KLINGER® KGS

Product range of Rubber-Metal-Gaskets

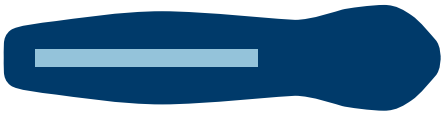
Gaskets for flanges with a smooth sealing surface,
Shape A - EN 1092,
and with sealing strip,
Shape B - EN 1092 acc. to DIN EN 1514-1,
Shape IBC (Inner Bolt Circle)

Dimensions acc. to the Standard in mm

Available dimensions on request, or please see our actual price list.

KLINGER®KGS

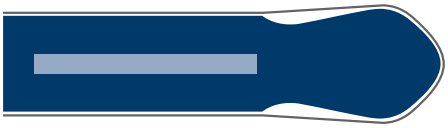
KLINGER®KGS/S



KLINGER®KGS/TK

KLINGER®KGS-Flon

KLINGER®KGS/TK-Flon



KLINGER®KNS
Compression stop gasket

DN	Inside diameter
10	18
15	22
20	27
25	34
32	43
40	49
50	61
60	72
65	77
80	89
100	115
125	141
150	169
200	220
250	273
300	324
350	356
400	407
450	458
500	508
600	610
700	712
800	813
900	915
1000	1016
1100	1120
1200	1220
1400	1420
1500	1520
1600	1620
1800	1820
2000	2020
2200	2220
2400	2420
2600	2620
2800	2820
3000	3020
3200	3220
3400	3420
3600	3620
3800	3820
4000	4020

KLINGER® KGS

Product range of Rubber-Metal-Gaskets

Outside diameter for PN						
1 / 2.5	6	10	16	25	40	63
39	39	46	46	46	46	56
44	44	51	51	51	51	61
54	54	61	61	61	61	72
64	64	71	71	71	71	82
76	76	82	82	82	82	88
86	86	92	92	92	92	103
96	96	107	107	107	107	113
106	106	117	117	117	117	123
116	116	127	127	127	127	138
132	132	142	142	142	142	148
152	152	162	162	168	168	174
182	182	192	192	194	194	210
207	207	218	218	224	224	247
262	262	273	273	284	290	309
317	317	328	329	340	352	364
373	373	378	384	400	417	424
423	423	438	444	457	474	486
473	473	489	495	514	546	543
528	528	539	555	564	571	–
578	578	594	617	624	628	–
679	679	695	734	731	747	–
784	784	810	804	833	–	–
890	890	917	911	942	–	–
990	990	1017	1011	1042	–	–
1090	1090	1124	1128	1154	–	–
–	–	1231	1228	1251	–	–
1290	1307	1341	1342	1364	–	–
1490	1524	1548	1542	1578	–	–
–	–	1658	1654	1688	–	–
1700	1724	1772	1764	1798	–	–
1900	1931	1972	1964	2000	–	–
2100	2138	2182	2168	2230	–	–
2307	2348	2384	–	–	–	–
2507	2558	2592	–	–	–	–
2707	2762	2794	–	–	–	–
2924	2972	3014	–	–	–	–
3124	3172	3228	–	–	–	–
3324	3382	–	–	–	–	–
3524	3592	–	–	–	–	–
3734	3804	–	–	–	–	–
3931	–	–	–	–	–	–
4131	–	–	–	–	–	–

KLINGER® KGS

Media resistance of rubber-metal-gaskets

Medium	NR	NBR	EPDM	CSM	FKM
Acetaldehyde	●	▲	●	■	▲
Acetamide	▲	●	●	■	■
Acetic acid	■	▲	●	▲	▲
Acetic acid ester	▲	▲	●	●	▲
Acetone	●	▲	●	■	▲
Acetylene	●	●	●	●	●
Adipic acid	●	●	●	●	●
Air	▲	▲	●	■	●
Alum	●	●	●	●	●
Aluminium acetate	●	●	●	■	▲
Aluminium chlorate		●	●		
Aluminium chloride	●	●	●	●	●
Ammonia	■	■	●	●	▲
Ammonium carbonate	●	■	●	●	■
Ammonium chloride	●	●	●	●	■
Ammonium diphosphate		●	●		
Ammonium hydroxide	■	■	●	●	■
Amyl acetate	■	▲	●	▲	▲
Aniline	■	▲	●	▲	●
Anon cyclohexanone	▲	▲	■	▲	▲
Arcton 12	■	●	■	■	●
Arcton 22	●	▲	●	●	▲
Asphalt	▲	▲	▲	▲	●
Aviation fuel	▲	●	▲	▲	●
Barium chloride	●	●	●	●	●
Benzene	▲	▲	▲	▲	●
Benzoic acid	●	●	●	●	●
Blast furnace gas	▲	▲	▲	▲	■
Bleaching solution	▲	▲	●	●	●
Boiler feed water	▲	■	●	▲	■
Borax	●	●	●	●	●
Boric acid	●	●	●	●	●
Brine		●	●	●	●
Butane	▲	●	▲	■	●
Butanol	●	■	●	●	●
Butanone	▲	▲	●	■	▲
Butyl acetate	▲	▲	●	▲	▲
Butylamine	▲	●	▲	▲	▲
Butyle alcohol	●	■	●	●	●
Butyric acid	▲	▲	●	▲	■
Caesium melt	▲	▲	▲	▲	▲
Calcium chloride	●	●	●	●	●
Calcium hydroxide	●	●	●	●	●
Calcium hypochlorit	▲	▲	●	●	●
Calcium sulphate		●	●		
Carbolic acid	▲	▲	■	▲	●
Carbon dioxide	●	●	●	●	●
Carbon disulphide	▲	▲	▲	▲	●
Carbon tetrachlorid	▲	▲	▲	▲	●
Castor oil	●	●	●	●	●
Chlorine water	▲	▲	■	▲	●
Chlorine, dry	▲	▲	■	▲	●
Chlorine, moist	▲	▲	■	▲	●
Chloroform	▲	▲	▲	▲	●
Chromic acid	▲	▲	■	■	●
Citric acid	●	●	●	●	●

Medium	NR	NBR	EPDM	CSM	FKM
Clorotrifluoride	▲	▲	▲	▲	▲
Condensation water	▲	●	●	▲	■
Copper acetate	■	■	●	■	▲
Copper sulphate	●	●	●	●	●
Creosote	▲	▲	■	■	●
Cresol	▲	▲	▲	▲	●
Crude oil	▲	●	▲	■	●
Cyclohexanol	▲	●	▲	■	●
Decahydronaphthalen	▲	■	▲	▲	●
Dibenzyl ether	▲	▲	■	▲	●
Dibutyl phthalate	▲	▲	●	▲	■
Diesel oil	▲	●	▲	▲	●
Dimethyl formamide	▲	▲	●	▲	▲
Diphyl	▲	▲	▲	▲	●
Ethane	▲	●	▲	■	●
Ethanol	●	■	●	●	●
Ethyl acetate	▲	▲	●	▲	▲
Ethyl alcohol	●	■	●	▲	●
Ethyl chloride	▲	■	■	▲	●
Ethyl ether	▲	▲	▲	▲	▲
Ethylendiamine	●	●	●	■	▲
Ethylene	▲	●	▲	▲	▲
Ethylene chloride	▲	▲	▲	▲	●
Ethylene glycol	●	●	●	●	●
Fluorine dioxide		▲	▲		
Fluorine gaseous		▲	▲		
Fluorine liquid (dry)	▲	▲	▲	▲	■
Fluorosilicic acid	▲	▲	▲	▲	■
Formaldehyde	●	●	●	●	■
Formamide	●	▲	●	●	■
Formic acid 10%	■	▲	●	●	▲
Freon 12	■	●	■	●	■
Freon 22	■	▲	●	●	▲
Fuel oil (crude oil basis)	▲	●	▲	▲	●
Generator gas		●	▲		●
Glacial acetio acid	■	▲	●	▲	▲
Glycerin	●	●	●	●	●
Heating oil	▲	●	▲	▲	●
Heptane	▲	●	▲	▲	●
Hydraulic oil (mineral-based)	▲	●	▲	▲	●
Hydraulic oil (phosphat ester)	▲	▲	●	▲	●
Hydrazine hydrate	▲	■	●	■	▲
Hydrochloric acid (10%)	■	■	●	●	●
Hydrochloric acid (37%)	▲	▲	●	▲	▲
Hydrofluorid acid	▲	▲	●	●	●
Hydrofluosilic acid	●	●	●	●	●
Hydrogen	●	●	●	●	●
Hydrogen chloride (dry)	■	▲	●	●	●
Hydrogen peroxide 3%	■	■	●	●	●
Hydrogen peroxide 90%	▲	▲	▲	▲	●
Hydrogen sulfide	▲	▲	●	▲	▲
Isooctane	▲	●	▲	■	●
Isopropyl alcohol	●	■	●	●	●
Kerosene	▲	●	▲	▲	●
Lactic acid	●	●	●	●	●
Lead acetate	●	■	●	▲	▲

KLINGER® KGS

Media resistance of rubber-metal-gaskets

Medium	NR	NBR	EPDM	CSM	FKM
Lead arsenate	▲	●	●	▲	▲
Linseed oil	■	●	■	■	●
Lithium melt	▲	▲	▲	▲	▲
Magnesium sulphate	●	●	●	●	●
Malic acid	▲	●	●	●	●
MEK butanone	▲	▲	●	■	▲
Methane	▲	●	▲	■	●
Methyl alcohol	●	■	●	●	▲
Methyl chloride	▲	▲	▲	▲	●
Methylene chloride	▲	▲	▲	▲	■
Mineral oil	▲	●	▲	■	●
Monochlorethane	▲	▲	▲	▲	●
Naphtha	▲	▲	▲	▲	■
Natural gas	▲	●	▲	■	●
Nitric acid	▲	▲	▲	▲	●
Nitrobenzene	▲	▲	■	▲	●
Nitrogen	●	●	●	●	●
Octane (n)	▲	■	▲	▲	●
Oil	■	●	▲	■	●
Oleanolic Acid	▲	▲	▲	■	●
Oleic acid	▲	■	▲	▲	●
Oxalic acid	■	■	●	■	●
Oxygen, gaseous, cold	▲	■	●	■	●
Palmitic acid	■	●	■	■	●
Patable water	●	●	●	●	●
Pentane	▲	●	▲	■	●
Perchlorethylene	▲	▲	▲	▲	●
Petroleum	▲	●	▲	▲	●
Petroleum benzin	▲	■	▲	■	●
Petrol ether	▲	●	▲	▲	●
Phenol	▲	▲	■	▲	●
Phosphoric acid	▲	▲	■	▲	●
Polychl.biphenyls.	▲	▲	▲	▲	●
Potassium chromium sulphate		■	●		●
Potassium acetate	●	■	●	▲	▲
Potassium carbonate	●	●	●	●	●
Potassium chlorate	■	▲	●	●	●
Potassium chloride	●	●	●	●	●
Potassium cyanide	▲	■	●	●	●
Potassium dichrom.	■	■	●	●	●
Potassium hydroxide	■	■	●	●	▲
Potassium hypochlorite		▲	■		
Potassium iodide	●	●	●	●	●
Potassium melt	▲	▲	▲	▲	▲
Potassium nitrate	▲	●	●	●	■
Potassium nitrite	●	●	●	●	●
Potassium permanganate	▲	▲	●	●	●
Propane	▲	●	▲	■	●
Pydraul C	▲	▲	▲	▲	●
Pydraul E	▲	▲	■	▲	●
Pyridine	▲	▲	■	▲	▲
Rape seed oil	▲	●	■	■	●
Rubidium melt	▲	▲	▲	▲	▲
Salicylic acid	●	●	●	●	●
Sea water	●	●	●	●	■
Silicon oil	●	●	●	●	●

Medium	NR	NBR	EPDM	CSM	FKM
Skydrol 500, 7000	▲	▲	●	▲	■
Soap, solution	■	●	●	●	●
Soda	●	●	●	●	●
Sodium aluminate		▲	■		
Sodium bicarbonate	●	●	●	●	●
Sodium bisulphite	■	●	●	●	●
Sodium chloride	●	●	●	●	●
Sodium cyanide	●	●	●	●	●
Sodium hydroxide	■	■	●	●	▲
Sodium melt	▲	▲	▲	▲	▲
Sodium silicate	●	●	●	●	●
Sodium sulfide	■	●	●	●	●
Sodium sulphate	●	●	●	●	●
Spirit	●	■	●	●	●
Starch	●	●	●	●	●
Steam (max. 150 °C)	▲	▲	●	▲	▲
Stearic acid 100°C	▲	▲	▲	■	●
Sugar	●	●	●	●	●
Sulphur dioxide	▲	▲	●	▲	●
Sulphuric acid	▲	▲	▲	▲	●
Sulphurous acid	■	■	●	●	●
Table salt	●	●	●	●	●
Tannic acid	●	●	●	●	●
Tannin	●	●	●	■	●
Tar	▲	▲	▲	▲	●
Tartaric acid	●	●	●	●	●
Tetrachloroethane	▲	▲	▲	▲	■
Tetrahydronaphthale	▲	▲	▲	▲	●
Toluene	▲	▲	▲	▲	●
Town gas (benzene free)	▲	●	▲	■	●
Transformer oil	▲	●	▲	▲	●
Trichloroethylene	▲	▲	▲	▲	●
Triethanolamine	■	▲	■	■	▲
Turpentine	▲	■	▲	▲	●
Urea	●	●	●	●	●
Vinyl acetate	▲	▲	▲	▲	▲
Water 100°C	▲	■	●	▲	■
Water flask	●	●	●	●	●
Water vapour (max. 150°C)	▲	▲	●	▲	▲
White spirit	▲	■	▲	▲	●
Xylene	▲	▲	▲	▲	●

It is not possible to select the right sealing material by just using this media resistance table! Please use the KLINGER documentation for making a safe decision.

Subject to technical changes.
Status: May 2015

▲ Not recommended
■ Conditionally recommended
● Resistant

KLINGER® KGS

Installation instructions for rubber-metal-gaskets

The following instructions have to be observed so that a reliable sealing connection can be ensured.

1. Gasket selection

The suitable material quality can be selected from the KLINGER® information sheet - above all, from the resistance chart.

2. Flanges

Flanges should be parallel, metallic, clean and dry, the gasket has to be mounted centrically.
Please ensure the correct gasket dimensions.
The gasket should never tower into the throughhole (media flow)!

The outer diameter of the KLINGER®KGS gasket is adapted to the bolt circle of the flange. Therefore safe centering at the screws is ensured.

3. Installation

The installation of the gaskets should be carried out without using any grease or oil containing separating/sealing agents or similar.

In no case, oil or grease containing products may be used, because they have a negative influence on the safety of the whole flange connection..

4. Screws

When installing the screws, they have to be tightened evenly in two to three steps crosswise.

The screws should be lubricated. Pay attention to the tightening torques.

5. Retightening

“Retightening" is not required if these instructions are followed.

6. Multiple use

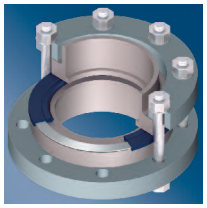
For reasons of safety, the multiple use of gaskets is generally not recommended.

On request, please make use of advice of the KLINGER GmbH!

KLINGER offers you excellent sealing products for all fields of application

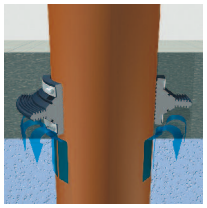
KLINGER®KGS

KLINGER®KGS/TK

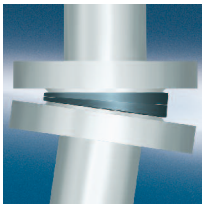


KLINGER®KGS-Flon

KLINGER®KGS/MK



KLINGER®KGS/VD



KLINGER®KNS

Certified according to DIN EN ISO 9001:2008

Subject to technical changes.
No responsibility is accepted for the accuracy of this information.
Status: May 2015

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