HIGH QUALITY
MADE IN GERMANY

KROLL & ZILLER
GASKETS

G-ST-P / ISO

FLANGE-INSULATION TECHNOLOGY

HIGH QUALITY

MADE IN GERMANY

G-ST-P/ISO

The perfect choice for insulation flange joints used in water pipelines

KROLL & ZILLER GmbH & Co. KG has traditionally supplied companies in the water industry and affiliated with high quality flange sealing technology. The proven concept of the **G-ST-P/KN force shunt gasket** can now be realised by selecting suitable materials for insulating flanges. The typical KROLL & ZILLER advantages - good handling and enormous sealing capacity - are ensured while meeting the requirements of DIN 3383. The bolt insulation concept is also particularly interesting. The coated glass fabric hose is indestructible.

The **G-ST-P/ISO** is our specialist when it comes to preventing corrosion. When different flange materials are paired materials, for example steel flange and stainless steel flange, electrochemical corrosion can occur. To prevent the formation of a galvanic element, these materials must be electrically separated from each other.

This is where the G-ST-P/ISO sealing kit comes into play. The design corresponds to our G-ST-P/KN, but differs in the choice of materials. Instead of steel or stainless steel, electrically insulating materials such as PP/PE, UPGM 203 or EP GC 203 are used here, combined with a sealing lip made of one of our elastomers.

The gasket set also includes the screw bolt insulation. This is made up of an insulating hose consisting of coated glass fabric hose (Mylar/Glasseide) and insulating washers made of EP GC 203.

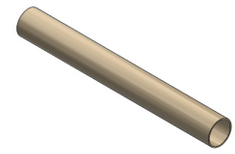
Advantages of using ISO-Gaskets

+ Use as galvanic separator
+ Prevention of electrochemical corrosion
+ Elastomer and material of the insert can be freely selected
+ Blow-out protection and maximum stability due to the ring, which also acts as an insulator
+ Optimum handling when installing the gasket

INSULATING MATERIALS G-ST-P/ISO

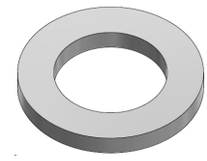
Glass silk DD lacquer tube or Mylar sleeves

Material	Glass silk	Mylar
Varnish	Varnish polyurethane	
Temperature resistance	-30 °C bis +150 °C	+130 °C
Dielectric strength	1,5-6 kV	6,4 kV
Transit resistance	50-200 X 10^6 Ω/m	
Spec. contact resistance		10^{18} Ω x cm
Inner diameter	0,5-50 mm	1,6-175 mm
Wall thickness	0,25-0,8 mm	0,05-1,5 mm



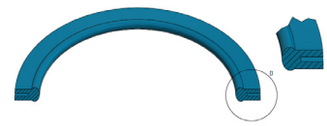
Insulating washer

Material	Glass fabric laminates EPGC 203	Glass fabric laminates EPGC 203
Temperature index	+155 °C	+155 °C
Parallel compressive strength	-150 N/mm²	150 N/mm²
Vertical compressive strength	350 N/mm²	350 N/mm²
Resistance after 24h storage in water	5 x 10^{10} Ω	5 x 10^{10} Ω
Dielectric strength parallel	35 kV	35 kV
Thickness	3 mm	8 mm



Sealing lip

Material*	EPDM*
	NBR*
	FKM
	* drinking water / gas certificated by request



Support ring, Form FF

Material	Hard paper PFCP 201	Hard mat UPGM 203
Temperature index	+120 °C	+155 °C
Parallel compressive strength	150 N/mm²	160 N/mm²
Vertical compressive strength	300 N/mm²	220 N/mm²
Resistance after 24h storage in water	5 X 10^6 Ω	10^8 Ω
Dielectric strength parallel	15 kV	75 kV

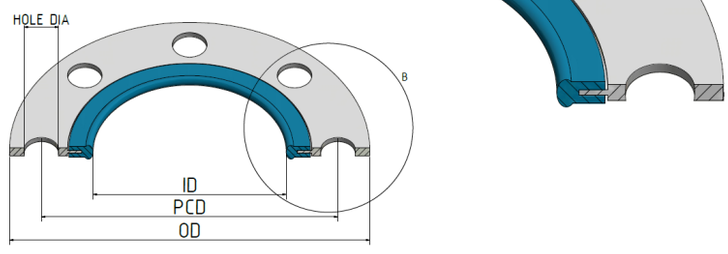
*Other materials available on request

G-ST-P/ISO - FORM FF

DIN 2690 / EN 1515-1 / Special dimensions

	PN	10	16	25	40	
DN	d_1	d_4	d_4	d_4	d_4	s_1/s_2
10	18	93	93	93	93	5 / 3
15	22	98	98	98	98	5 / 3
20	28	108	108	108	108	5 / 3
25	35	118	118	118	118	5,5 / 3,5
32	43	143	143	143	143	5,5 / 3,5
40	49	153	153	153	153	5,5 / 3,5
50	61	**168**	**168**	**168**	**168**	5,5 / 3,5
65	77	**188**	**188**	**188**	**188**	5,5 / 3,5
80	90	**203**	**203**	**203**	**203**	5,5 / 3,5
100	115	**223**	**223**	**238**	**238**	8 / 5
125	141	**253**	**253**	273	273	8 / 5
150	169	**288**	**288**	303	303	8 / 5
175	195		**318**	333	353	8 / 5
200	220	**343**	**343**	363	378	8 / 5
250	274	**398**	**408**	428	453	8 / 5
300	325	**448**	**463**	488	518	8 / 5
350	368	**508**	**523**	558	583	8 / 5
400	420	**568**	**583**	623	663	8 / 5
450	470	618	643	673	688	10 / 6,5
500	520	673	718	733	758	10 / 6,5
600	620	783	843	848	893	10 / 6,5
700	720	898	913	963		10 / 6,5
800	820	1018	1028	1088		10 / 6,5
900	920	1118	1128	1188		10 / 6,5
1000	1020	1233	1258	1323		10 / 6,5
1200	1220	1458	1488	1533		10 / 6,5
1400	1420	1678	1688	1758		12 / 8
1600	1620	1918	1933	1978		12 / 8
1800	1820	2118	2133	2198		12 / 8
2000	2020	2328	2348	2428		12 / 8

Dimensions in mm



BOLTS, HOSES AND WASHER

suitable for DIN EN Flanges and ASME B 16.5 Flanges

for DIN EN Flanges

Bolts	Inner Ø of hose	ISO-washers	ISO-washers
Thread	d_1	d_1 x d_a x t	d_1 x d_a x t
M10	9	11 x 27 x 3	11 x 27 x 8
M12	11	14 x 30 x 3	14 x 30 x 8
M16	15	18 x 36 x 3	18 x 36 x 8
M20	18	22 x 43 x 3	22 x 43 x 8
M24	23	26 x 50 x 3	26 x 50 x 8
M27	26	30 x 56 x 3	30 x 56 x 8
M30	28	33 x 62 x 3	33 x 62 x 8
M33	32	36 x 66 x 3	36 x 66 x 8
M36	34	39 x 72 x 3	39 x 72 x 8
M39	38	42 x 78 x 3	42 x 78 x 8
M45	45	48 x 91 x 3	48 x 91 x 8
M52	50	56 x 104 x 3	56 x 104 x 8
M56		60 x 111 x 3	60 x 111 x 8

From M56 we offer MYLAR insulating sleeves.

for ASME B 16.5 Flanges

Bolts	Inner Ø of hose	ISO-washers
Thread	d_1	d_1 x d_a x t
½“	12	14 x 30 x 3
⅝“	15	18 x 36 x 3
¾“	18	21 x 40 x 3
⅞“	22	24 x 48 x 3
1“	25	27 x 54 x 3
1 ⅛“	28	32 x 60 x 3
1 ¼“	30	35 x 67 x 3
1 ⅜“	34	39 x 73 x 3
1 ½“	38	42 x 80 x 3
1 ⅝ “	40	45 x 98 x 3
1 ¾“	45	48 x 102 x 3
1 ⅞“		51 x 108 x 3
2“		54 x 114 x 3
2 ¼“		61 x 121 x 3
2 ½“		67 x 127 x 3
2 ¾“		73 x 134 x 3
3		80 x 140 x 3

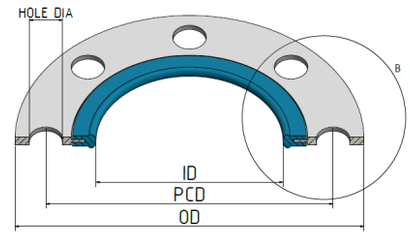
From $1^{7/8}$“ we offer MYLAR insulating sleeves.

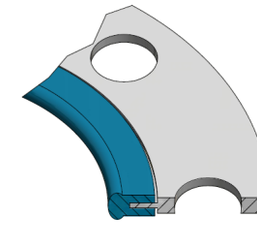
G-ST-P/ISO - FORM FF

similar to ASME B 16.21 for ASME B 16.15 Flanges

	Class	150	300	400	600	
NPS	d_1	d_4	d_4	d_4	d_4	s_1/s_2
½"	16	93	98	98	98	5 / 3
¾"	22	102	120	120	120	5 / 3
1"	28	111	127	127	127	5 / 3
1 ¼"	35	120	136	136	136	5,5 / 3,5
1 ½"	43	130	158	158	158	5,5 / 3,5
2"	**61**	**155**	**168**	**168**	**168**	5,5 / 3,5
2 ½"	**77**	**181**	**194**	**194**	**194**	5,5 / 3,5
3"	**90**	**193**	**213**	**213**	**213**	5,5 / 3,5
3 ½"	**102**	**219**	**232**	**232**	**232**	8 / 5
4"	**115**	**232**	**257**	**257**	**276**	8 / 5
5"	**141**	**257**	**282**	282	333	8 / 5
6"	**169**	**282**	**320**	320	359	8 / 5
8"	**220**	**346**	**384**	384	422	8 / 5
10"	274	409	447	447	511	8 / 5
12"	325	486	524	524	536	8 / 5
14"	368	536	587	587	606	8 / 5
16"	420	600	651	651	689	8 / 5
18"	470	638	714	714	746	10 / 6,5
20"	520	702	778	778	816	10 / 6,5
24"	620	816	917	917	943	10 / 6,5

Dimensions in mm





G-ST-P/ISO - FORM FF

similar to ASME B 16.21 for ASME B 16.47 Flanges

Series A

	Class	150	300	400	600	
NPS	d_1	d_4	d_4	d_4	d_4	s_1/s_2
26 ¼"	665	873	975	975	1019	10 / 6,5
28"	720	930	1038	1038	1076	10 / 6,5
30"	770	987	1095	1095	1133	10 / 6,5
32"	820	1063	1152	1152	1197	10 / 6,5
34"	865	1114	1209	1209	1248	10 / 6,5
36"	920	1171	1273	1273	1318	10 / 6,5
38"	965	1241	1171	1209	1273	10 / 6,5
40"	1020	1292	1241	1273	1324	10 / 6,5
42"	1070	1349	1292	1324	1406	10 / 6,5
44"	1120	1406	1356	1387	1457	10 / 6,5
46"	1170	1457	1419	1444	1514	10 / 6,5
48"	1220	1514	1470	1514	1597	10 / 6,5
50"	1270	1571	1533	1571	1673	12 / 8
52"	1320	1629	1584	1622	1724	12 / 8
54"	1370	1686	1660	1705	1781	12 / 8
56"	1430	1749	1711	1756	1857	12 / 8
58"	1475	1806	1762	1806	1908	12 / 8
60"	1530	1857	1813	1889	1997	12 / 8

Dimensions in mm

Series B

	Class	150	300	400	600	
NPS	d_1	d_4	d_4	d_4	d_4	s_1/s_2
26"	665	789	870	854	892	10 / 6,5
28"	720	840	924	917	955	10 / 6,5
30"	770	890	994	975	1025	10 / 6,5
32"	820	944	1057	1038	1089	10 / 6,5
34"	865	1008	1111	1089	1165	10 / 6,5
36"	920	1060	1174	1159	1216	10 / 6,5
38"	965	1127	1225			10 / 6,5
40"	1020	1178	1276			10 / 6,5
42"	1070	1229	1336			10 / 6,5
44"	1120	1279	1387			10 / 6,5
46"	1170	1344	1463			10 / 6,5
48"	1220	1395	1514			10 / 6,5
50"	1270	1438	1565			12 / 8
52"	1320	1497	1616			12 / 8
54"	1370	1552	1676			12 / 8
56"	1430	1603	1768			12 / 8
58"	1475	1678	1830			12 / 8
60"	1530	1729	1881			12 / 8

Dimensions in mm

KROLL & ZILLER PRODUCT RANGE

GASKETS MADE IN GERMANY

G-ST
- Universally applicable
- Very good adaptability to sealing surfaces

G-ST / GUSS
- In special dimensions
- For complete covering of the sealing strip
- Reduction of rust nodule binding

G-ST-P / S
- Universally applicable and blow-out proof
- Tightness even with low surface pressure
- Sealing by additional round cord sealing system

G-ST-P / K
- Ideal for GRP and plastic flange connections
- Tight with small screw tightening torques

G-ST-P / KN
- Universally applicable
- Force shunt seal for high bolt forces
- Optimal for extreme loads and high pressures

G-ST-P / HTB
- Higher thermal load capacity (DIN EN 30653)
- Gasket for gas supply (DIN EN 682)

G-ST-P / OE
- Dimension freely selectable
- Gasket with open VA insert
- Large dimensions › 4000 mm realizable

G-ST-P / Hybrid
- Universal combination of rubber and fiber material gasket with stainless steel insert and freely dimensionable
- Prevents flange deformation

G-ST-P / KN-PP
- Frorce shunt gasket with plastic support ring
- Ideal for GRP and plastic flange connections

G-ST-P / GR
- Profile gasket for rubberized pipelines
- In accordance with guideline FDG 0389 for flanges according to DIN 28034 Flanges according to DIN 28034

G-ST / FD
- Flat version of the proven G-ST profile
- Thickness: 3 mm
- Repair gasket

BFD-flange gaskets
- For standpipes in well construction
- For protection of the casing pipe
- Freely dimensionable gasket

G-ST-Wedge ring
- Infinitely adjustable from 0° bis 8°
- Certified for use in contact with drinking water

G-ST-P / ISO
- Use as galvanic separator
- Prevention of electrochemical corrosion

NBR-DUO-EL Aramid-Gasket
- Freely dimensionable gasket
- Good mechanical, thermal and chemical resistance

Comb profile Gaskets
- For high pressures in gas and steam applications
- Optimum temperature resistance
- Very good media resistance

RTJ Ring-Joint-Gaskets
- For highest pressures in the gas range
- In oval and octagonal shape
- Use in refineries and petrochemical industry

PTFE-Gaskets
- For sealing of chemically aggressive media
- With perforated steel insert
- Approved for contact with food

HIGH QUALITY
MADE IN GERMANY

KROLL & ZILLER GmbH & Co. KG
Reisholzstraße 15
40721 Hilden
Germany

Tel.: +49 2103 951 - 0

info@kroll-ziller.de
www.kroll-ziller.de

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