HIGH QUALITY

MADE IN GERMANY

KROLL & ZILLER GASKETS

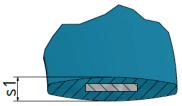
SEALED!

RUBBER-STEEL-GASKETS

G-ST-FLAT GASKETS
G-ST PROFILE GASKETS
G-ST WEDGE RINGS

RUBBER-STEEL FLANGE GASKETS
PRODUCT RANGE

G-ST
For various applications



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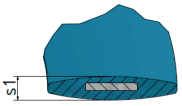
G-ST/GUSS
In special dimensions, to completely cover the flange face



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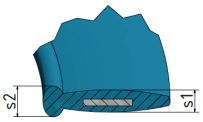
G-ST-P/S
For various applications, top choice for joints connecting non-metallic (plastic or GRP) and steel flanges



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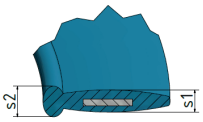
G-ST-P/K
Ideal for flange connections from pairs of plastic stub ends



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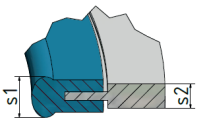
G-ST-P/KN
Universally applicable, ideal for partially coated flanges and extreme load



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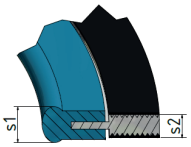
G-ST-P/HTB
For steel flange connections with high thermal load capacity



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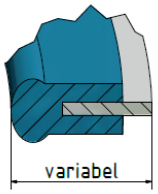
G-ST-P/OE
Customized dimensions with a visible stainless steel insert



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G-ST-Keilring
Continuously adjustable from 0 to 8 degrees. Safe and easy solution for alignment problems

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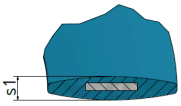
SPECIAL GASKETS

PRODUCT RANGE

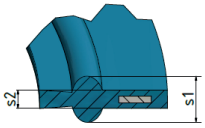
You can obtain individual data sheet for the following assortments

G-ST/FD
Flat version of the proven G-ST gasket type, thickness 3 mm

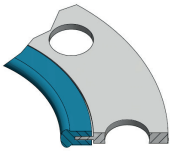


BFD-Flange Gaskets
For risers in well construction to protect the coat pipe

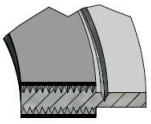
G-ST-P/GR
Profile gasket for rubberized pipelines following guideline FDG 0389 for flanges according to DIN 28034



G-ST-P/ISO
Gasket sets for galvanic separation of different metallic flange materials



Comb Profile Gaskets
For high pressures in gas and steam application



RTJ Ring-Joint-Gaskets
For highest pressures in the gas applications

PTFE-Gaskets
With perforated steel insert for sealing of chemically aggressive media

RUBBER-STEEL-FLANGE-GASKETS
PROVEN IN PIPELINE CONSTRUCTION

G - ST - P / *

S	Steel flange connections
K	Plastic flange connections
KN	Force shunt
OE	Open insert
HTB	High thermal load capacity
P	Profile
ST	Steel
G	Rubber

Rubber-steel-flange-gaskets and adjustable wedge rings have proven their worth for decades in all areas of plant and pipeline construction. Well-known companies in the primary industry, the chemical industry and last but not least countless utility companies at home and abroad appreciate the advantages of KROLL & ZILLER sealing elements.

Over 80 years of experience in solving individual sealing problems means that our customers have a range of flange gaskets with immense operational reliability. They benefit from these advantages when using Kroll & Ziller gaskets:

+ A high degree of cost-effectiveness through a reduction in operating costs
+ An environmentally compatible material flow by avoiding leakages

Growing international competition is forcing cost minimization in all operational areas. Production disruptions, the occurrence of rejects, maintenance and servicing costs must be avoided by selecting optimum components. The dangers of possible environmental pollution must be to be excluded. KROLL & ZILLER continuously pursues a policy of specialization,research and technical development in close cooperation with an international clientele.

The large available range of gaskets offers the possibility of high quality standardization. A high level of economy (reduced stock) is coupled with excellent handling. The latter is characterized by the stabilizing steel core, which considerably simplifies assembly, especially for large nominal diameters.simplified.

OUR GASKETS
YOUR ADVANTAGES

+ Tightness at low surface pressure and at low tightening torques.
+ Very good adaptability to the sealing surfaces
+ Low leakage rates thanks to homogeneous structure of elastomer materials
+ Blow-out resistance and maximum stability due to centrally positioned, corrosion-protected and vulcanized steel insert
+ Optimum handling when installing the gasket

RUBBER-STEEL-FLANGE-GASKETS
QUALITY ,,MADE IN GERMANY''

Quality ,,Made in Germany"

Our products are 100 % „Made in Germany", making our supply chains stable and reliable at all times. With more than 80 years of experience in solving individual requirements, KROLL & ZILLER is your international international and reliable partner for gaskets with highest operational safety.

Research and development in Germany

Our technological aspirations are preceded by research and development at our site in Germany in order to continue to drive innovation in the future. With our certification according to DIN EN ISO 9001:2015 we ensure that the principles of qualitymanagement are successfully implemented and that our development processes are continuously improved.

Optimal delivery capacity

A large and well-stocked warehouse is the guarantor for a rapid ability to deliver. The logistics department with its own carpenter's workshop packs and ships our gaskets all over the world.

RUBBER-STEEL-FLANGE-GASKETS
MATERIALS

NR = Natural rubber
Temp.tmax. –30 ...+60° C, Shore-A-Hardness 65 ± 5

NBR-DUO-EL = Acrylonitrile-Butadiene Rubber. Temp. tmax.–25...+70°C, Shore-A-Hardness 80 ± 5

DRINKING WATER according to DIN-EN 681-1 + GAS according to DIN-EN 682
Certificates / Approval according to valid standards and regulations

HNBR = Hydro-generated-Acrylonitrile-Butadiene Rubber Temp.tmax. –25 ...+150° C, Shore-A-Hardness 75 ± 5

CR = Chloroprene Rubber
Temp.tmax. –25 ...+95° C, Shore-A-Hardness 60 ± 5

CSM = Chloro-sulfonyl-polyethylene rubber
Temp. tmax.–20...+120°C, Shore-A-Hardness 80 ± 5

EPDM(S) = Ethylene Propylene Diene Monomer Rubber Crosslinking Agent Sulfurl
Temp.tmax.-30…+120°C; Shore-A-Hardness 75 ± 5

EPDM-PW(P) = Ethylene-Propylene-Dien-Monomer-Rubber
Temp.tmax.-30…+120°C; Shore-A-Hardness 70 ± 5

EPDM-EL = Ethylene Propylene Diene Monomer Rubber Crosslinking Agent Sulfurl
Temp.tmax.-30…+120°C; Shore-A-Hardness 75 ± 5
With certification for drinking water according to DIN-EN-681-1, as well as further requirements in the automotive industry up to power plant and air conditioning technology

FKM = Fluorinated Rubber
Temp.tmax.-20…+ 200°C; Shore-A-Hardness 80 ± 5

BIIR = Bromo-Isobutene Isoprene Rubber (Bromobutyl-Rubber
Temp.tmax.-25…+120°C; Shore-A-Hardness 70 ± 5

Steel insert 1.0330, other materials on request

AREAS OF APPLICATION
TIGHT IN EVERY APPLICATION

Gaskets from KROLL & ZILLER have proven themselves for decades in all areas of pipeline and plant construction.

THE AREAS OF APPLICATION:

Drinking water

Natural gas

Chemistry & Petrochemistry

Fire protection

GRP & Plastic

Food Technology

Apparatus & tank construction

Mining

Hydrogen

MPF7330

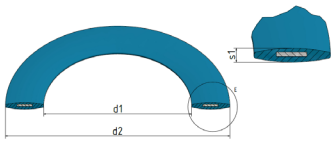
G-ST-FLANGE-GASKETS
PROVEN IN PIPELINE AND PLANT CONSTRUCTION

Rubber-steel-flange-gaskets from KROLL & ZILLER are used for the safe sealing of flange connections connections in all fields. The use of rubber-steel gaskets is particularly recommended in areas of application where a secure gasket is required with low surface pressure:

Reliable sealing
Reliable sealing of flanged joints on pipelines has become possible thanks to the development of KROLL & ZILLER G-ST gaskets. During the process of vulcanization, extreme adhesion is achieved between the steel insert and the rubber coating. Even under the highest stresses, this makes displacement, detachment or even blow-out virtually impossible.

No flow losses
The standard-compliant dimensioning prevents unnecessary flow losses in the case of cross-sectional overlap. This is combined with optimum handling during installation, as the gasket is centered on the bolt ring and has high dimensional stability due to the steel insert.

G-ST
GASKETS IN RAW PIPELINE CONSTRUCTION



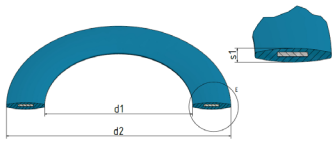
G-ST based on EN 1514-1

Diameter Nominal	Nominal pressure	Dimensions in mm				
DN	PN	d_1	x	d_2	x	s_1
15	10-40	22	x	51	x	4
20	10-40	27	x	61	x	4
25	10-40	34	x	71	x	4
32	10-40	43	x	82	x	4
40	10-40	49	x	92	x	4
50	10-40	61	x	107	x	4
65	10-40	77	x	127	x	4
80	10-40	89	x	142	x	4
100	6	115	x	152	x	5
100	10-16	115	x	162	x	5
100	25-40	115	x	168	x	5
125	10-16	141	x	192	x	5
125	25-40	141	x	194	x	5
150	10-16	169	x	218	x	5
150	25-40	169	x	224	x	5
200	10-16	220	x	273	x	6
200	25	220	x	284	x	6
200	40	220	x	290	x	6
250	10	273	x	328	x	6
250	16	273	x	329	x	6
250	25	273	x	340	x	6
250	40	273	x	352	x	6
300	6	324	x	373	x	6
300	10	324	x	378	x	6
300	16	324	x	384	x	6
300	25	324	x	400	x	6
300	40	324	x	417	x	6
350	10	356	x	438	x	7
400	10	407	x	489	x	7
400	16	407	x	495	x	7
400	25	407	x	514	x	7
400	40	407	x	546	x	7
500	10	508	x	594	x	7
500	40	508	x	628	x	7
600	10	610	x	695	x	7
700	10	712	x	810	x	8
800	10	813	x	917	x	8
1000	10	1016	x	1124	8	8
1200	2,5	1220	x	1290	8	8
1200	6	1220	x	1307	8	8
1200	10	1220	x	1341	8	8
1200	16	1220	x	1342	8	8
1600	2,5	1620	x	1700	8	8
1600	10	1620	x	1772	8	8
1800	10	1820	x	1972	8	8

G-ST based on DIN 2690

Diameter Nominal	Nominal pressure	Dimensions in mm				
DN	PN	d_1	x	d_2	x	s_1
50	10-40	57	x	107	x	4
100	10-16	108	x	162	x	5
100	25-40	108	x	167	x	5
125	6	141	x	182	x	5
125	10-16	133	x	192	x	5
150	6	169	x	207	x	5
150	10-16	159	x	218	x	5
175	10-16	195	x	248	x	5
175	40	195	x	267	x	5
200	10-16	216	x	273	x	6
200	25	216	x	285	x	6
250	10	267	x	328	x	6
300	10	318	x	378	x	6
350	6	368	x	423	x	7
350	10	368	x	438	x	7
350	16	368	x	445	x	7
350	25	368	x	458	x	7
350	40	368	x	475	x	7
400	6	420	x	473	x	7
400	10	420	x	490	x	7
400	16	420	x	497	x	7
400	25	420	x	515	x	7
400	40	420	x	547	x	7
450	10	470	x	540	x	7
500	6	520	x	575	x	7
500	10	520	x	595	x	7
500	16	520	x	618	x	7
500	25	520	x	625	x	7
600	10	620	x	695	x	7
600	16	620	x	735	x	7
600	25	620	x	730	x	7
600	40	620	x	745	x	7
700	6	720	X	785	x	8
700	10	720	x	810	x	8
800	6	820	x	890	x	8
800	10	820	x	915	x	8
800	16	820	x	910	x	8
800	25	820	x	940	x	8
900	6	920	x	990	x	8
900	10	920	x	1015	x	8
900	16	920	x	1010	x	8
900	25	920	x	1040	x	8
1000	6	1020	x	1090	x	8
1000	10	1020	x	1120	x	8
1000	16	1020	x	1125	x	8
1000	25	1020	x	1150	x	8
1000	40	1020	x	1190	x	8
1100	16	1120	x	1225	x	8
1100	25	1120	x	1260	x	8
1200	25	1220	x	1360	x	8
1200	40	1220	x	1395	x	8
1300		1320	x	1435	x	8
1400	10	1420	x	1545	x	8

G-ST
SPECIAL DIMENSIONS



G-ST (Special dimension)

Diameter Nominal	Dimensions in mm				
DN	d_1	x	d_2	x	s_1
15	15	x	54	x	3
20	23	x	54	x	3
20	23	x	60	x	3
25	28	x	43	x	3
25	28	x	53	x	3
25	28	x	65	x	3
25	30	x	48	x	4
25	30	x	71	x	4
25	33	x	70	x	3
25	36	x	50	x	5
32	38	x	82	x	4
40	43	x	55	x	3
40	45	x	85	x	4
40	45	x	92	x	4
40	45	x	102	x	4
50	50	x	100	x	8
50	52	x	70	x	3
50	52	x	78	x	3
50	55	x	69	x	3
50	55	x	112	x	4
50	57	x	87	x	3
50	57	x	95	x	4
50	57	x	118	x	3
50	62	x	118	x	3
50	63	x	75	x	4
65	65	x	85	x	4
65	70	x	107	x	4
65	71	x	91	x	3
65	71	x	137	x	4
80	80	x	104	x	3
80	80	x	118	x	3
80	85	x	147	x	5
80	87	x	105	x	3
80	92	x	124	x	3
80	95	x	121	x	4
100	100	x	148	x	5
100	102	x	138	x	3
100	105	x	127	x	4
100	108	x	149	x	4
100	108	x	173	x	5
100	110	x	150	x	4
100	110	x	160	x	10
100	115	x	149	x	4
100	116	x	218	x	5
100	120	x	170	x	5
100	125	x	170	x	4
125	125	x	172	x	5
125	130	x	151	x	4
125	132	x	175	x	5
125	133	x	210	x	5
125	150	x	208	x	5
150	150	x	210	x	5
150	150	x	212	x	5
150	152	x	177	x	5
150	152	x	194	x	3
150	152	x	210	x	3,5
150	154	x	258	x	5

Diameter Nominal	Dimensions in mm				
DN	d_1	x	d_2	x	s_1
150	156	x	177	x	4
150	158	x	188	x	4
150	159	x	203	x	5
150	160	x	215	x	3,5
150	160	x	247	x	5
150	169	x	203	x	5
150	170	x	195	x	5
150	170	x	285	x	5
150	175	x	228	x	5
175	180	x	240	x	5
175	187	x	238	x	6
175	192	x	228	x	4
190	192	x	277	x	5
190	203	x	239	x	5
200	203	x	273	x	6
200	204	x	305	x	6
200	205	x	270	x	5
200	208	x	242	x	5
200	210	x	258	x	6
200	215	x	270	x	4
200	220	x	259	x	5
200	220	x	309	x	6
200	225	x	239	x	5
225	225	x	280	x	5
225	230	x	267	x	5
250	255	x	295	x	4
250	255	x	312	x	5
250	267	x	342	x	6
250	274	x	364	x	6
300	300	x	345	x	6
300	300	x	349	x	6
300	300	x	365	x	6
300	300	x	378	x	5
300	307	x	353	x	5
300	310	x	358	x	8
300	310	x	363	x	5
350	344	x	403	x	6
350	350	x	410	x	7
350	350	x	435	x	7
350	370	x	450	x	5
400	400	x	490	x	6
400	400	x	455	x	5
400	420	x	470	x	6
450	470	x	570	x	7
450	480	x	574	x	7
450	485	x	535	x	7
450	490	x	540	x	5
500	500	x	580	x	7
500	504	x	542	x	7
500	508	x	585	x	7
500	520	x	585	x	6
500	552	x	625	x	6
550	595	x	643	x	6
600	620	x	710	x	7
600	622	x	674	x	7
650	650	x	710	x	8
650	676	x	736	x	8

Diameter Nominal	Dimensions in mm				
DN	d_1	x	d_2	x	s_1
650	650	x	810	x	8
700	704	x	746	x	8
700	720	x	895	x	8
800	800	x	840	x	8
950	982	x	1050	x	8

G-ST (Special dimension)

In special dimensions, for PN 10
Outside diameter similar to DIN 2690,
with deviating inner diameter

Diameter Nominal	Dimensions in mm				
DN	d_1	x	d_2	x	s_1
25	17	x	70	x	4
40	34	x	92	x	4
50	44	x	107	x	4
65	61	x	127	x	4
80	72	x	142	x	4
100	97	x	162	x	5
125	121	x	192	x	5
150	149	x	218	x	5
200	196	x	273	x	6
250	250	x	328	x	6
300	299	x	378	x	7
350	329	x	438	x	7
400	378	x	490	x	7
500	485	x	595	x	7
600	587	x	695	x	7
700	687	x	810	x	8
800	786	x	915	x	8
900	884	x	1015	x	8
1000	986	x	1120	x	8

G-ST-FLAT-GASKETS
G-ST / GUSS

The right gasket for the utility industry

Flat gaskets for flanged joints in pipeline and plant construction have historically been manufactured according to standards or guidelines that specified precise dimensions for inside and outside diameters.The inside diameters are generally so large that a considerable area of the sealing strip of the flange is not covered.

Example:

FFG ductile iron pipe with cast-on standard flanges lined with cement mortar,
DN 80, PN 10-25

di_{Pipe} = 78 mm

$d_{a\ Sealing\ strip\ flange}$ = 133 mm sealing surface = 9.115 mm²

Flat gasket DN 80, PN 10-40 according to DIN EN 1514-1

d_i = 89 mm d_a = 142 mm

Sealing surface with $d_{a\ Sealing\ strip\ flange}$ = 7.672 mm²

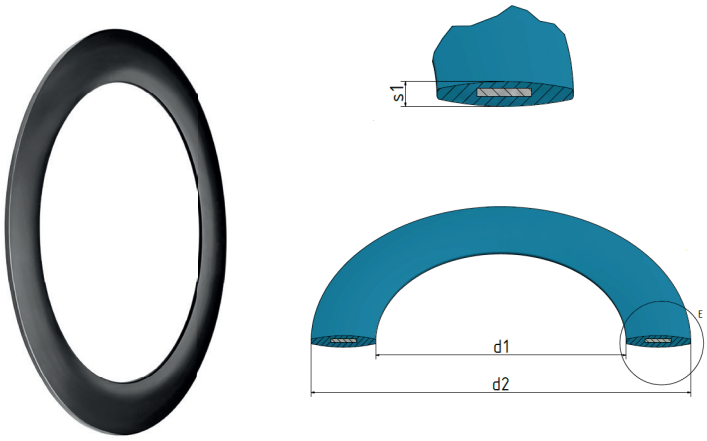
It shows: approx. 16 % of the sealing surface is not covered!

As the corrosion protection is often insufficient, especially in the case of old plant components, this leads to increased especially with aggressive water qualities, to increased rust nodule formation. When using the KROLL & ZILLER gasket TYPE G-ST/CAST this problem is consequently eliminated!

The inner diameters are based on the nominal diameters of common pipes and fittings: Of course, no other restrictions are associated with a conversion.

G-ST / GUSS

Diameter Nominal	Nominal pressure	Dimensions in mm				
DN	PN	d_1	x	d_2	x	s_1
40	10-40	40	x	91	x	4
50	10-40	50	x	106	x	4
60	10-40	60	x	117	x	4
65	10-40	65	x	126	x	4
80	10-40	80	x	142	x	4
100	10-16	100	x	162	x	5
125	10-16	125	x	192	x	5
150	10-16	150	x	218	x	5
200	10-16	200	x	273	x	6
250	10-16	250	x	328	x	6
300	10	300	x	378	x	7
300	16	300	x	384	x	7
350	16	350	x	444	x	7
400	10	400	x	490	x	7
400	16	400	x	495	x	7
500	10	500	x	594	x	7
500	16	500	x	617	x	7



G-ST-PROFILE GASKETS
THE NEW GENERATION

For KROLL & ZILLER, technological progress is embodied in the G-ST-P profile gasket program. A graphic representation of the seal cross-section makes the basic idea clear. The spherical G-ST basic body is combined with an „O-ring“. The toroidal sealing ring, as the optimum static sealing element, performs almost impossible tasks even without cost-intensive torquing on the flange. The G-ST-P profile gasket combines the advantages of the individual elements. High surface pressures transmitted in the main flow of force are absorbed by the stiff spherical G-ST gasket. The corrosion-protected vulcanized-in flat steel ring can easily withstand the required test pressure. The round sealing ring, which is located in the power bypass, fits snugly against the sealing surfaces, even at low surface pressures. Uneven surfaces and grooves, even slight misalignments, are compensated for. In addition to the material-saving assembly with small necessary tightening torques, a previously unattained operational reliability is realized.

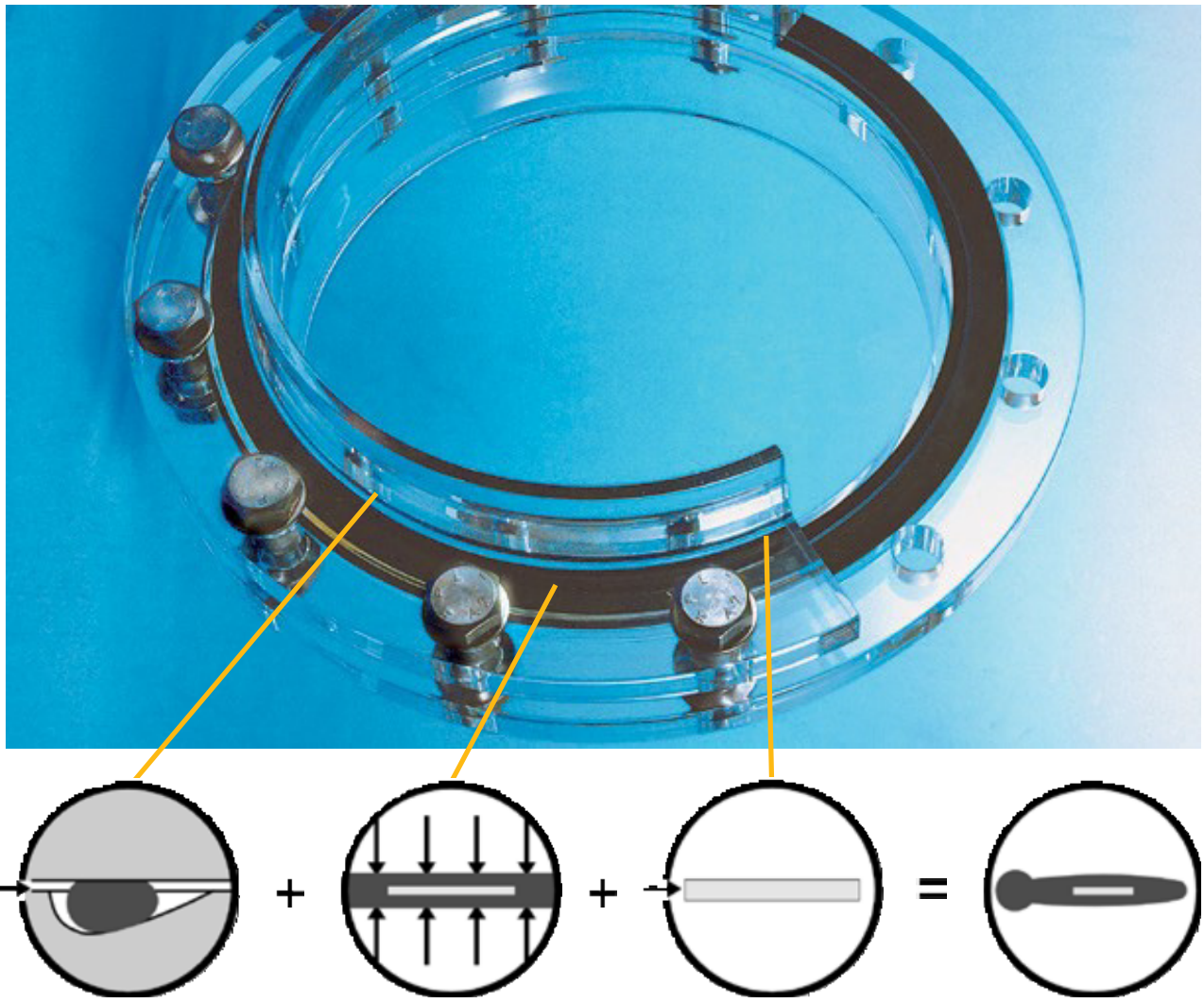
Once inserted - SEALED!

These advantages take on special weight in flange connections of thermoplastic pipes (materials: PVC, PE, PP, PVDF).
The special gasket KROLL & ZILLER G-ST-P/K (K stands for plastic flange joints) has as a special feature a wider sealing surface and a rectangular instead of spherical cross-section next to the „O-ring“ which prevents the unfolding of the flange or the fixed flange is prevented from folding up. The toroidal sealing ring reliably fills the enlarged gap and low necessary tightening torques protect against overloading of the fasteners.

G-ST-PROFILE GASKETS
ELASTOMER AND INSERT MATERIAL FREELY SELECTABLE

Advantages in usage:

+ Tight at low tightening torques
+ Compensation of surface defects
+ Flange and bolts can be designed weaker
+ Lifetime of plastic flange connections is significantly higher (consideration of the creep behavior)
+ Angular deviations can be compensated more easily compared to simple flat gaskets
+ Expensive grooving for round cord ring groove or offset grooving on the flange can be omitted



Sealing by round sealing system

Absorption of surface pressure

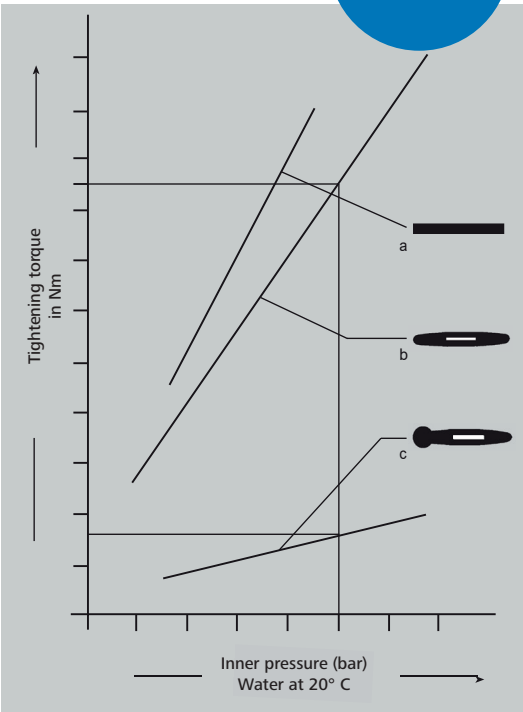
Absorption of inner pressure by steel insert

G-ST-Profie gasket

G-ST-PROFILE GASKETS
HOLDS TIGHT

The progress in the KROLL & ZILLER sealing program is proven in the factory test.

YOUR PLUS IN SAFETY

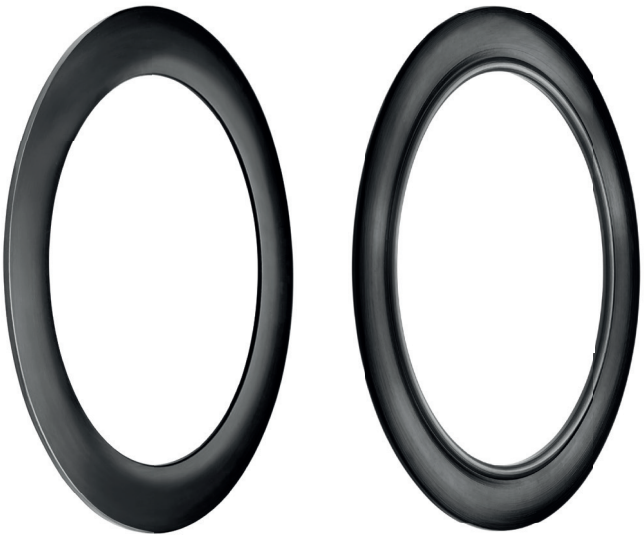


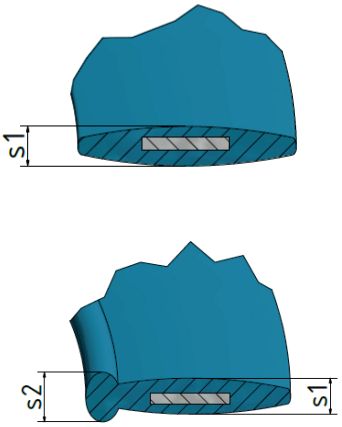
Test parameters

Medium:		Water
Temperature:		20° C
Test pressure:		constant, 10 bar
Test objects:		DN 500, according to DIN 2690
a	=	Rubber flange gasket with textile inlay NBR
b	=	G-ST-Flat Gasket NBR
c	=	G-ST-P/S-Profile Gasket NBR

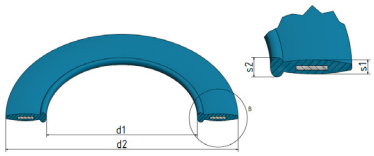
The diagram shows the qualitative result of the test series.
At a constant pressure, the G-ST-P/S profile gasket requires only a fraction of the determined necessary tightening torque of a G-ST flat gasket of a G-ST flat gasket.

Nevertheless, the recommendation is to carry out the assembly with the higher value of the G-ST gasket. The plus in safety compensates for many imponderables in practice.





G-ST-P/S
DIVERSE RANGE OF APPLICATIONS



G-ST-P/S based on EN 1514-1

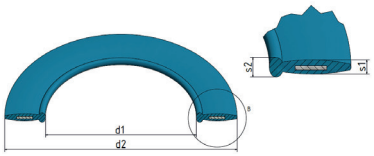
Diameter Nominal	Nominal pressure	Dimensions in mm				
DN	PN	d_1	x	d_2	x	s_1/s_2
*15	10-40	22	x	51	x	3/4
*20	6	27	x	64	x	3/4
*20	10-40	27	x	61	x	3/4
*25	10-40	34	x	71	x	3/4
*32	6	43	x	76	x	3/4
*32	10-40	43	x	82	x	3/4
40	10-40	49	x	92	x	4/5
*50	6	61	x	96	x	4/5
*50	10-40	61	x	107	x	4/5
*65	6	77	x	116	x	4/5
*65	10-40	77	x	127	x	4/5
(*)80	10-40	89	x	142	x	4/5
100	6	115	x	152	x	5/6
100	10-16	115	x	162	x	5/6
100	25-40	115	x	168	x	5/6
125	6	141	x	182	x	5/6
125	10-16	141	x	192	x	5/6
125	25-40	141	x	194	x	5/6
150	6	169	x	207	x	6/8
(*)150	10-16	169	x	218	x	6/8
150	25-40	169	x	224	x	6/8
200	6	220	x	262	x	6/8
200	10-16	220	x	273	x	6/8
200	25	220	x	284	x	6/8
200	40	220	x	290	x	6/8
250	6	273	x	317	x	6/8
250	10	273	x	328	x	6/8
250	16	273	x	329	x	6/8
250	25	273	x	340	x	6/8
250	40	273	x	352	x	6/8
300	6	324	x	373	x	6/8
300	10	324	x	378	x	6/8
300	16	324	x	384	X	6/8
300	25	324	x	400	x	6/8
300	40	324	x	417	x	6/8
350	10	356	x	438	x	7/10
350	16	356	x	444	x	7/10
400	10	407	x	489	x	7/10
400	16	407	x	495	x	7/10
450	10	458	x	539	X	7/10
450	16	458	x	555	X	7/10
500	10	508	x	594	X	7/10
500	16	508	x	617	X	7/10
600	10	610	x	695	X	7/10
600	16	610	x	734	X	7/10
700	10	712	x	810	X	8/11
700	16	712	x	804	X	8/11
800	10	813	x	917	X	8/11
800	16	813	x	911	X	8/11
900	10	915	x	1017	X	8/11
900	16	915	x	1011	X	8/11
1000	10	1016	x	1124	X	8/11
1000	16	1016	x	1128	X	8/11
1200	2,5	1220	x	1290	x	8/11
1200	6	1220	x	1307	x	8/11
1200	10	1220	x	1341	x	8/11
1200	16	1220	x	1342	x	8/11

G-ST-P/S based on DIN 2690

Diameter Nominal	Nominal pressure	Dimensions in mm				
DN	PN	d_1	x	d_2	x	s_1/s_2
350	6	368	x	423	x	7/10
350	10	368	x	438	x	7/10
350	16	368	x	445	x	7/10
350	25	368	x	458	x	7/10
350	40	368	x	475	x	7/10
400	6	420	x	473	x	7/10
400	10	420	x	490	x	7/10
400	16	420	x	497	x	7/10
400	25	420	x	515	x	7/10
400	40	420	x	547	x	7/10
450	6	470	x	528	x	7/10
450	10	470	x	540	x	7/10
450	16	470	x	557	x	7/10
450	25	470	x	565	x	7/10
450	40	470	x	572	x	7/10
500	6	520	x	578	x	7/10
500	10	520	x	595	x	7/10
500	16	520	x	618	x	7/10
500	25	520	x	625	x	7/10
500	40	520	x	628	x	7/10
600	6	620	x	680	x	7/10
600	10	620	x	695	x	7/10
600	16	620	x	735	x	7/10
600	25	620	x	730	x	7/10
600	40	620	x	745	x	7/10
700	6	720	x	785	x	8/11
700	10	720	x	810	x	8/11
700	16	720	x	805	x	8/11
700	25	720	x	830	x	8/11
700	40	720	x	850	x	8/11
800	6	820	x	890	x	8/11
800	10	820	x	915	x	8/11
800	16	820	x	910	X	8/11
800	25	820	x	940	x	8/11
800	40	820	x	970	x	8/11
900	6	920	x	990	x	8/11
900	10	920	x	1015	x	8/11
900	16	920	x	1010	x	8/11
900	25	920	x	1040	x	8/11
900	40	920	x	1080	X	8/11
1000	6	1020	x	1090	X	8/11
1000	10	1020	x	1120	X	8/11
1000	16	1020	x	1125	X	8/11
1000	40	1020	x	1190	X	8/11
1100	10	1120	x	1215	X	8/11
1200			x	1285	X	8/11
1200	2,5	1220	x	1290	X	8/11
1200	6	1220	x	1307	X	8/11
1200	10	1220	x	1341	X	8/11
1200	16	1220	x	1342	X	8/11
1200	25	1220	x	1360	X	8/11
1200	40	1220	x	1395	X	8/11
1200		1380	x	1380	X	8/11
1400	2,5	1420	x	1490	x	8/11

*Available on request

G-ST-P/S
DIVERSE RANGE OF APPLICATIONS



G-ST-P/S (Special dimensions)

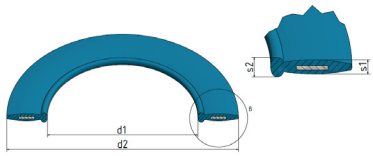
Diameter Nominal	Dimensions in mm				
DN	d_1	x	d_2	x	s_1/s_2
40	38	x	92	x	3 / 4
50	50	x	107	x	4 / 5
65	66	x	127	x	4 / 5
80	76	x	142	x	4 / 5
80	84	x	133	x	4 / 5
100	100	x	162	x	4 / 5
125	125	x	192	x	5 / 6
150	150	x	218	x	5 / 6
150	144	x	218	x	6 / 8
175	175	x	235	x	6 / 8
200	182	x	275	x	6 / 8
200	200	x	273	x	6 / 8
250	228	x	328	x	6 / 8
250	250	x	328	x	6 / 8
300	275	x	378	x	6 / 8
300	300	x	378	x	6 / 8
350	285	x	438	x	7 / 10
350	330	x	438	x	7 / 10
350	340	x	490	x	7 / 10
350	340	x	617	x	7 / 10
350	396	x	444	x	6 / 8
400	372	x	490	x	7 / 10
400	324	x	490	x	7 / 10
400	400	x	490	x	7 / 10
500	465	x	595	x	7 / 10
600	589	x	695	x	7 / 10
600	630	x	680	x	7 / 10
700	661	x	810	x	8 / 11
700	690	x	755	x	8 / 11
800	749	x	915	x	8 / 11

G-ST-P/S (Special dimensions)

Dimensions for flanges of VCI-tanks
In accordance with construction guideline C2.1.1

Diameter Nominal	Dimensions in mm				
DN	d_1	x	d_2	x	s_1/s_2
500	510	x	577	x	7/10
600	610	x	677	x	7/10
600	610	x	717	x	7/10
700	710	x	782	x	8/11
800	810	x	887	x	8/11

G-ST-P/S
DIVERSE RANGE OF APPLICATIONS



G-ST-P/S

Für ASME B 16.5 Flanges

Diameter Nominal	Dimensions in mm/ Nominal pressure up to 150 lbs					Dimensions in mm / Nominal pressure up to 300 lbs				
NPS	d_1	x	d_2	x	s_1/s_2	d_1	x	d_2	x	s_1/s_2
1/2“	21	x	45	x	3 / 4	20	x	51	x	3 / 4
3/4“	27	x	54	x	3 / 4	27	x	64	x	3 / 4
1“	33	x	64	x	3 / 4	33	x	70	x	3 / 4
1 1/4“	42	x	73	x	3 / 4	42	x	80	x	3 / 4
1 1/2“	48	x	83	x	3 / 4	48	x	92	x	3 / 4
2“	60	x	102	x	4 / 5	60	x	108	x	4 / 5
2 1/2“	73	x	121	x	4 / 5	73	x	127	x	4 / 5
3“	89	x	133	x	4 / 5	89	x	146	x	4 / 5
3 1/2“	102	x	159	x	4 / 5	102	x	162	x	4 / 5
4“	115	x	171	x	5 / 6	115	x	178	x	5 / 6
5“	140	x	193	x	5 / 6	140	x	213	x	5 / 6
6“	168	x	219	x	6 / 8	168	x	247	x	6 / 8
8“	219	x	276	x	6 / 8	219	x	305	x	6 / 8
10“	273	x	337	x	6 / 8	273	x	359	x	6 / 8
12“	325	x	406	x	6 / 8	325	x	419	x	6 / 8
14“	356	x	448	x	7 / 10	356	x	482	x	7 / 10
16“	406	x	512	x	7 / 10	406	x	537	x	7 / 10
18“	457	x	547	x	7 / 10	457	x	594	x	7 / 10
20“	508	x	604	x	7 / 10	508	x	651	x	7 / 10
24“	610	x	715	x	7 / 10	610	x	772	x	7 / 10

G-ST-P/S

For ASME B 16.47 Series A Flanges

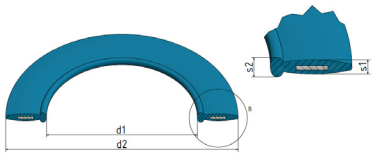
Diameter Nominal	Dimensions in mm / Nominal pressure up to 150 lbs					Dimensions in mm / Nominal pressure up to 300 lbs				
NPS	d_1	x	d_2	x	s_1/s_2	d_1	x	d_2	x	s_1/s_2
26“	665	x	771	x	7 / 10	665	x	832	x	7 / 10
28“	720	x	829	x	8 / 11	720	x	895	x	8 / 11
30“	770	x	880	x	8 / 11	770	x	949	x	8 / 11
32“	820	x	937	x	8 / 11	820	x	1003	x	8 / 11
34“	865	x	987	x	8 / 11	856	x	1054	x	8 / 11
36“	920	x	1045	x	8 / 11	920	x	1114	x	8 / 11
38“	965	x	1108	x	8 / 11	965	x	1051	x	8 / 11
40“	1020	x	1159	x	8 / 11	1020	x	1111	x	8 / 11
42“	1070	x	1216	x	8 / 11	1070	x	1162	x	8 / 11
44“	1120	x	1273	x	8 / 11	1120	x	1216	x	8 / 11
46“	1170	x	1324	x	8 / 11	1170	x	1270		8 / 11
48“	1220	x	1381	x	8 / 11	1220	x	1321	x	8 / 11
50“	1270	x	1432	x	8 / 11	1270	x	1375	x	8 / 11
52“	1320	x	1489	x	8 / 11	1320	x	1425	x	8 / 11
54	1370	x	1546	x	8 / 11	1370	x	1489	x	8 / 11
56“	1430	x	1603	x	8 / 11	1430	x	1540	x	8 / 11
58“	1475	x	1660	x	8 / 11	1475	x	1590	x	8 / 11
60“	1530	x	1711	x	8 / 11	1530	x	1641	x	8 / 11

G-ST-P/S

For ASME B 16.47 Flansche Series B Flanges

Diameter Nominal	Dimensions in mm / Nominal pressure up to 150 lbs				
NPS	d_1	x	d_2	x	s_1/s_2
28"	720	x	773	x	8 /11
30"	770	x	824	x	8 /11
32"	820	x	878	x	8 /11
36"	920	x	984	x	8 /11

G-ST-P/K
PLASTIC FLANGES



G-ST-P/K

For thermoplastic flange connections
(PVC, PP, PE, PVDF)

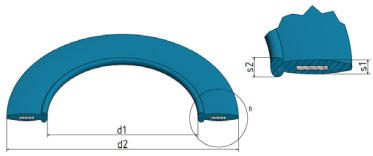
Flange	Pipe outside Ø	Dimensions in mm				
DN	mm	d_1	x	d_2	x	s_1/s_2
10	16	16	x	46	x	3 / 4
15	20	20	x	51	x	3 / 4
20	25	25	x	61	x	3 / 4
25	32	32	x	71	x	3 / 4
32	40	40	x	82	x	3 / 4
40	50	50	x	92	x	3 / 4
50	63	63	x	107	x	4 / 5
65	75	75	x	127	x	4 / 5
80	90	90	x	142	x	4 / 5
100	110	110	x	162	x	5 / 6
125	125	125	x	192	x	5 / 6
125	140	140	x	192	x	5 / 6
150	160	160	x	218	x	6 / 8
200	200	200	x	273	x	6 / 8
200	225	225	x	273	x	6 / 8
250	250	250	x	303	x	6 / 8
250	250	250	x	328	x	6 / 8
250	280	280	x	328	x	6 / 8
300	315	315	x	378	x	6 / 8
350	355	355	x	438	x	7 / 10
400	400	400	x	489	x	7 / 10

G-ST-P/K

For plastic pressure pipelines made of PVDF with
plastic stub and loose flanges

Flange		Pipe outside Ø		Dimensions in mm				
DN	PN	mm	SDR	d_1	x	d_2	x	s_1/s_2
20	16	25	21	24	x	61	x	3 / 4
25	16	32	21	30	x	71	x	3 / 4
32	16	40	21	37	x	82	x	3 / 4
40	16	50	21	46	x	92	x	3 / 4
50	16	63	21	61	x	107	x	4 / 5
65	16	75	21	73	x	127	x	4 / 5
65	10	75	33	69	x	127	x	4 / 5
80	10-16	90	33	84	x	142	x	4 / 5
100	16	110	21	104	x	162	x	5 / 6
100	10	125	33	123	x	162	x	5 / 6
125	10	140	33	137	x	192	x	5 / 6
125	16	140	21	127	x	192	x	5 / 6
150	10	160	33	156	x	218	x	6 / 8
150	16	160	21	146	x	218	x	6 / 8
150	10	180	33	177	x	218	x	6 / 8
200	10	200	33	196	x	273	x	6 / 8
200	16	200	21	181	x	273	x	6 / 8
200	10	225	33	220	x	273	x	6 / 8
200	16	225	21	203	x	273	x	6 / 8
250	10	280	33	274	x	328	x	6 / 8

G-ST-P/K
PLASTIC FLANGES



G-ST-P/K

For plastic pressure pipelines made of PE and PP with plastic stub and loose flange
Flange dimension similar to DIN 2501 PN10

Flange	Pipe outside Ø		Dimensions in mm				
DN	mm	SDR	d_1	x	d_2	x	s_1/s_2
20	25	11	22	x	61	x	3 / 4
20	25	7,4	24	x	61	x	3 / 4
25	32	11	28	x	71	x	3 / 4
25	32	7,4	23	x	71	x	3 / 4
32	40	11	34	x	82	x	3 / 4
32	40	7,4	29	x	82	x	3 / 4
40	50	17	46	x	92	x	3 / 4
40	50	11	42	x	92	x	3 / 4
40	50	7,4	36	x	92	x	3 / 4
50	63	17	58	x	107	x	4 / 5
50	63	11	53	x	107	x	4 / 5
50	63	7,4	45	x	107	x	4 / 5
65	75	17	69	x	127	x	4 / 5
65	75	11	63	x	127	x	4 / 5
65	75	7,4	54	x	127	x	4 / 5
80	90	17	84	x	142	x	4 / 5
80	90	11	76	x	142	x	4 / 5
80	90	7,4	65	x	142	x	4 / 5
100	110	33	104	x	162	x	5 / 6
100	110	17	100	x	162	x	5 / 6
100	110	11	93	x	162	x	5 / 6
100	110	7,4	80	x	162	x	5 / 6
100	125	33	123	x	162	x	5 / 6
100	125	17	114	x	162	x	5 / 6
100	125	11	105	x	162	x	5 / 6
100	125	7,4	90	x	162	x	5 / 6
125	140	33	137	x	192	x	5 / 6
125	140	17	127	x	192	x	5 / 6
125	140	11	117	x	192	x	5 / 6
125	140	7,4	101	x	192	x	5 / 6

Flange	Pipe outside Ø		Dimensions in mm				
DN	mm	SDR	d_1	x	d_2	x	s_1/s_2
125	140	7,4	101	x	192	x	5 / 6
150	160	33	156	x	218	x	6 / 8
150	160	17	146	x	218	x	6 / 8
150	160	11	135	x	218	x	6 / 8
150	160	7,4	116	x	218	x	6 / 8
150	180	33	177	x	218	x	6 / 8
150	180	17	164	x	218	x	6 / 8
150	180	11	151	x	218	x	6 / 8
150	180	7,4	130	x	218	x	6 / 8
200	200	33	196	x	273	x	6 / 8
200	200	17	181	x	273	x	6 / 8
200	200	11	168	x	273	x	6 / 8
200	200	7,4	145	x	273	x	6 / 8
200	225	33	220	x	273	x	6 / 8
200	225	17	203	x	273	x	6 / 8
200	225	11	188	x	273	x	6 / 8
250	250	33	243	x	328	x	6 / 8
250	250	17	226	x	328	x	6 / 8
250	250	11	208	x	328	x	6 / 8
250	280	33	274	x	328	x	6 / 8
250	280	17	252	x	328	x	6 / 8
250	280	11	233	x	328	x	6 / 8
300	315	33	306	x	378	x	6 / 8
300	315	17	283	x	378	x	6 / 8
300	315	11	262	x	378	x	6 / 8
350	355	17	319	x	438	x	6 / 8
350	355	11	294	x	438	x	6 / 8
400	400	17	359	x	489	x	6 / 8
400	400	11	331	x	489	x	6 / 8
500	450	17	403	x	594	x	7/10
500	450	11	372	x	594	x	7/10
500	500	17	447	x	594	x	7/10
500	500	11	413	x	594	x	7/10
600	560	17	494	x	695	x	7/10
600	560	11	462	x	695	x	7/10
600	560	11	451	x	695	x	7/10
600	630	17	555	x	695	x	7/10
600	630	11	519	x	695	x	7/10

1) The nominal width of the flange does not have to correspond to the nominal width of the pipeline.

2) SDR = Standard Dimension Ratio
(Ratio pipe-outside Ø / wall thickness)

RUBBER-STEEL-PROFILE-GASKETS
FOR STEEL FLANGE CONNECTIONS IN THE FORCE SHUNT CONNECTION

The successful fusion of two opposing philosophies of poetry

The **G-ST-Profile-Gasket-Program** consistently shows adequate deformation and adaptation at small surface pressures.

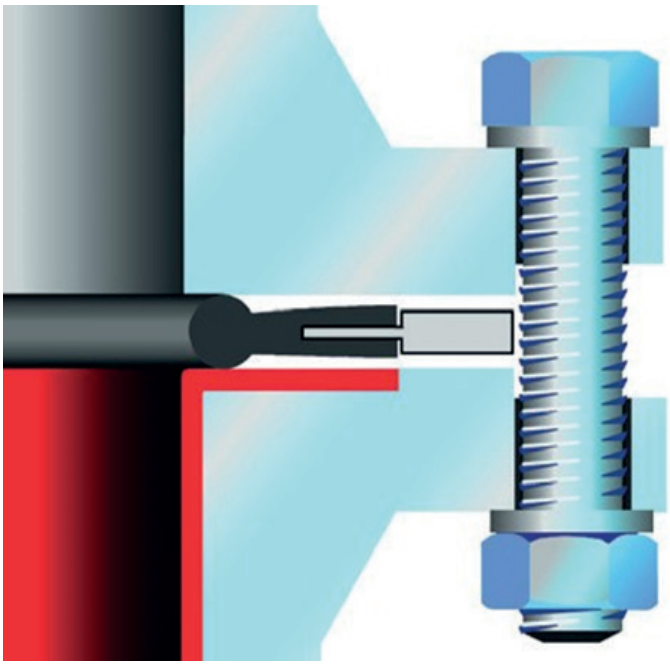
If extreme loads due to acting forces have to be compensated for in the installed condition, the type G-ST-P/KN offers the optimum solution.

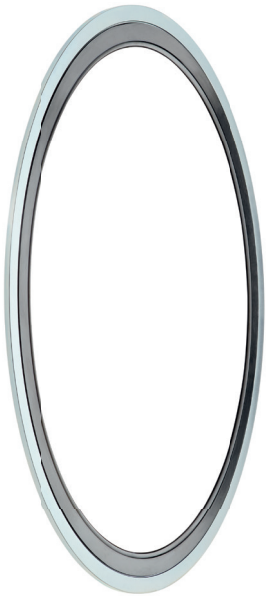
The external steel ring chambers the O-ring/flat seal lip and protects it completely.

High surface pressures on the rubber lip, other mechanical interference or blow-out under high operating pressures and pressure surges are impossible.

In the case of partially coated flanges, the sensitive surfaces are protected.

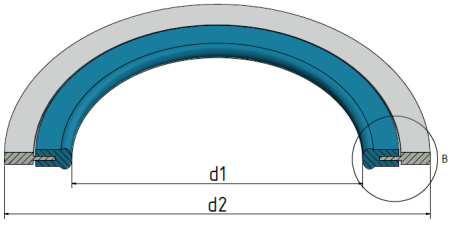
G-ST-P/KN profile gaskets are approved in accordance with DIN 30690 for GAS applications at pressures up to 100 bar.

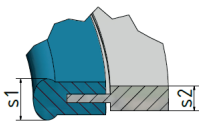




Typical applications

+ Rubberized assemblies in chemical and power plants or Systems with high operating pressures
+ Up to 100 bar
+ Materials: EPDM/NBR/FKM Back-up ring: S235JR galvanized/ 1.4301/1.4571 (others on request)

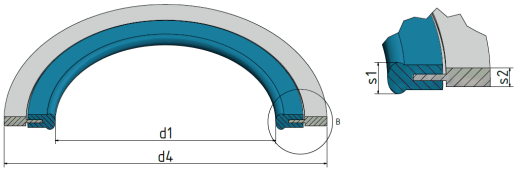




G-ST-P/KN
FORCE SHUNT

G-ST-P / KN based on DIN 2690

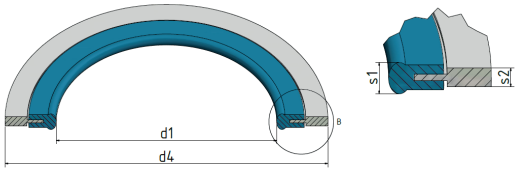
For steel flange connections in force shunt and gas applications according to DIN 30690



	PN	6	10	16	25	40	63	100	
DN	d_1	d_4	d_4	d_4	d_4	d_4	d_4	d_4	s_1/s_2
10	18		45	45	45	45	56	56	5 / 3
15	22		50	50	50	50	61	61	5 / 3
20	28		60	60	60	60			5 / 3
25	35		70	70	70	70	82	82	5,5 / 3,5
32	43		82	82	82	82			5,5 / 3,5
40	49		92	92	92	92	103	103	5,5 / 3,5
50	61		107	107	107	107	113	119	5,5 / 3,5
65	77		127	127	127	127	137	143	5,5 / 3,5
80	90		142	142	142	142	148	154	5,5 / 3,5
100	115		162	162	168	168	174	180	8 / 5
125	141		192	192	195	195	210	217	8 / 5
150	169		218	218	225	225	247	257	8 / 5
175	195		248	248	255	267	277	287	8 / 5
200	220		273	273	285	292	309	323	8 / 5
250	274		328	330	342	353	364	391	8 / 5
300	325		378	385	402	418	424	458	8 / 5
350	368		438	445	458	475	486	512	8 / 5
400	420	473	490	497	515	547	543	572	8 / 5
450	470		540	557	565	572			10 / 6
500	520	578	595	618	625	628	657	704	10 / 6
600	620	680	695	735	730	745	764	813	10 / 6
700	720	784	810	805	830	850	879	950	10 / 6
800	820	890	915	910	940	970	988		10 / 6
900	920	990	1015	1010	1040	1080	1108		10 / 6
1000	1020		1120	1125	1150	1190	1220		10 / 6
1200	1220	1307	1340	1340	1360	1395	1452		10 / 6
1400	1420		1545	1540	1575	1615			12 / 8
1600	1620	1724	1770	1760	1795	1830			12 / 8
1800	1820		1970	1960	2000				12 / 8
2000	2020		2180	2165	2230				12 / 8
2200	2220	2348	2380		2375				12 / 8
2400	2420	2558	2590	2585					12 / 8
2600	2620		2790	2785					12 / 8
2800	2820		3010						12 / 8
3000	3020		3225						12 / 8

G-ST-P/KN
FORCE SHUNT

G-ST-P / KN based onASME B16.21



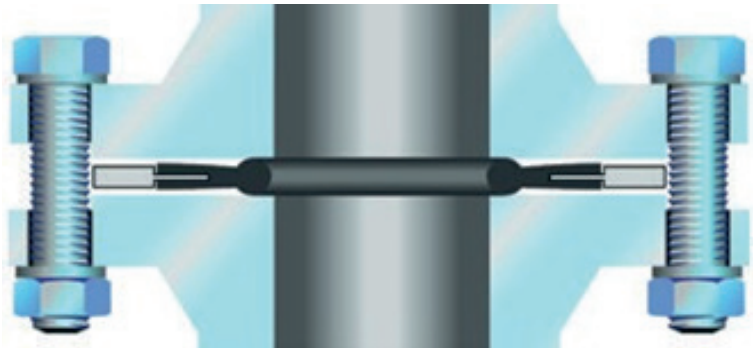
For steel flange connections in force shunt and gas applications according to DIN 30690

Similar to ASME B16.21 for ASME B16.5 flanges

	Class	150	300	400	600	900	
NPS	d_1	d_4	d_4	d_4	d_4	d_4	s_1/s_2
1/2"	16	45	51	51	51	61	5 / 3
3/4"	22	54	64	64	64	67	5 / 3
1"	28	64	70	70	70	76	5 / 3
1 1/4"	35	73	80	80	80	86	5,5 / 3,5
1 1/2"	43	83	93	93	93	95	5,5 / 3,5
2"	61	102	108	108	108	140	5,5 / 3,5
2 1/2"	77	121	127	127	127	162	5,5 / 3,5
3"	90	134	146	146	146	165	5,5 / 3,5
3 1/2"	102	159	162	159	159		8 / 5
4"	115	172	178	175	191	203	8 / 5
5"	141	194	213	210	238	245	8 / 5
6"	169	220	248	245	264	286	8 / 5
8"	220	277	305	302	318	356	8 / 5
10"	274	337	359	356	397	432	8 / 5
12"	325	407	419	416	454	496	8 / 5
14"	368	448	483	480	489	518	8 / 5
16"	420	512	537	534	562	572	8 / 5
18"	470	547	594	591	610	635	10/6
20"	520	604	651	645	680	696	10/6
24"	620	715	772	766	788	835	10/6

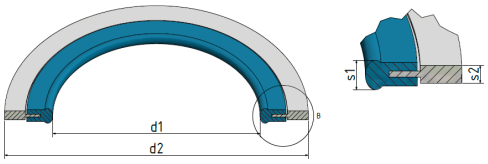
Materials
EPDM, NBR, FKM, more gaskets on request

Support ring
S235JR galvanisiert / 1.4301 / 1.4571
Further support rings on request



G-ST-P/KN
FORCE SHUNT

G-ST-P / KN based on ASME B 16.21



For steel flange connections in force shunt and gas applications according to DIN 30690

Similar to ASME B 16.21 for ASME B 16.47 Series A Flanges

	Class	150	300	400	600	
NPS	d_1	d_4	d_4	d_4	d_4	s_1/s_2
26″	665	771	832	829	864	10/6
28″	720	829	895	889	911	10/6
30″	770	880	949	943	968	10/6
32″	820	937	1003	1000	1019	10/6
34″	865	987	1054	1051	1070	10/6
36″	920	1045	1114	1114	1127	10/6
38″	965	1108	1051	1070	1102	10/6
40″	1020	1159	1111	1124	1152	10/6
42″	1070	1216	1162	1175	1216	10/6
44″	1120	1273	1216	1229	1267	10/6
46″	1170	1324	1270	1286	1324	10/6
48″	1220	1381	1321	1343	1387	10/6
50″	1270	1432	1375	1400	1445	12/8
52″	1320	1489	1425	1451	1495	12/8
54″	1370	1546	1489	1515	1552	12/8
56″	1430	1603	1540	1565	1610	12/8
58″	1475	1660	1590	1616	1660	12/8
60″	1530	1711	1641	1680	1730	12/8

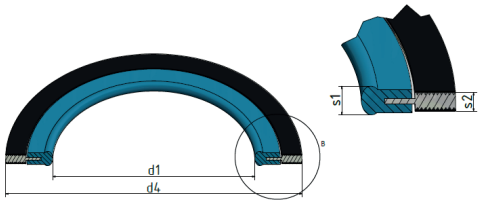
G-ST-P / KN

For steel flange connections in force shunt and gas applications according to DIN 30690

Similar to ASME B 16.21 for ASME B 16.47 Series B flanges

	Class	150	300	400	600	
NPS	d_1	d_4	d_4	d_4	d_4	s_1/s_2
26″	665	725	771	746	765	10/6
28″	720	776	825	800	819	10/6
30″	770	827	886	857	879	10/6
32″	820	881	939	911	933	10/6
34″	865	935	993	962	997	10/6
36″	920	987	1047	1022	1047	10/6
38″	965	1044	1098			10/6
40″	1020	1095	1149			10/6
42″	1070	1146	1200			10/6
44″	1120	1196	1251			10/6
46″	1170	1255	1317			10/6
48″	1220	1306	1368			10/6
50″	1270	1357	1419			12/8
52″	1320	1408	1470			12/8
54″	1370	1463	1530			12/8
56″	1430	1514	1593			12/8
58″	1475	1579	1655			12/8

G-ST-P/HTB
HIGHER THERMAL LOAD CAPACITY



G-ST-P / HTB based on DIN 1514-1 and DIN 2690

For steel flange connections in HTB (higher thermal load capacity) and piping systems, if necessary with connected fire extinguishing systems.

DVGW approved up to 5 bar according to DIN 30653 (formerly VP401)

Elastomer sealing lip made of NBR material, approved to DIN EN 682
Support ring comb-profiled, stainless steel 1.4571, with 0.5 mm graphite coating on both sides.

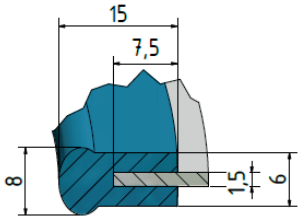
Diameter Nominal	Nominal pressure	Dimensions in mm				
DN	PN	d_1	x	d_4	x	s_1/s_2
25	10-40	35	x	71	x	5,5/4,5
32	10-40	43	x	82	x	5,5/4,5
40	10-40	49	x	92	x	5,5/4,5
50	10-40	61	x	107	x	5,5/4,5
65	10-40	77	x	127	x	5,5/4,5
80	10-40	90	x	142	x	5,5/4,5
100	10-16	115	x	162	x	8/6
125	10-16	141	x	192	x	8/6
150	10-16	169	x	218	x	8/6
200	10-16	220	x	273	x	8/6
200	25	220	x	284	x	8/6
250	16	274	x	329	x	8/6
300	10	324	x	378	x	8/6

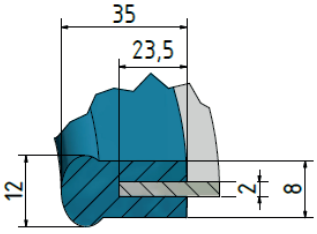
G-ST-P/OE
CUSTOM GASKETS

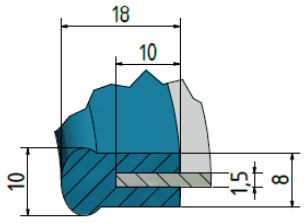
G-ST-P / OE

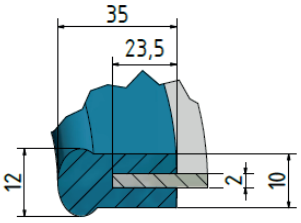
Freely dimensionable gaskets with open steel insert

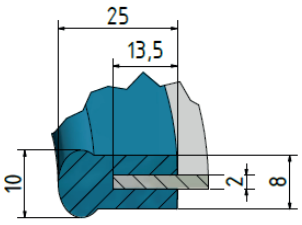
Thanks to their innovative design principle, profile gaskets are suitable for making flanged joints that have a weak static design operationally safe without additional effort.
In apparatus and tank construction, for example, there are often narrow sealing strips combined with a coarse bolt hole pattern. For these special cases, but also for any similarly designed construction, type G-ST-P/OE offers an excellent problem solution.
According to your specifications, we manufacture the appropriate profile gasket from elastomer and stainless steel profiles.

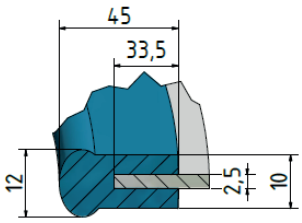


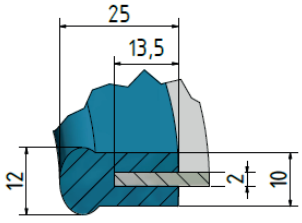


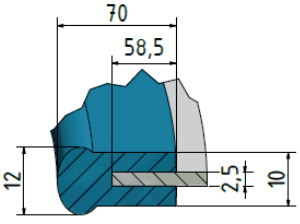












Elastomer lip
Others on request

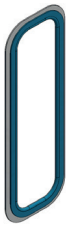
Available materials
EPDM NBR FKM Silikon

Flat steel insert made of 1.4301
Others on request

Minimum inner diameter = 160 mm

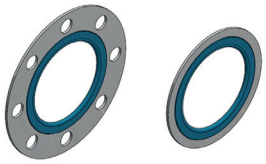
a)

b)



c)

d)



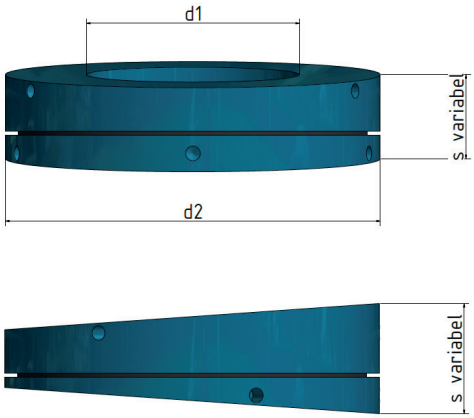
G-ST/WEDGE RING
INFINITELY ADJUSTABLE

G-ST-P / Wedge ring

The quick help for adjustment problems

The KROLL & ZILLER G-ST wedge ring is ideal for making adjustments during assembly in the event of misalignment or excessive installation play. The shell design with integrated elastomer gasket offers the possibility of continuously producing spread angles between O° and 8°.

The ideal combination with G-ST gaskets is a must for the practitioner, as this makes time savings during assembly and operationally reliable flange sealing a real advantage.

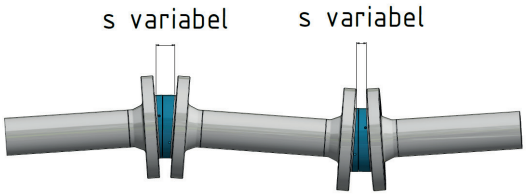


The advantages at a glance

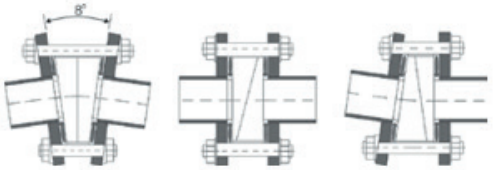
+ Bridging of gaps between flange blades
+ Stepless compensation of flange misalignments and mounting errors from 0° to 8
+ Certified for use in contact with drinking water

Diameter Nominal	Dimensions in mm						Weight
DN	d_1	x	d_2	x	s bei 0°	s bei 8°	kg
40	45	x	89	x	23	29	0,6
50	58	x	102	x	24	31	0,8
65	71	x	127	x	25	34	1,4
80	89	x	142	x	27	37	1,7
100	108	x	162	x	27	38	2,0
125	133	x	192	x	30	43	3,2
150	163	x	218	x	33	48	4,1
200	216	x	273	x	37	56	5,4
250	267	x	328	x	41	64	7,7
300	318	x	378	x	45	71	9,7
350	368	x	438	x	53	84	17,6
400	420	x	490	x	57	91	19,3
500	520	x	595	x	66	108	32,1
600	605	x	695	x	73	120	40,3
700	710	x	810	x	84	141	76,0
800	808	x	917	x	92	156	99,0
900	910	x	1015	x	100	171	121,0
1000	1015	x	1120	x	111	189	130,0
1200	1214	x	1341	x	127	221	216,4

Diameter Nominal	Dimensions in mm						Weight
NPS	d_1	x	d_2	x	s bei 0°	s bei 8°	kg
2“	55	x	102	x	24	31	0,92
2 1/2“	68	x	121	x	27	35	1,39
3“	84	x	133	x	28	37	1,54
4“	110	x	171	x	29	41	2,61
6“	163	x	219	x	35	50	3,89
8“	214	x	276	x	39	58	6,16
10“	268	x	337	x	43	67	9,5



Materials: Elastomer gasket available in various materials.



*Available on request

HIGH QUALITY
MADE IN GERMANY

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