

EN

## INSTALLATION INSTRUCTION



- Flanges must be clean, dry and aligned in parallel before installation
- The gasket must not be damaged
- Greasy separating agents or lubricants should not come into contact with the rubber gasket
- Insert gasket between flange faces
- Tighten the bolts evenly several times in a crosswise sequence
- Ensure that bolts are well lubricated
- Always use torque wrench to ensure even tightening
- Appropriate pipe support must be in place in order to prevent the pipe from settling, otherwise the gasket will be squeezed on one side
- Rubber/steel gaskets should not be used more than once

### 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  $\mu = 0.12$  and a maximum surface pressure of  $15 \text{ N/mm}^2$ . 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:  $\text{ND} / 3 = \text{torque in Nm}$
- PN 16:  $\text{ND} / 1.5 = \text{torque in Nm}$
- PN 25:  $\text{ND} = \text{torque in Nm}$
- PN 40:  $\text{ND} * 2 = \text{torque in Nm}$

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.