

SOFT MATERIALS GASKETS

GRAPHITE GASKETS



Service parameters

T (°C)	-200 ÷ +650	450*
P _{max} (bar)	250	40*
Q _{max} (MPa)	270	150*

Widely used in:

SPETOGRAF® gaskets GUS® 30 style and GUS® 40 style are applied in petrochemical industry and refineries, power and heat generation and in all the installations with exposure to high temperature media. Applied in the construction of the pipelines, valves, vessels and heat exchangers; typical working temperatures -200 ÷ +550°C in customized versions up to +650°C

Custom styles:

- full face gaskets with bolt holes
- metal eyelets from other materials, e.g. Hastelloy or silver
- gaskets with bars and of shapes other than round
- gaskets for plastic flanges

Ordering:

- for gaskets obeying EN 1514-1, DIN 2690, DIN 2691, DIN 2692, ISO 7483 please indicate the symbol, thickness, DN, PN, for the EN and ISO standards, please indicate the type (e.g. IBC, FF, TG or SR in case of EN 1514-1), the number of the standard, e.g. SPETOGRAF® GUS® 31, 2mm, DN 50 PN 40, IBC, EN 1514-1,
- for gaskets obeying EN 12560-1 please indicate the name, thickness, DN, CLASS, type, number of the standard, e.g. SPETOGRAF® GUS® 31, 2mm, DN 50 CLASS 150, IBC, EN 12560-1,
- for gaskets obeying ASME 16.21 please indicate the name, thickness, NPS, CLASS, the number of the standard, e.g. SPETOGRAF® GUS® 31, 2mm, NPS 2" CLASS 150, ASME 16.21,
- please indicate the dimensions or a drawing for non standard gaskets, and any special requirements, e.g. "used for oxygen".

General information

Availability:

- DIN2690, DIN 2691, DIN 2692, ISO 7483, EN 12560-1, EN 1514-1, ASME 16.21, other
- SIGRAFLEX® Universal sheets 1500x1500 or 1000x1000 th.: 1,5; 2;3mm
- SIGRAFLEX® C2A sheets 1500x1500 or 1000x1000 th.: 2;3 mm
- SIGRAFLEX® Hochdruck sheets 1000x1000 or 1500x1500 th.: 1; 1,5; 2;3;4mm

Gaskets

- DIN 2690÷2692, DIN 7168, EN 1514-1, EN 12560-1, ASME B 16.5, B 16.21, B 16.47
- Sheets SIGRAFLEX® Standard 1000x1000 thickness: 1; 1,5; 2mm
- Sheets SIGRAFLEX® Economy 1000x1000 thickness: 1,5; 2; 3mm
- Sheets SIGRAFLEX® Universal 1000x1000 and 1500x1500 thickness: 1,5; 2; 3mm
- Sheets SIGRASEAL® dimensions 1500x1500 thickness: 2; 3mm

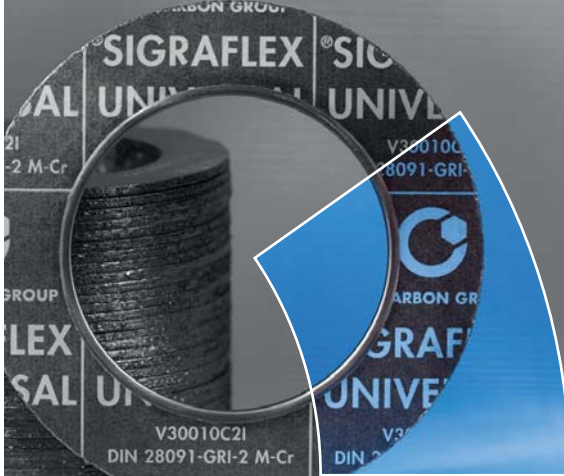
In case when the full data is not provided, standard gaskets will be produced:

- default standard EN 1514-1 (DN and PN); EN 12560-1 (DN/NPS and CLASS)
- default normative dimension type IBC
- default thickness:
 - 2 mm up to DN 400 (NPS 16")
 - 3 mm from DN 450 (NPS 18")
- default PN/CLASS:
 - PN 10-40 up to DN 80
 - PN 16 from DN 100
 - CLASS 150 for all the NPS

* – please contact SPETECH if the specified values are higher

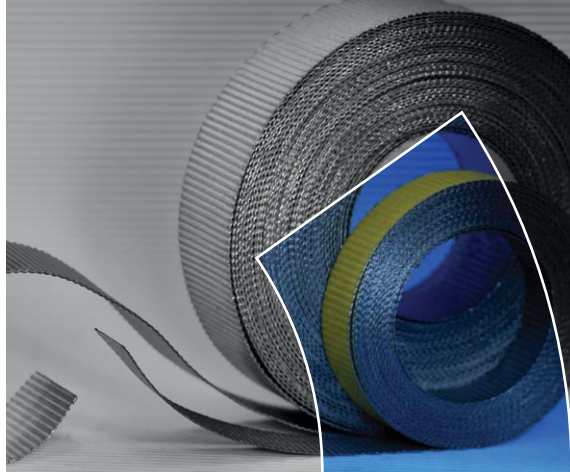
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GRAPHITE GASKETS SPETOGRAF® SERIES GUS® 30



Designation	Sketch	Description
<p>SPETOGRAF® GUS® 30</p> <p>SPETOGRAF® GUS® 30 PRO</p>		<p>The SPETOGRAF® GUS® 30 gaskets are made of SIGRAFLEX® Universal sheet, i.e. of graphite foil, the purity of which is >98%, with an oxidization inhibitor mechanically connected to a perforated stainless steel reinforcement 1.4401; the top layer of the graphite is specially impregnated, which protects the board from humidity, increases its tightness and scratch resistance; optimized technology of the metal carrier perforation prevents the flange surfaces from being scratched; the SPETOGRAF® GUS® 30 PRO gaskets are made of Sigraflex® Universal Pro sheet holding a TA-Luft certificate, the gaskets are available in 1; 1,5; 2; 3 mm thickness, standard advised thickness is 2mm for sizes up to DN 400 and 3 mm for sizes over DN 400.</p>
<p>SPETOGRAF® GUS® 31</p>		<p>The SPETOGRAF® GUS® 31 is a high-quality solution, especially while using inflammable or toxic substances, they are tighter and more blowing resistant, they hold a PZH certificate concerning food, and a IGNIG one for the natural gas.</p>
<p>SPETOGRAF® GUS® 32</p> <p>SPETOGRAF® GUS® 32 Z</p>		<p>The SPETOGRAF® GUS® 32 gaskets are preferred as segment gaskets, assembled by the producer, in which the edges function as a hardening element during transportation (for DN>900); the outer edge may also be used in temperatures over 550°C as an anti-oxidization protection, the GUS® 32 Z may also be used for flat flange surfaces.</p>
<p>SPETOGRAF® GUS® 33</p>		<p>The GUS® 33 are destined for cleaning and review holes.</p>

SOFT MATERIALS GASKETS



GRAPHITE GASKETS SPETOGRAPH® SERIES GUS® 40, GUS® 1000

Designation	Sketch	Description
SPETOGRAPH® GUS® 40		The SPETOGRAPH® GUS® 40 gaskets are produced of highest quality graphite sheet SIGRAFLEX® Hochdruck made in form of a multi-layer laminate being the combination of the metal foil (0,05 mm of thickness) and of graphite foil (1.1 g/cm ³ of density, nuclear purity, 0,45 mm of thickness) joined in a special non-glue process and impregnated on the surface. The SPETOGRAPH® GUS® 40 PRO gaskets are produced of Sigraflex® Hochdruck Pro sheet, holding a TA-Luft certificate. Those gaskets are of extreme resistance, the greatest of all the currently used soft sealing materials; they are used on tonque and groove type, notch-appendage type and flat and raised flange surfaces in any dimension standards; they are typically used under high-pressure water gauge glasses. The SPETOGRAPH® GUS® 40 gaskets are frequently used as very narrow, <5 mm wide gaskets.
SPETOGRAPH® GUS® 40 PRO		
SPETOGRAPH® GUS® 40 APX2		
SPETOGRAPH® GUS® 41		The SPETOGRAPH® GUS® 41 gaskets are preferably used on flat and raised flange surfaces due to its increased tightness, blowing resistance, erosion resistance and resistance against so-called "intoxication" of the gasket. It is deemed to be high-quality taking into account the above criteria. The SPETOGRAPH® GUS® 43 is used in review hatches, cleaning holes, etc.
SPETOGRAPH® GUS® 41 I		The SPETOGRAPH® GUS® 41 I with a metal centralizing ring; they allow for optimizing the connection by decreasing the active width of the gaskets and for saving the sheet surface; the steel centralizing element allows also for producing elements which facilitate the assembly.g. in case of vertical materials.
SPETOGRAPH® GUS® 42		The SPETOGRAPH® GUS® 42 gaskets with an additional outer eylet increasing its rigidness and oxidization resistance.
SPETOGRAPH® GUS® 1000		Corrugated graphite tape basing on Sigraflex graphite foils programm. Available wide range of graphite grades, different thicknesses from 0,25 to 1,00mm, densities from 0,7 to 1,0 g/cm ³ . Possible to be delivered also with self adhesive surface. GUS®1000 can be used as the sealing layer in large diameters metal gaskets, as well as self existing seal of joints requesting very thin seal, but also many other applications are possible.