



## AESSEAL Joint Sealant AESTEX

### ePTFE Gasket

#### Characteristics

- Simple to install
- $\cdot\,$  No ageing of the ePTFE Joint Sealant
- Excellent adaption, ideal to compensate uneven gland surfaces
- $\cdot\,$  Physiologically safe in temperatures up to +260 °C
- Selection criteria: unevenness of gland should not be bigger than 1/3 of seal thickness

**Suitable for** 

· Chemical industry

Food industry

• General service

· Pharmaceutical industry

#### **Operating range**

p <sub>max</sub> [bar]	Vacuum	55
t°C	-240	+270
рН	0 - 14	

Pressure: Vacuum up to 55 bar (according to the operational and/or assembly conditions)

Temperature: Resistance of the ePTFE sealing material short term +310 °C. After first temperature exertion the bolts should be Re-tightened.

#### Material

100% pure ePTFE in a stretched filament knotted fibre structure. This ensures that there is a high pressure resistance (restricted cold flow) and a good adaptation to the flange surface.

### Main application

- Pipe Columns
- $\cdot\,$  Separation joints
- Mixer
- Pump Housing
  Machine Housing
- Glass- and Graphite-Devices
- Lined vessels
- Sight glasses
- Hand- and Manhole covers (Not TRD401)
- Ventilation and Air Condition Channels
- Steel and Plastic flanges
- Pipes and devices with highly
- aggressive chemicals

Gearboxes

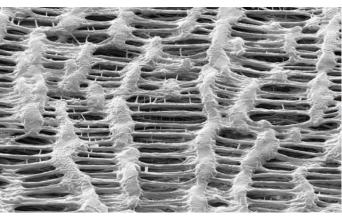
#### **Approvals**

- TÜV Prüfung acc. MUC-KSP-A066
- BAM for oxygen 60 °C / 40 bar
- DVGW Reg.-Nr.: DG-5127CL0032
- TA-Luft: AMTEC 1.7 · 10-7 mbar · I/ (s·m) @ 250 °C test pressure

#### Food:

- FDA21 CFR 177.1550 (PTFE)
- FDA21 CFR 170.105 (adhesive)
- EG 1935:2004 EU 10/2011





Resistant

All media pH 0-14, e.g:

under high pressure

· Ageing resistant

grease, steam

• Excluded:

acids, alkaline, solvents, paint, oil,

molten and/or solved alkaline me-

tals and elementary or gaseous

fluoride at high temperature or

Electron microscopic view: 100 % pure PTFE (VDE-VDI 2480) in a monoaxial expanded Net-Knot structure

All technical information and advice is based on our experience and will be given most conscientiously but without any liability.

Indication and figures are for guidance only and need to be examined by the user. All sizes are subject to manufacturing tolerances. We reserve the right to modify specifications at any time. Please note that the technical values cannot be used all at the same time in their maximum values.

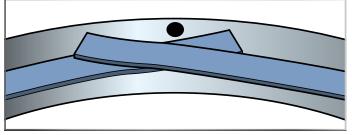
AESSEAL plc Packing Division Europe Rudolf-Diesel-Ring 26a . 82054 Sauerlach . Germany

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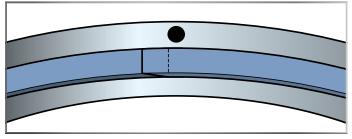
Telephone: +49 8104 6640-21 . Telefax: +49 8104 6640-44 packing.euro@aesseal.com . www.aesseal.com



#### Installation

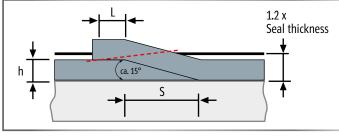


- 1. Clean joint surfaces
- 2. Remove protection strip from adhesive side
- 3. Place the seal on the on the joint surface
- 4. Overlap the ends by 1 -2 cm right in front of a bolt
- 5. Cut of the rest of the seal



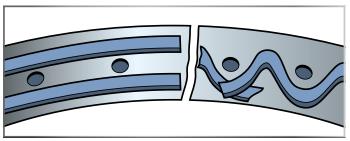
#### Special installation suggestion Skive cut for tension sensitive components

- 1. Clean flange surfaces
- 2. Remove protection strip from adhesive side
- 3. Fix seal on the flange surface and cut it taper to a point using skiving technique shown in figure below.
- 4. Place the skive connection always in front of a bolt
- 5. End cutting Conducting a skive cut (see figure below)

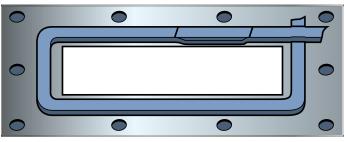


skive cut section (S) = 2 x sealing width. Overlap length (L) approx. 2-3 x seal thickness (h).

Overlap material at intersection with + 20% height addition (h x 1.2).



Wavelike installation along the pitch circle or additional supporting strip prevents tipping of flanges. When selecting the width under consideration of the screw forces, do not exceed the maximum permissible surface pressure of 150 MPa.



Unevenness should not exceed 1/3 of the sealing thickness. Bedding or double layer in case of larger unevenness and flange distortion or local damage on the flange.

#### Form of delivery

Order Code	Width/ Height	Standard Roll Length	Recommended for flange width	Surface pressure/result. thickness (mm)			
(mm)	(mm)	(mtr)		10 N/mm <sup>2</sup>	20 N/mm <sup>2</sup>	30 N/mm <sup>2</sup>	
D 1/1	1 x 1	25		0.15	0.10	0.08	
D 1/3	3 x 1.5	25	< NW 100	0.40	0.35	0.30	
D 1/5	5 x 2	25	< NW 300	0.80	0.60	0.50	
D 1/7	7 x 2.5	25	< NW 800	1.00	0.80	0.70	
D 1/10	10 x 3	25	< NW 1,500	1.20	0.90	0.80	
D 1/12	12 x 4	10	< NW 1,500	1.45	1.15	0.95	
D 1/14	14 x 5	10	> NW 1,500	1.60	1.20	1.00	
D 1/17	17 x 6	10	In case of bigger unevenness use next bigger thickness or apply a double layer	2.10	1.50	1.40	
D 1/20	20 x 7	10		2.40	1.80	1.40	
D 1/25	25 x 5	5		1.60	1.20	1.00	
D 1/25DD	25 x 8	5		2.74	2.06	1.60	
D 1/28	28 x 5	5		1.60	1.20	1.00	
D 1/40	40 x 5	5		1.60	1.20	1.00	
Defense Value Development from the little							

Reference Values: Depending on flange surface condition.

Gas Tight above 20 N/mm<sup>2</sup> during operation conditions.

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