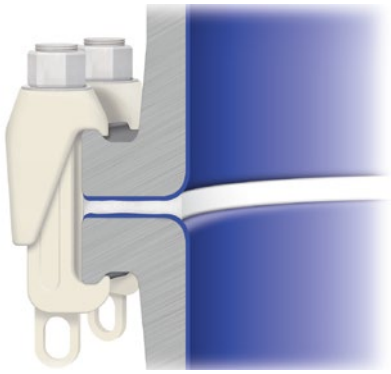
Sealant Technologies

Torque Guidelines EN

Flange Type: Glass-Lined Steel Flange
Gasket Type: Gasket
Product Name: GORE® Universal Pipe Gasket (Style 800)



Glass-Lined Steel Flange

To achieve a reliable seal, adequate gasket stress must be applied during installation. This table provides an estimation of torque for use during assembly of standard pipe flanges.

The user must verify these conditions, as outlined, are appropriate for the specific application.

Due to the variation of the glass-lined steel sealing surface by flange manufacturer, the user must confirm that torque values do not exceed the pipe manufacturer's maximum torque recommendation. Consult Gore when selecting a lower torque value.

Caution should be used when using this documentation as proof of flange design. It is the user's responsibility to meet all applicable local laws and requirements. This estimation does not account for the influence of flange rotation, flange strength, external forces, temperature expansion, pressure peaks and installation error.

GORE® Universal Pipe Gasket (Style 800)
Bolt Torque: Gasket on Glass-Lined Steel Flange

DN (mm)	PN 10		
	Bolts Number x Size	Nm	Ft-lbs
15	4 x M12	10	8
20	4 x M12	20	15
25	4 x M12	30	20
32	4 x M16	50	40
40	4 x M16	60	45
50	4 x M16	80	60
65	4 x M16	95	70
80	8 x M16	65	50
100	8 x M16	70	50
125	8 x M16	85	65
150	8 x M20	120	90
200	8 x M20	170	130
250	12 x M20	130	100
300	12 x M20	150	110
350	16 x M20	200	150
400	16 x M24	280	210
450	20 x M24	240	180
500	20 x M24	260	190

Torque Values Requirements

- Use of well lubricated bolts, Grade 24CrMo5 or better
- Use of 6 mm (1/4 in) gasket thickness
- Installation practices according to ASME PCC-1

Torque Estimation Conditions

- Gasket dimensions according to EN1514-1 Form IBC with reduced inner diameter according to Gore specification
- Flange dimensions according to DIN 2873 PN 10
- Maximum working pressure 10 bar (145 psi)
- Friction factor μ = 0.12; Nut factor K = 0.15
- Suggested torque values are based on best practices. In general, 20 MPa (2900 psi) average gasket stress is targeted.
- Calculation according to ASME PCC-1 Appendix J

For detailed selection criteria, technical information, installation guidelines and the complete listing of local sales offices, please visit **gore.com/sealants.**

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