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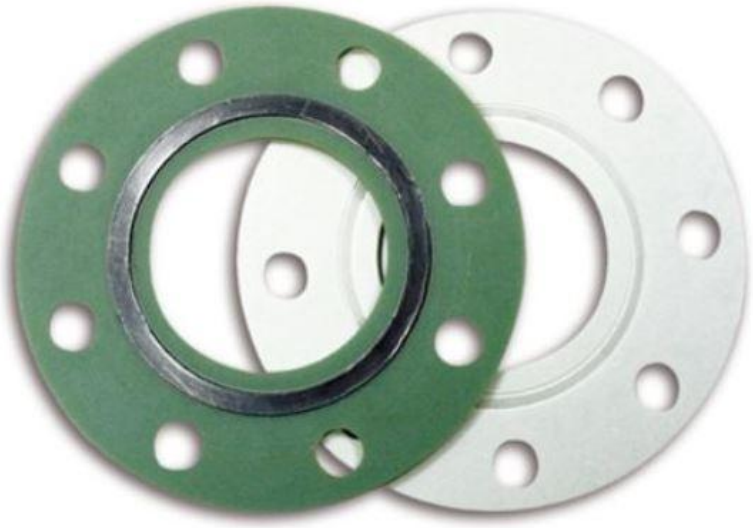
pipeline accessories

GLV-UniSeal® GGR & T
for gas, fuelling systems, airfield and water

TYPE GGR (green)



TYPE T (white)

General use:
- Flangeisolation gaskets combined with isolating sleeves and washers satisfy the requirements of cathodic protection.
- Flangeisolation kits can be used in chemically agressive environments for sealing flammable gases and liquids.
- The GLV flangeisolation kits can also be used for general sealing purposes.

The GLV-UniSeal® T and GLV-UniSeal® GGr make that the gasket can be used wherever an absolutely tight sealing must be achieved with low surface pressure.The silicone or graphite rings stays permanently elastic throughout the entire lifetime of the seal and is does not age or become brittle due to the temperature or media it is subjected to. The O-ring properties of the silicone or graphite ring gaurantee optimal sealing under indirect bolt force load.
Generally the gasket can be used with all DIN and ANSI flanges. It can be installed in new systems or replaced during maintenance work.

Advantages of GLV-UniSeal® T and GLV-UniSeal® GGr at a glance
- Easy to install
- Maintenance-free, no retightening of the bolts required
- Blow-out safety due to chambered sealing rings inside grooves
- Permanently elastic due to being a pure graphite seal(does not become brittle due to temperature)
- Suitable for heavy duty service due to indirect bolt force load
- Funktionally reliable due to lowest water absorption

The GLV-UniSeal® T and GLV-UniSeal® GGr installed together with isolation sleeves and washers are tested with 5000 voltage according to DIN 50049/2.3 EN 10204. Potable water version GLV-UniSeal® T, GLV T gaskets are made according to KTW/W270 recommendations. General application of GLV-UniSeal® T are the pharmaceutical Industry, water statoins ect.

Application areas of GLV-UniSeal® GGr, German Clean Air Code(TA Luft) DVGW
These materials have a high universial resistance to most substances and offer long and safe sealing. This gasket material har universial applications and can be used in many different industries including petrochemical, ags, offshore, water oil, ect.

Chemical resistance
GLV-UniSeal® T gasket i smanufactured from high quality PVC with good resitance against hydrous solutions and non-concentrated acids and alkalines. The silicone rubber RTV 1-02 sealing element has good resistance against diluted alkalis, weak acids, water, hydrous and inorganic salts. It stays permanently elastic and has good aging and degrading resistance. The O-ring-characteristic of the silicone bead ensures absolute tightness of a full elastomer gasket even at low sealing pressure. GLV-UniSeal® GGr gasket is manufactured from epoxy resin bound glass roving fabric with good resistance against most chemicals, fuels, oils, water, hot water and steam.

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Technical details

Exception
Exceptions are strong alkalines, acids and oxiding agents. Expanded graphite has excellent sealing characteristics and almost unlimited chemical resistance, very good aging characteristics and is temperature resistant up to 500°C.

Technical details

	GLV-UniSeal ® GGr	GLV-UniSeal ® T
DN	15-900 (DN 1000/1200)	
ANSI	1/2" - 40" (depending on pressure class, 44" only GLV-UniSeal ® T)	
Pressure class PN	6, 10, 16, 25, 40, 63	6, 10, 16, 25, 40
Class	75, 150, 300, 400	75, 150, 300

Isolation material		**GLV-UniSeal ® GGr**	**GLV-UniSeal ® T**	
Retainer		Epoxy resin glass roving fabric	Polyvinylchlorid (PVC)	
Color		Light green	White	
Mech./electric properties	**Unit**	**GLV-UniSeal ® GGr**	**GLV-UniSeal ® T**	**Test method**
Thickness	mm	4	4-6*	-
Density	g/cm³	1.9	1.4	DIN 53479
Tensile strength	Mpa	200	55	DIN 53455
Impact strenght 20°C/180°C	Mpa	500/350	130	ISO 604/DIN 53454
Flexural strength 80°C/180°C	Mpa	-/150	80/-	DIN 53452
Notched bar impact value	kJ/m²	33	6.3	DIN 53453
Operating temperature	°C	150	80	DIN/IEC 216/T1
Max peak temperature	°C	180	100/1 hour	DIN 44904
Spec. Volume resistance	Ω x cm	10ex16	10ex15	DIN/VDE 303T30
Dieelectric strength	kV/mm	13	27	JEC 243/DIN 53841
Water absorption (10mm thickness)	mg/%	20	<0.01	ISO 62/1 / DIN 53495

* Up to DN 250 = 4 mm, from DN300 = 6 mm

Sealing material	**Unit**	**GLV-UniSeal ® GGr**	**GLV-UniSeal ® T**	**Test method**
Thickness	mm	1.5	2.0	-
Density	g/cm³	1.25	1.20	DIN E28090T2/ DIN53505
Hardness	Shore A	-	55	DIN 53504S3D
Impact strenght	Mpa	>45	-	DIN 52913
Compression	%	>20	-	ASTM F36A
Resilence	%	>12	-	ASTM F36A
Chlorite content	ppm	≤50	-	-
Ash content	%	≤2	-	DIN 51903
Surface pressure	Mpa	15	-	-
Max surface pressure	Mpa	120	-	-
Max sustained temperature	°C	+500	+100	-
Approvals	-	DVGW TA-Luft-Conformity	KTW/W270	-

Available versions

Gasket type E (FF)
Gasket with bolts holes according to the flange standards (Full Face)

Gasket type F (IBC)
Gasket without bolts holes according to the flange standards (IBC)

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DIN DVGW CERT

DVGW CERT

DIN-DVGW-Baumusterprüfzertifikat

DIN-DVGW type examination certificate

NG-5124BL0367
Registriernummer
registration number

Anwendungsbereich ***field of application***	Produkte der Gasversorgung *products of gas supply*
Zertifikatinhaber ***owner of certificate***	DONIT TESNIT d.o.o. Cesta komandanta Staneta 38, SLO-1215 Medvode
Vertreiber ***distributor***	DONIT TESNIT d.o.o. Cesta komandanta Staneta 38, SLO-1215 Medvode
Produktart ***product category***	Schmier-/Dicht-/Betriebsmittel: Flachdichtungswerkstoff auf Basis Graphit (5124)
Produktbezeichnung ***product description***	Flachdichtungswerkstoff auf Basis Graphit für Druckregelgeräte und Drehkolben-Gaszähler
Modell ***model***	Grafilit SF
Prüfberichte ***test reports***	Kontrollprüfung Labor: 15/068/5124/01 vom 23.04.2015 (EBI)
Prüfgrundlagen ***test basis***	DIN 3535-6 (01.01.2011)
Ablaufdatum / AZ ***date of expiry / file no.***	25.08.2016 / 15-0267-GNV

21.09.2015 Rie A-1/2
Datum, Bearbeiter, Blatt, Leiter der Zertifizierungsstelle
date, issued by, sheet, head of certification body

DVGW CERT GmbH ist von der DAkkS nach DIN EN ISO/IEC 17065:2013 akkreditierte Stelle für die Zertifizierung von Produkten der Energie- und Wasserversorgung.

DVGW CERT GmbH is an accredited body by DAkkS according to DIN EN ISO/IEC 17065:2013 for certification of products for energy and water supply industry.

DAkkS
Deutsche Akkreditierungsstelle
D-ZE-16028-01-05

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Typ *type*	Technische Daten *technical data*	Bemerkungen *remarks*
Grafilit SF	Normbezeichnung: DIN 3535GR	

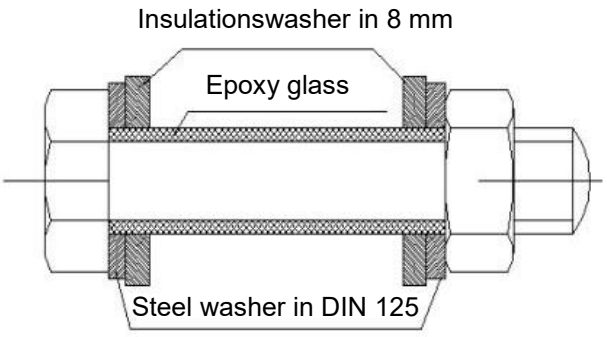
Technical data for IsoHexagon flange bolt 200

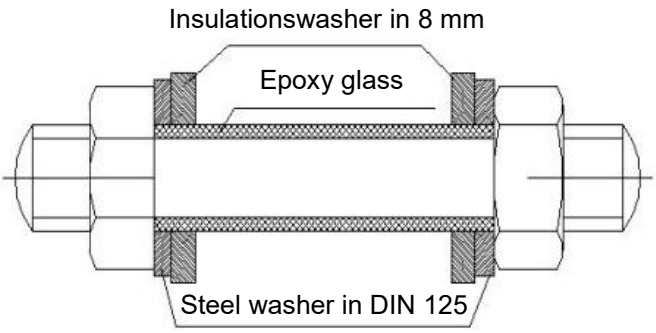
Technical specifications

Insulation bolts for flange insulation to 200 ° C

Bolts according to DIN 1025/931, and special bolts on request
Bolt dimensions analogous to DIN/ANSI standard norm
Bolt materials: DIN - 8.8, ANSI - B7/2H - special materials on request

Material on insulation		Test methods	Unit	Value
Material	epoxy / glass			
Colour	white			
Glass filaments per cm				30
Tensile strength in B.condition			N/cm	> 2000
Tensile strength after curing	min.		N/cm	> 2500
Modulus			MPa	50.000
Operating temperature			°C	200
Spec. volume resistance			Ω/cm	10^{14}
Insulation resistance after water		IEC 168	Ohm	10^{12}
Water absorption		ISO 62/1	mg	<20





Technical modifications reserved

10-20-222

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