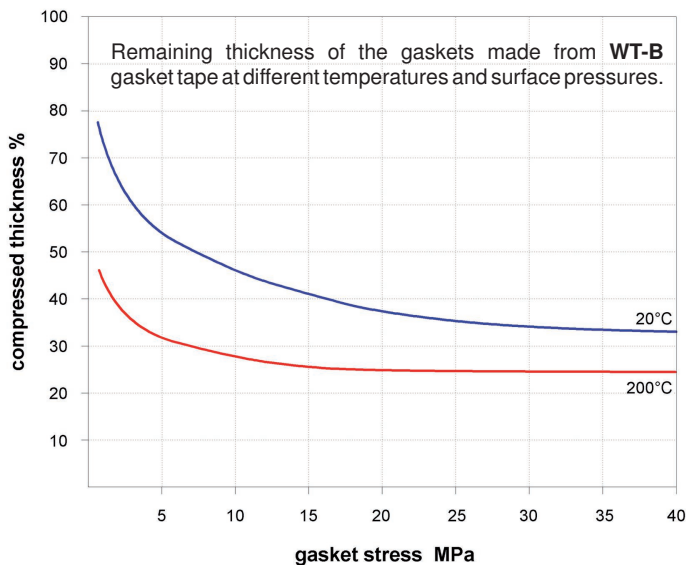
WT-B gasket tapes are suited for sealing flanges in frictional connections. Within the admissible temperature range they may be used for sealing steel and stress-sensitive components such as enamel, glass, ceramic and GRP.

WT-B gasket tapes offer a wide range of benefits:

- no punching nor die-cutting
- fast to install
- no waste and no inventory of odd-shaped gaskets
- excellent adaptability to uneven sealing surfaces
- almost no increase in width under stress
(thus suitable also for narrow flange surfaces)

WT-B gasket tapes require, contrary to **WT-A** gasket sheets, more space during installation (min. 60 mm flange distance). They are well-suited for large flange diameters and geometrically complicated surfaces.

Deformation of Gasket Thickness



Delivery Form

Standard cross-sections

width in mm	Thickness in mm									
	2	3	4	5	6	7	8	9	10	
10	x	x	x	x	x	x	x	x	x	x
15	x	x	x	x	x	x	x	x	x	x
20	x	x	x	x	x	x	x	x	x	x
25	x	x	x	x	x	x	x	x	x	x
30	x	x	x	x	x	x	x	x	x	x
35	x	x	x	x	x	x	x	x	x	x
40	x	x	x	x	x	x	x	x	x	x
45	x	x	x	x	x	x	x	x	x	x
50		x		x	x	x	x	x	x	x
55		x			x	x	x	x	x	x
60		x			x	x	x	x	x	x
65		x			x	x	x	x	x	x

Standard length 10,0 m

Other lengths, widths and thicknesses are available on request

Handling and Assembly

- Selection of required gasket tapes:

Selection of the gasket tape width:

For stress-sensitive components, such as enamel, choose a width covering the whole flange surface, for steel flanges a width covering 30 – 50 % of the sealing surface is adequate.

Selection of gasket tape thickness:

As a rough rule of thumb, the bigger the flange diameter, the higher the unevenness, the thicker the gasket tape. Very rough sealing surfaces should be padded additionally with **WT-B** gasket tape in the area of the damage. Determining for the correct choice of tape dimensions are the concrete conditions and properties of the sealing connection.

- Mounting of **WT-B** gasket tapes:

Remove any oil, moisture, solvents and other residues from the sealing surface. Release the protective film from the self-adhesive back for about 20 cm and mount the gasket tape, beginning from a bolt, centrally of the flange surface. Execute a bevel cut as shown below (fig.1).

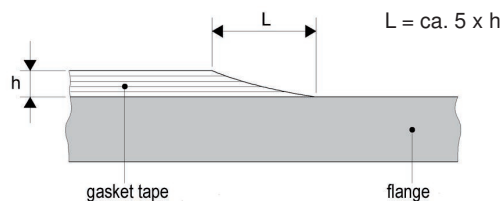


fig.1

Gradually mount the gasket tape on the sealing surface, simultaneously removing the protective film. Join the endings and cut the gasket tape with a sharp knife starting from a height of $1,2 \times h$ converging to the gasket tape height h as shown below.

Tighten nuts crosswise in 3 to 4 progressive torque sequences until the optimum torque or bolt force is reached. After the first temperature cycle, retighten nuts to $2/3$ of the initial bolt force. Retighten stress-sensitive components only at ambient temperature and pay attention to the maximum torque stated by the manufacturer.

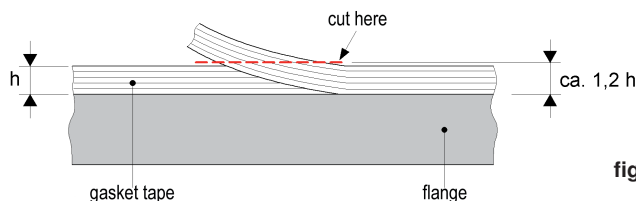


fig.2

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Rev.Nr. : EN08/17.07.13