Flange Gaskets - Type RSG-TW-V 4 pipes

Product Information

RSG-TW-V rubber steel flange gasket is a two-piece construction, made from elastomeric material vulcanized over steel rings.

With its twist and plug mechanism, the RSG-TW-V can be adjusted to the angle of the sealing surface.

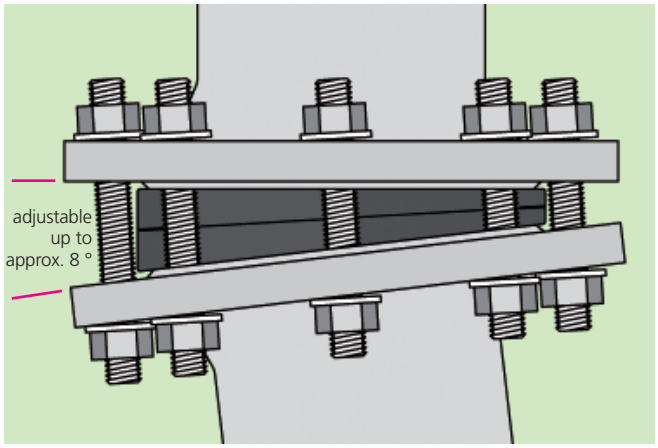
Elastomeric elements provide secure sealing against fluids on flange connections with **non-parallel flange surfaces**. The two-piece construction of conical elements not only forms the seal, but also compensates for angular misalignment by allowing **adjustment up to 8°**.
Steel rings, vulcanised into the elastomeric elements, ensure mechanical stability and long term functionality.

Material qualities and technical data

RSG-TW-V for water, various other fluids, industrial applications and waste water: **EPDM**

Operating temperature:	-25° C up to +120° C
Hardness:	70 ±5 Shore A
Approvals:	DVGW W270, Elastomer guideline of UBA/KTW, WRAS and ACS, DVGW certificate of conformity hygiene
Specifications:	DIN-EN 681-1, Type WA/WC/70

Other material qualities and certificates are available on request.



Application

RSG-TW-V flange gaskets are intended for:
- flange connections with sealing surfaces not parallel to each other
- hydrants with misaligned connection tee / duckfoot bend
- pipes for firefighting
- buried pipeline systems

Elastomer EPDM provides excellent resistance to several substances, including different chemicals, industrial water, aqueous salt solutions and is **DVGW approved for drinking water application**. Very good ozone and UV resistance!

Chemical resistance table available: www.4pipes.de

Unique advantages

- Easy and cost effective installation due to adjustment of sealing surfaces
- excellent resistance to substances in pipes
- vulcanized steel rings provide long term stability
- high tightening value at low bolt forces
- no retightening of bolts
- excellent operational reliability
- no leakage
- cost effective because follow-up costs are avoided

Dimensions and pressure rates

RSG-TW-V flange gaskets are manufactured according to DIN-EN 1514-1 (comparable to old DIN 2690), form IBC, self-centering in flanges according to DIN-EN 1092-1, DIN-EN 1092-2.

Please find available dimensions and pressure rates in our price list or contact us.
Gasket dimensions suitable for plastic and ANSI flanges are available on request.

The 4 pipes warranty only applies to faulty material.
Checking the suitability of the product for the individual application is solely the responsibility of the user.
4 pipes does not grant any warranty for preinstalled or reused flange gaskets.

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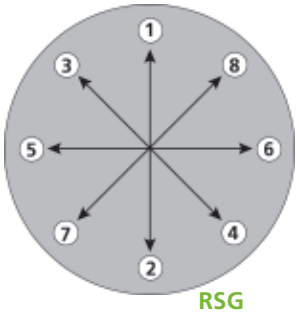
Flange Gasket - Type RSG and RSG-TW-V 4 pipes

Installation RSG

- the sealing line of flange surfaces needs to be clean, free of grooves and edges
- insert the gasket carefully between the flanges
- lubricate bolts
- insert bolts into bolt holes
- tighten bolts evenly (in three steps 30% + 40% + 30%) with a torque wrench according to the tightening torque table specification below
- tighten bolts in a diagonally opposite sequence as shown in the picture on the right

For any other installation or operation situation please contact our customer service.

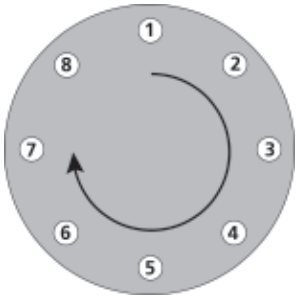


RSG

Installation RSG-TW-V

- sealing lines of flanges must be **clean and free of grooves and edges**
- extra long bolts with smaller diameter might be necessary
- adjust angle of RSG-V according to misalignment of flanges by plugging and twisting sealing elements into each other
- IBC form ensures self-centering of gasket
- insert the gasket carefully between the flanges
- lubricate bolts
- insert bolts into bolt holes
- tighten bolts evenly (in three steps 30% / 40% / 30%) **in a clockwise direction (see picture to the right)** with a **torque wrench** according to table below

For any other installation or operation situation please contact our customer service.



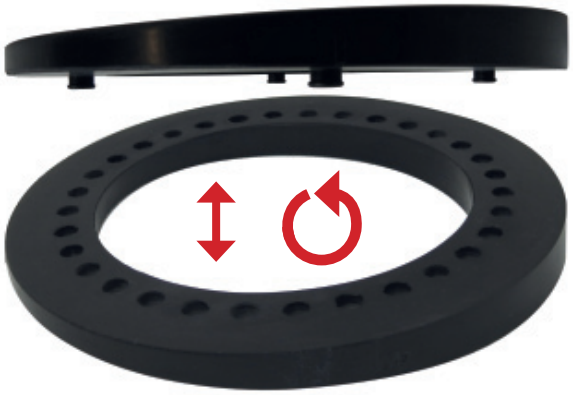
RSG-TW-V

Important advice

Gaskets should only be installed once. Don't apply any additional sealant, lubricant or glue on the installed gasket. Never install more gaskets on top of the first one. Please adhere to the installation instructions/regulations and requirements for qualified fitters, in accordance with DIN-EN 1591.

Torques values for flange gaskets type RSG and RSG-TW-V
Values for steel flanges in Newtonmeter (Nm)

DN	PN 6	PN 10	PN 16	PN 25	PN 40
15	15	30	20	25	25
20	25	30	40	25	40
25	25	30	40	25	40
32	40	100	100	100	100
40	40	100	100	100	100
50	70	100	100	100	100
65	70	100	100	100	100
80	100	100	100	100	100
100	100	100	100	200	200
125	100	100	100	310	310
150	100	200	200	310	310
200	100	200	200	310	450
250	100	200	310	450	720
300	200	200	310	450	720
350	200	200	310	720	980
400	200	290	450	820	1200
450	-	290	-	-	-
500	200	290	550	820	-
600	300	420	750	1200	-
700	300	420	750	1300	-
800	350	610	960	1850	-
900	400	610	960	1850	-
1000	400	800	1300	2600	-
1200	550	1100	1200	-	-
1400	-	1400			
1600	-	1930			
1800	-	1930			
2000	-	1930			


RSG-TW-V (twist and plug tmechanism)

The RSG gasket was tested and calculated by the laboratory company amtec Messtechnischer Service GmbH.

Calculated for flanges on the basis of EN 1591-1, considering the specific gasket values acc. to DIN EN 13555 and VDI 2200.

Values based on friction μ = 0.14 (bolts lubricated). Bolts quality 5.6 or higher. Flange quality: 1.0460 (C22.8)

For PE flanges please note:
The torque value must be adjusted to the grade of the PE flange. All informations on tightening torques can be obtained from the flange manufacturer.
Also note DVS2210-1 B3.
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