



# FLANGE GASKET





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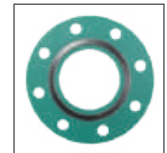
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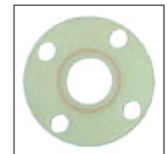
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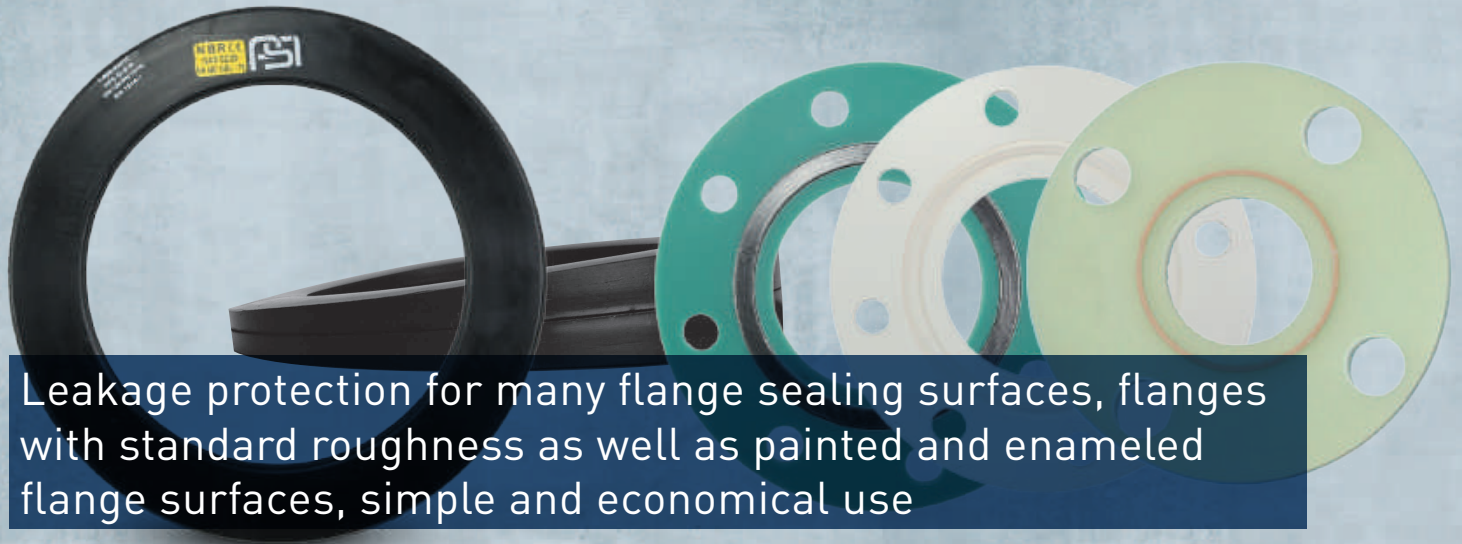
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Leakage protection for many flange sealing surfaces, flanges with standard roughness as well as painted and enameled flange surfaces, simple and economical use

## GASKIT FLANGE GASKET/ISOLATION

 KFD	 WD	 GLV UniSeal GGR®	 GLV UniSeal T®	 LineBacker®
 VCS™	 VCFS™	 Isolation Kit		



Building



Civil engineering



Water



SHK



Energy



Oil



Gas



District heating



Industry



Chemistry



## TYPE SELECTION



### GaskiT **KFD** - Rubber Steel Gasket (G-S-S)

#### Fields of application

Sealing of flange connections for gas supply systems, drinking water systems, service water, wastewater and pumping station systems

#### Material

Elastomer materials made of EPDM: hardness Shore A: 70° ±5, operating temperature from -25 °C up to +120 °C; elastomer materials made of NBR: hardness Shore A: 70° ±5, operating temperature from -25 °C up to +90 °C

#### Properties

Gaskets for more dimensional stability due to vulcanized steel ring; gasket dimensions according to DIN 1514-1 / DIN 2690; for safe centering within the bolt ring; fast sealing effect at low bolt tightening torque due to bead on the medium side; compensation of pressure changes and variations in temperature due to high resilience

#### Sizes

ND 15 to ND 1200 (up to ND 2000 on request); pressure ratings PN 6 to PN 40



### GaskiT **WD** - Adjustable Rubber Steel Gasket

#### Fields of application

Sealing of flange connections for water, wastewater and pumping station installations

#### Material

Elastomer materials made of EPDM; operating temperature from -25 °C up to +120 °C other elastomer materials e.g. FKM (Viton) on request

#### Properties

Easy to use for flange misalignment; each gasket consists of two segments connected by a tongue-and-groove connection; adjustment range by rotating the two parts in opposite directions up to 8 degrees; replaces the wedge disks commonly used in such cases, and the additional gasket in a simple and economical way; gasket dimensions according to DIN 1514-1; for safe centering within the bolt ring.

#### Sizes

Pressure ratings PN 10 up to PN 40 (large nominal Sizes PN 10)





### **GLV UniSeal GGR®** - Flange Isolation

#### **Fields of application**

Sealing of flange connections in the field of gas supply; tank installation; oil supply; and electrical separation.

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#### **Material**

Retainer made of epoxy resin-bonded glass filament laminate; sealing-material made of expanded graphite

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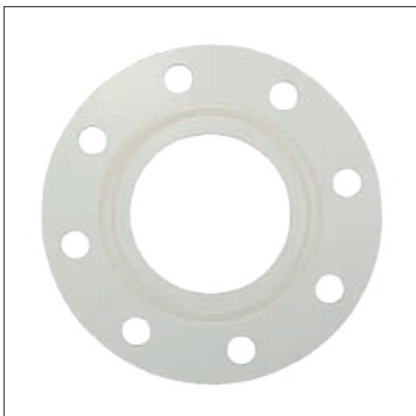
#### **Properties**

Indirect bolt force load flange insulating gasket; fulfills the requirements of the technical rules for flammable gases and liquids; functionally safe due to minimum water absorption; blow-out safe due to chambered sealing rings inside grooves; gasket type E with bolt holes according to the flange standards; gasket in design type F without bolt holes according to the flange standard (IBC Inner Bolt Circle); compressive strength up to 500 MPa (at +20°C); thickness 4 mm (8, 16 and 20 mm on request); operating temperature from -60 °C up to +150 °C

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#### **Sizes**

ND 15 to 900; PN 6 - PN 63 (EN 1092-1) / ½" to 40"; CLASS 150 - 400 (ANSI B16.5 + B16.47); Other nominal and special sizes on request



### **GLV UniSeal T®** - Flange Isolation

#### **Fields of application**

Water supply, drinking water, wastewater, in the area of electrical separation and/or sealing of flanged connections.

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#### **Material**

Retainer made of PVC; sealing material made of silicone RTV1-02; permanently elastic

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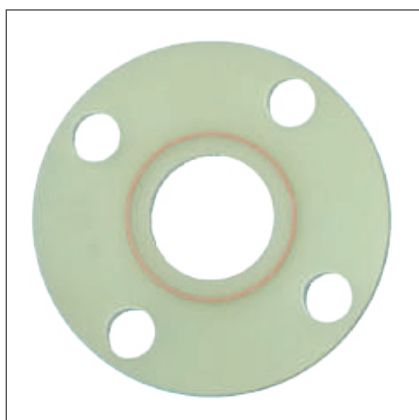
#### **Properties**

Flange Isolation gasket; indirect bolt force load; functionally safe due to minimal water absorption; pressure resistance up to 130 MPa (at +20 °C); thickness 4-6 mm (4 mm up to ND 250 / 6 mm from ND 300); operating temperature up to +60 °C

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#### **Sizes**

ND 15 to 1200; PN 6 - PN 40 (EN 1092-1) / ½" to 42"; CLASS 150-300 (ANSI B16.5 + B16.47); Other nominal and special sizes on request



## **LineBacker®** - Flange Isolation

### **Fields of application**

Oil & Gas industry, tank farms; applicable in the field of electrical isolation and/or sealing of flange connections; appropriate for usage with RTJ flanges (dimensions on request).

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### **Material**

Gasket retainer made of epoxy resin-bonded glass filament fabric G10 (other retainer materials on request);  
Sealing element NITRIL (PTFE, EPDM, VITON on request)

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### **Properties**

Flange isolation gasket; indirect bolt force load; functionally safe due to minimal water absorption; effective sealing due to patented rectangular sealing element in combination with unique groove design; low bolt forces; compressive strength up to 350 MPa (at +20 °C); operating temperature from -54°C up to +138 °C (depending on operating medium)

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### **Sizes**

ND 25 to 700, PN10 - 100 (EN 1092-1) / 1" to 30"; CLASS 150 - 600 (ANSI B16.5 + B16.47); Other nominal diameters on request



## **Pikotek® VCS™** - Flange Isolation

### **Fields of application**

Oil & Gas industry; tank farms; applicable in the field of electrical separation and/or sealing of flange connections; for many common flange standards such as DIN EN, ANSI, ASME, API, BS; applicable for RTJ flanges (dimensions on request)

### **Material**

Gasket made of stainless steel core (standard V4A / S316) with epoxy resin bonded glass filament fabric G10 on both sides (other carrier materials on request); spring-energized teflon sealing element are installed in the dovetail-shaped seal grooves; other sealing element configurations (e.g. EPDM, VITON) available, depending on application conditions.

### **Properties**

Flange isolation gasket; indirect bolt force load; flange gasket/isolation for "very critical applications"; functionally safe due to lowest water absorption; compressive strength up to 350 MPa (at +20 °C); operating temperature from -54 °C up to +138 °C (depending on the operating medium)

### **Sizes**

ND 25 to 600, PN10 - 400 (EN 1092-1) / 1" to 24";  
CLASS 150 - 2500 (ANSI B16.5), API 10000 psi;  
Other nominal diameters on request



## **Pikotek® VCFSTM** - Fire-resistant Flange Isolation

### **Fields of application**

Applicable in FireSafe systems according to API 6FB Part 3, in conjunction with DH isolation washers (Diamond-Hyde™ coating) Oil & Gas industry; tank farms in the field of electrical separation and/or sealing of flange connections; suitable for RTJ flanges (dimensions on request).

### **Material**

Gasket made of stainless steel core (standard V4A / S316) with epoxy resin-bonded glass filament fabric G10 overlay on both sides (other retainer materials on request); standard seal consist of a PTFE spring-energized primary sealing element with secondary E-ring seal

### **Properties**

Flange isolation gasket; indirect bolt force load; flange gasket/isolation for "very critical applications"; functionally reliable due to minimal water absorption; pressure resistance up to 350 MPa (at +20 °C); operating temperature from -129 °C up to +150 °C (depending on the operating medium)

### **Sizes**

ND 25 to 1200, PN10 - 400 (EN 1092-1) / 2" to 48"; CLASS 150 - 2500(ANSI B16.5 + B16.47); sizes depend on pressure rating and flange type; other nominal sizes on request





## GaskiT Isolating Sleeves

### Fields of application

Optimal electrical separation of flange connection bolts

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### Material

Mylar (spiral wound polyester film); standard version;  
G-10 (epoxy resin bonded glass fabric); only for inch sizes; G-11  
(epoxy resin bonded glass fabric)

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### Properties

Designed for all common flange types; easy installation on site; sleeve wall thickness 0.3 to 0.8 mm (depending on sizes and design); temperature range Mylar: -60 °C up to +130 °C; temperature range G10: -150 °C up to +150 °C; temperature range G11: -150 °C up to +200 °C.

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### Sizes

For metric bolt sizes M12 to M52; for inch bolts ½" to 3½";  
(Other sizes on request).



## GaskiT Isolating Washers

### Fields of application

Optimal electrical separation of flange connection bolts

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### Material

G-10 (epoxy resin bonded glass fabric), standard version; G-7  
(silicone resin bonded glass fabric), on request;  
Diamond Hyde™ (for VCFS Flange Isolation), standard version

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### Properties

Designed for all common flange types; easy installation on site;  
high compressive strength;  
Temperature range G10: -60 °C up to +130 °C; Temperature range G7: -60 °C  
up to +180 °C; Temperature range Diamond Hyde™: -45 °C up to +218 °C

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### Sizes

For metric bolt sizes M12 to M52; for inch bolts ½" to 3½";  
(other sizes on request).



## GaskiT **Steel Washers**

### **Fields of application**

In conjunction with isolation accessories for flange isolations

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### **Material**

Steel, galvanized (standard version); stainless steel A4 (special version)

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### **Properties**

Designed for all common flange types

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### **Sizes**

For metric bolt sizes M12 to M52; according to DIN 126 for steel versions and DIN 125 for stainless steel versions (other sizes on request).



## GaskiT **Isolation Bolt**

### **Fields of application**

Isolation/electrical separation of flange connection bolts

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### **Material**

Bolt materials: Grade 5.6, 8.8 CK35, 42 CrMo4, UNC - Special materials on request;

Bolt isolation with epoxy resin glass fiber sheathing, including double steel and isolation washers; cured and reworked according to nominal sizes

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### **Properties**

Easy installation on site; optimal electrical separation; extreme strength; no increase of bolt diameter; operating temperature up to +200 °C (higher temperatures on request)

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### **Sizes**

Bolt dimensions in line with to DIN/ANSI flange requirements (special sizes on request); ND 25 - DN 300, PN 10 - PN 63



## GaskiT **Isolation KIT**

### **Fields of application**

Isolation/electrical separation of flange connection bolts

### **Material**

Isolation KIT consist of one isolation sleeve; 2 isolation washers and 2 steel washers for each bolt hole.

### **Properties**

Easy installation on site; optimal electrical separation; extreme strength; no increase of bolt diameter; operating temperature up to 130 °C (higher temperatures on request).

### **Sizes**

ND 25 - ND 300, PN 10 - PN 63;

Composition of isolation washers; steel washers and isolation sleeves according to DIN/ANSI flange requirements.



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**Product data sheet**



**Installation**



**Certificates**



**Tender text**

## PRODUCT INFORMATION

### Properties

- High operational safety
- Low tightening torques
- Dimensional stability
- Large operating temperature range

### Fields of application

Sealing and isolation of flange connections in corrosion protection plants, for electrical separation. Flange Isolation for cathodic corrosion protection of flange sealing surfaces in combination with isolation sleeves and isolation washers. Flange Isolation to meet the requirements of technical regulations for flammable gases and liquids. The flange gaskets GLV-UniSeal® T and GGr can, of course, also be used as gaskets without Isolation.

### Description

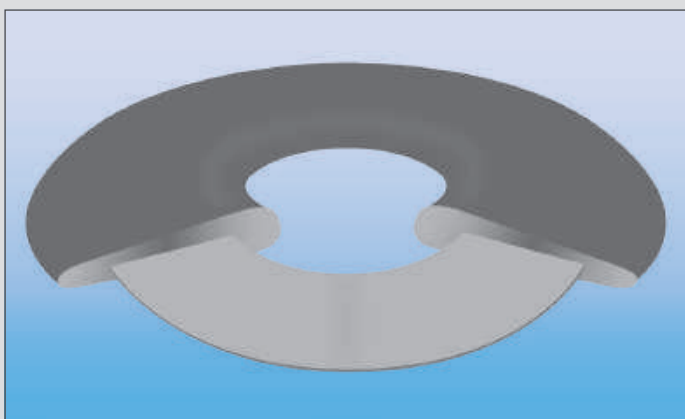
Easy and quick installation. Can be mounted with "standard tools" and torque wrench.

### Notes

The flange gasket VCFS must always be used in conjunction with the Diamond Hyde™ disc system.

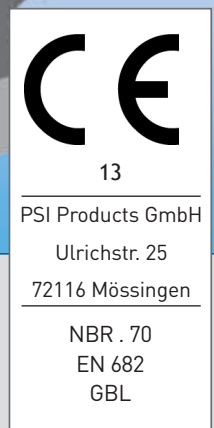
## TECHNICAL INFORMATION

### GaskiT KFD - Rubber Steel Gasket



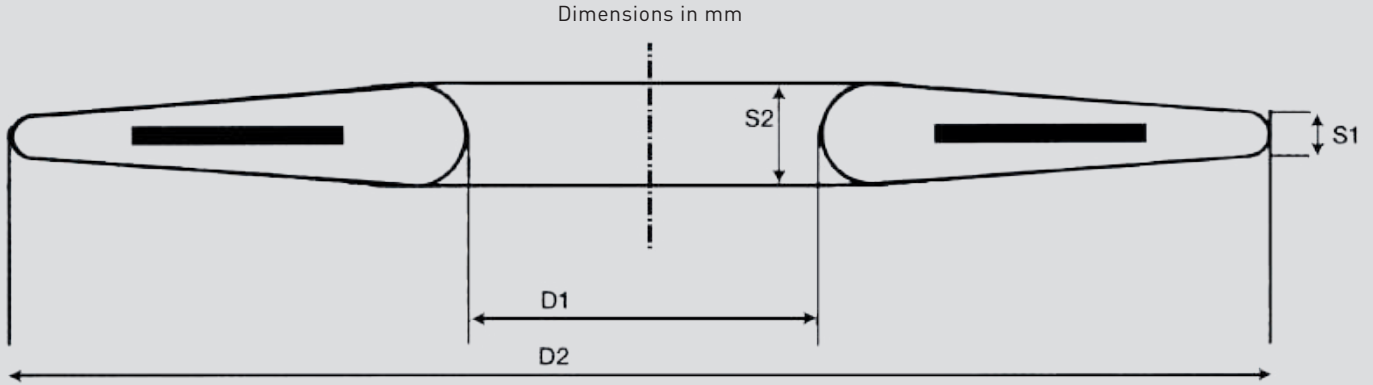
Rubber Steel Gasket G-S-S with vulcanised steel ring for more dimensional stability, safe centering and perfect sealing according to DIN EN 1514-1 (PN 6-40).

Gaskets according to DIN 1514-1 / 2690. For dimensions from ND 15 to ND 1200 (up to ND 2000 on request). For pressure ratings from PN 6 to PN 40.



**Rubber Steel Gasket Typ G-S-S**

With vulcanized steel ring according to DIN EN 1514-1: Form IBC for pressure ratings from PN 6 to PN 40.



Extraction from the dimension table of the Rubber Steel Gaskets type G-S standard. For values S1, S2, D1 and D2, please refer to the price list.

**Two in one**

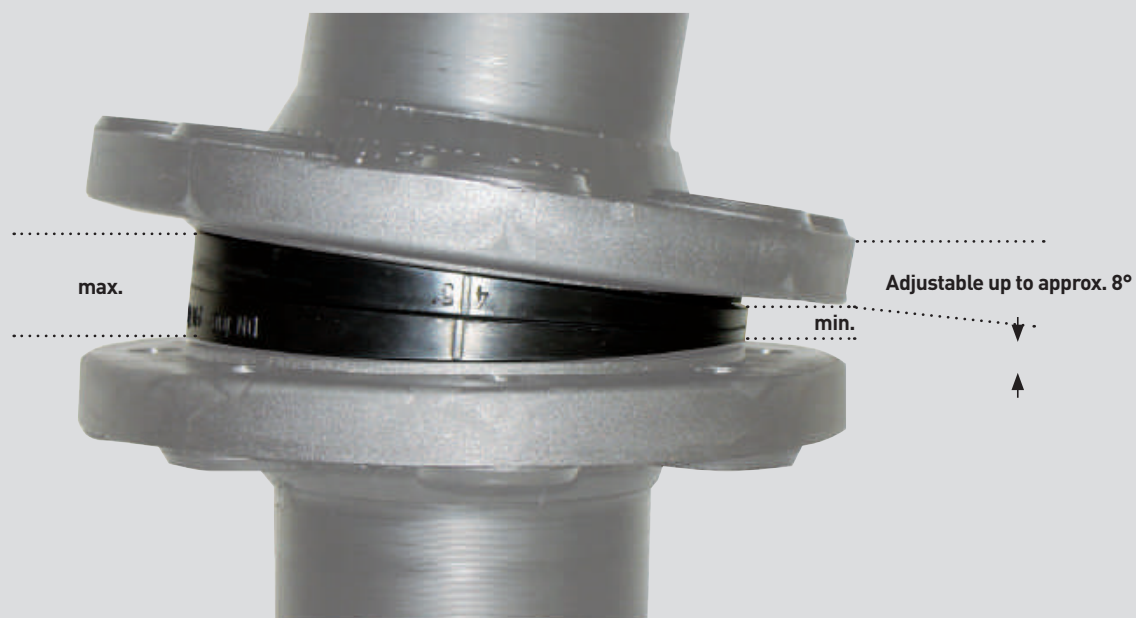
Due to its wedge shape, the PSI rubber-steel gasket GASKIT KFD can be used as an alternative to the so-called O-ring seal, and as a standard rubber-steel gasket.



ND	PN 6	PN 10	PN 16	PN 25	PN 40
15	6	11	11	11	11
20	10	16	16	16	16
25	13	21	21	21	21
32	22	36	36	36	36
40	28	45	45	45	45
50	31	58	58	58	58
65	42	77	77	38	38
80	70	45	45	45	45
100	74	49	49	70	70
125	50	64	64	105	105
150	54	89	89	124	124

ND	PN 6	PN 10	PN 16	PN 25	PN 40
200	76	123	82	123	155
250	65	102	127	177	234
300	105	105	160	177	245
350	136	133	177	264	345
400	111	160	223	340	515
500	120	188	316	370	437
600	173	250	480	500	-

## GaskiT WD



Dimension		Thickness		Bolt length	Bolt size
ND	PN	min.	max.		
32	10 - 40	9	20	90	M 14
40	10 - 40	9	22	90	M 14
50	10 - 40	9	24	100	M 14
65	10 - 40	9	26	100	M 14
80	10 - 40	14	30	100	M 14
100	10 - 16	14	30	100	M 14
100	25 - 40	14	33	110	M 18
125	10 - 16	14	36	100	M 14
150	10 - 16	14	39	110	M 18
150	25 - 40	14	39	130	M 22
200	10 - 16	15	50	120	M 18
200	40	15	50	160	M 24
250	10	16	59	140	M 18
250	40	16	59	170	M 27
300	10	22	68	150	M 18
350	10	22	68	150	M 18
400	10	22	74	160	M 22
500	10	23	79	180	M 22



## CERTIFICATES

To offer our customers the best possible quality and service, we are organized according to DIN EN ISO 9001:2015 and also have this continuously checked and certified.

### **CERTIFICATE ISO 9001:2015**

This certification documents our conformity of the quality management system

### **AEO CERTIFICATE**

Authorized Economic Operator "AEOC (Customs Simplification)"

### **Flange gaskets**



- KFD NBR; EN 682-1, DVGW VP406 A7; DIN-DVGW type examination certificate
- KFD EPDM; DVGW W270; Test report TZW
- KFD EPDM; EN 681-1, BGA KTW, DVGW W270; DIN-DVGW type examination certificate
- WRAS: Material Approval
- ACS: Certificate of sanitary conformity

### **Flange Isolations**



- GLV UniSeal GGr: DIN DVGW Cert; TA-Luft-Compliant
- GLV UniSeal T: DVGW W270 and UBA silicone transition recommendation for preliminary drinking water hygiene assessment
- LineBaker: Leakage Test Report according to EN 13555
- Pikotek® VCF™: TA-Luft according to VDI 2200 (2007-06)
- Pikotek® VCFS™ : TA-Luft according to VDI 2200 (2007-06)
- Fire Test Report according to API 6FB
- HTB confirmation according to DVGW VP401, chapter 4.6.3



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Product overview **Pipe Insertion**



Product overview **Corrosion Protection**



Product overview **Flange Gasket**



Product overview **Pipe Cleaning**



Product overview **Marking**





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