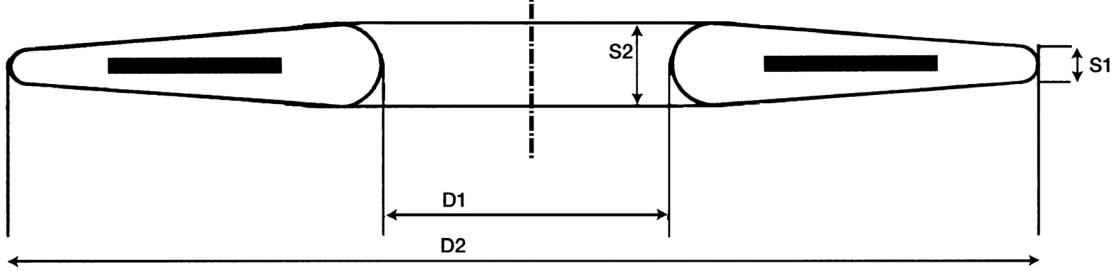
TECHNICAL DATA

Rubber steel gasket G-S-S with vulcanized steel ring according to DIN EN 1514-1: IBC for pressure rates from PN 6 to PN 40

Dimensions in mm



Example for gasket dimensions G-S-Standard

Value S1, S2, D1 and D2 please take out of the price list

Elastomer materials according to ISO R 1629

Materials	Shore hardness A	Temperature range
NBR / DVGW[1]	70 +/- 5	-25 °C to +90 °C
EPDM / UBA ELL, W270[2]	70 +/- 5	-25 °C to +120 °C

[1] NBR is used as a sealing material for gas supply pipelines and their components, certified with quality mark DIN-DVGW Reg. NG-5113BR0477 according to EN 682 GB (temperature range -5 °C to +50 °C)

[2] In compliance with KTW D1 / D2, 1.3.13 BFA for potable water and W270 physical properties of elastomer material according to DIN EN 681-1.

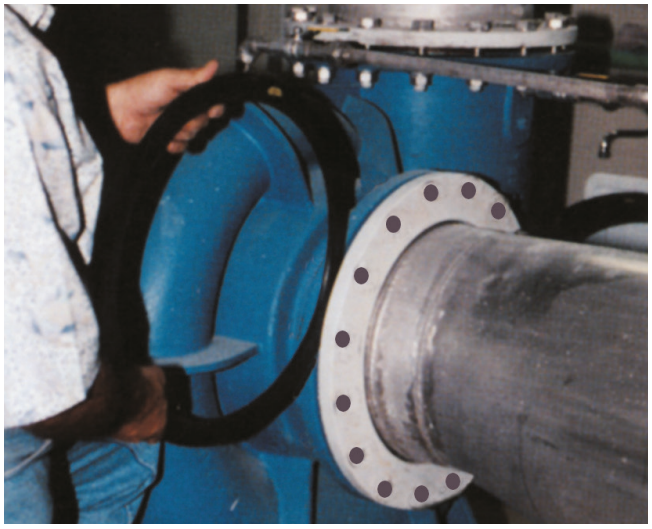
Other dimensions and materials available upon request

Two in one

Due to its wedge shape, the the PSI Rubber Steel Gasket G-S-S can be used as an alternative to the so-called ‘O-ring’ seal and as a standard rubber/steel gasket.

Thanks to the gasket’s thicker inner diameter facing the medium, a sealing effect is achieved very quickly.

INSTALLATION INSTRUCTIONS



- The sealing strips of the flanges must be dry, clean, free of burrs and grooves in the order of the roughness depth standardised according to DIN EN.
- The flanges are to be prepared clean, dry and aligned in parallel
- The seal must not be damaged.
- Greasy release agents or lubricants should not come into contact with the rubber seal.
- Place the gasket between the flange surfaces.
- Tighten the screws crosswise and evenly in several passes.
- Check that the connecting screws are well lubricated.
- Always use a torque wrench to ensure even tightening of the connecting screws.
- The pipeline must be prevented from settling by appropriate mounting, otherwise the rubber seal will be crushed on one side.
- Rubber/steel seals should not be reused.

Standard tightening torques (in Nm)
for PSI rubber steel flange gaskets

ND	PN 6	PN 10	PN 16	PN 25	PN 40
15	6	11	11	11	11
20	10	16	16	16	16
25	13	21	21	21	21
32	22	36	36	36	36
40	28	45	45	45	45
50	31	58	58	58	58
65	42	77	77	38	38
80	70	45	45	45	45
100	74	49	49	70	70
125	50	64	64	105	105
150	54	89	89	124	124
200	76	123	82	123	155
250	65	102	127	177	234
300	105	105	160	177	245
350	136	133	177	264	345
400	111	160	223	340	515
500	120	188	316	370	437
600	173	250	480	500	-

For flanges ND 15 - ND 600:

The values are based on a coefficient of friction of μ = 0.12 and a maximum surface pressure of 15 N/mm². The number and sizes of bolts comply with DIN standards 2632 to 2635.

The guide values for tightening torques for flanges larger than ND 600 can be calculated according to the following rule of thumb:

PN 10: ND / 3 = torque in Nm
PN 16: ND / 1.5 = torque in Nm
PN 25: ND = torque in Nm
PN 40: ND * 2 = torque in Nm

If the flange material consists of plastic, e.g. PE, please note that the tightening torques must be adjusted or reduced according to the respective flange material.

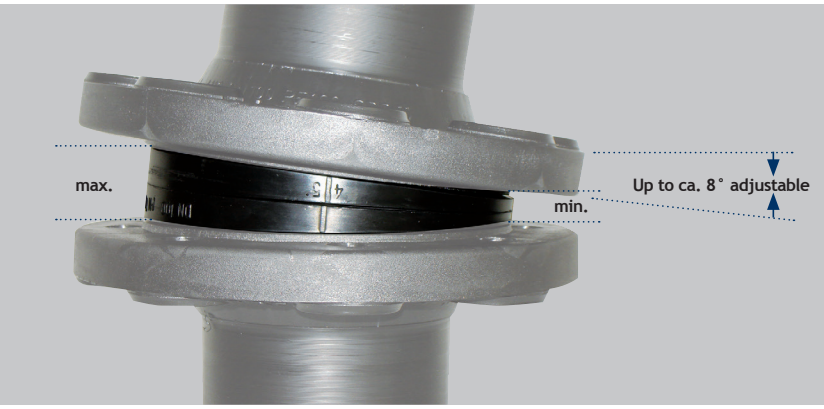
GENERAL INFORMATION

The adjustable flange gasket WD consists of two segments connected by a tongue-and-groove joint. This allows the two wedge-shaped parts to be turned against each other up to an angle of approx. 8°. After installation, the two parts form a “medium-tight“ bond.

Simple and extremely economical - No need for using wedge disks or additional gaskets
The PSI Adjustable Flange Gasket WD simply and very economically replaces steel or cast iron wedge disks. These heavy wedge disks are difficult to install and also require two additional seals.

The result: Inexact assembly and higher costs. Complicated handling of such metal elements in tight spaces produces uncertainties during installation and increased risk of leakage.

Simple application for misaligned flange faces
Sometimes it is not possible to align flange faces properly. Especially underground pipes with adaptors and flanges, e.g. hydrants and valves, cannot always be aligned perfectly.



The standard material of the PSI adjustable flange gasket WD is EPDM. However, depending on the application, it can also be made of other elastomers such as FPM (Viton) and silicone. EPDM service temperature ranges from -25 °C to +120 °C

Dimensions		Thickness		Bolt length	Size
ND	PN	min.	max.		
32	10 - 40	9	20	90	M14
40	10 - 40	9	22	90	M14
50	10 - 40	9	24	100	M14
65	10 - 40	9	26	100	M14
80	10 - 40	14	30	100	M14
100	10 - 16	14	30	100	M14
100	25 - 40	14	33	110	M18
125	10 - 16	14	36	100	M14
150	10 - 16	14	39	110	M18
150	25 - 40	14	39	130	M22
200	10 - 16	15	50	120	M18
200	40	15	50	160	M24
250	10	16	59	140	M18
250	40	16	59	170	M27
300	10	22	68	150	M18
350	10	22	68	150	M18
400	10	22	74	160	M22
500	10	23	79	180	M22

PSI Adjustable Flange Gasket WD
Dimensions according to DIN EN 1514-1 in mm
Other dimensions and material qualities available upon request