

Kammprofile Gaskets

The use of kammprofile gaskets has increased in recent decades – not only for the sealing of standard flanges, but also of equipment components, such as heat exchangers and containers.

Kammprofile gaskets with soft material layers are characterised on the one hand by a very low minimum surface pressure which is determined by the facing material. On the other hand, the maximum permissible surface pressure is very high as this is determined by the metal carrier material.

This gives the kammprofile gasket a very wide range of applications. They are therefore almost universally applicable. The bolt force to be applied when using kammprofile gaskets is determined by the characteristic stiffness of the bolts.



Applications

- Flanged pipes (DIN/ANSI)
- TA-Luft
- Heat exchanger
- Plant / Containers
- Boilers
- High pressure



Surface pressure limits

Type	Temp. °C	Min. MPa	Max. MPa
KV, KV9, KB9- Steel / Stainless steel carrier			
Graphite Facing	20	20	500
	300	20	400
PTFE Facing	20	25	500
	200	25	120

Characteristic values in accordance with EN 13555 can be found at gasketdata.org

Properties

Metal carrier

- Stainless steel/steel in various grades
- Depending on the thickness of the layers, the carrier material contains the precisely defined comb-like grooves

Soft material layer

- Thickness 0.5mm or 1.0mm
- Graphite -200 to +450°C
- PTFE -240 to +200°C
- Mica 0 to +800°C
- Silver -270 to +750°C

Pressure

- Max. 200 bar, depending on the installation and surface pressure

Types (forms)

- Round, oval, rectangular
- With seam gaps according to drawing

Total thickness

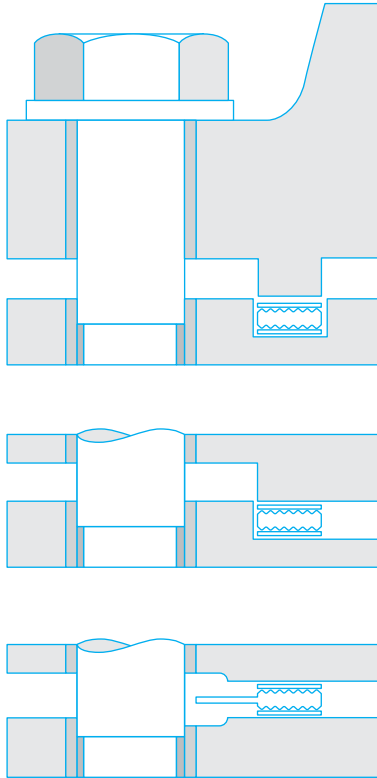
- Standard: 4 or 5mm

Approvals



(Depending on material)

Types of Kammprofile Gasket



Type KG1 without locating ring



Type KG1-KB crowned without locating ring



Type KG1-KV9 (LG413) with turned locating ring



Type KG1-KB9 crowned with turned locating ring



Type KG1-KV9S with turned locating ring and predetermined breaking point



Type KKG1-B9S crowned with turned locating ring and predetermined breaking point



Type KG1-KV9L with loose locating ring



Type KG1-KB9L crowned with loose locating ring

Materials - Overview*

Material	DIN / EN	Metallic	AISI / UNS	Temperature °C
1.4301	X5CrNi18-10	Stainless Steel	304 (S30400)	-200 to +550
1.4404	X2CrNiMo17-12-2	Stainless Steel	316L (S31603)	-200 to +550
1.4571	X6CrNiMoTi17-12-2	Stainless Steel	316Ti (S31635)	-270 to +550
1.4541	X6CrNiTi18-10	Stainless Steel	321 (S32100)	-270 to +550
1.0038	St 37-2	General Structural Steel	A570 Gr.36 (S235JR)	-40 to +450
1.4876	X10NiCrAlTi32-20	Incoloy® 800 (Alloy 800)	ASTM B409 (N08800)	-110 to +950
2.4617	NiMo28	Hastelloy® B2 (Alloy B2)	ASTM B333 (N10665)	-200 to +450
2.4819	NiMo16Cr15W	Hastelloy® C276 (Alloy C276)	ASTM B575 (N10276)	-200 to +450
2.4816	NiCr15Fe	Inconel™ 600 (Alloy 600)	ASTM B168 (N06600)	-60 to +900
2.4360	NiCu30Fe	Monel® 400 (Alloy 400)	ASTM B127 (N04400)	-60 to +425
3.7035	Ti 2	Titanium Gr. 2	ASTM B265 (R50400)	-40 to +300
Graphite ≥98%		-	-	-200 to +450**
Graphite ≥99.85%		-	-	-200 to +450**
PTFE		-	-	-240 to +200
ePTFE		-	-	-240 to +200
Silver		-	-	-270 to +750
Mica		-	-	0 to +800

Other materials available on request

* The information listed here is not claimed to be exhaustive and serves only as a guide; despite careful content control we assume no liability or guarantee for the topicality, correctness and completeness of the information provided

** (to +550°C only after consultation)