GORE® Universal Pipe Gasket

(STYLE 800)

The reliable universal pipe gasket for all standard flanges

GORE® Universal Pipe Gasket (Style 800) is used to seal all types of flanges in chemical process piping. Designed to meet the needs of many different piping materials, they are ideal for standardising gasket materials across steel, glass-lined steel and FRP systems, wherever a non-metallic gasket can be used.

Unaffected by even the most aggressive chemicals, Style 800 gasket combines all the properties of expanded PTFE with exceptional sealability. Engineered to deliver superior bolt load retention, these gaskets exhibit outstanding creep resistance for reliable sealing of piping flanges. And due to their unique design, they provide low stress to seal for applications in the most fragile of plastic, steel and glass-lined flanges.

Look to **GORE® Universal Pipe Gasket** (Style 800) for superior performance in three important areas: conforming to irregular surfaces, helping to protect flanges and sealing reliably. With decades of manufacturing and technical experience, GORE offers gasketing you can depend on when you need the highest level of confidence.

Technical data

Material

100 % expanded PTFE (ePTFE) with multidirectionally oriented fibril structure.

Temperature range of the material

-268 °C to +315 °C/-450 °F to +600 °F

Chemical resistance

Resistant to all media (pH 0 – 14), except for molten or dissolved alkali metals and elemental fluorine particularly at high temperatures and pressures.

Stability

Not subject to ageing within the material's temperature range, UV-resistant and can be stored indefinitely.

Physiological safety

Physiologically harmless within temperature range of material.

Operating range

The maximum applicable pressure as well as the maximum safe operating temperature depend mainly on the equipment. Standard pressures range from full vacuum to 40 bar.



Key Features

- Made from 100 % expanded PTFE (ePTFE)
- Seals at low bolt loads
- Highly conformable
- High chemical and thermal restistance
- High dimensional stability and creep resistance
- High blow-out resistance

Key Benefits

- Seals all types of standard flanges
- Standardisation: only one type of gasket in the piping system
- No misuse of a wrong gasket
- Seals highly permeable and aggressive fluids
- Seals damaged or misaligned flanges
- Seldom needs retorquing
- Superior sealing reliability and long gasket life
- Lowers total sealing cost

Typical applications

- Steel flanges
- Plastic flanges
- Glass-lined steel flanges
- Lined flanges

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Mechanical Data

ASTM F-36	55%
Blow-out safety (VDI 2200)	Test step 1/60 bar
	Test step 2/60 bar

Sealability

ASTM F-37 (“Y” value)	1,500 psi
ASTM F-568 (“m” factor)	2,4
“TA-Luft”	Yes

Thickness	P_{QR} data			Q_{Smax}	$Q_{min\ (0,1)}$*	Q_{Smin}*
	20°C	150°C	230°C	230°C		
1.5 mm	0.94	0.87	0.84	225 MPa	6 MPa	5 MPa
3.0 mm	0.85	0.72	0.62	150 MPa	6 MPa	5 MPa

* Q_{Smin} and Q_{min} tests according to EN 13555 do not provide data < 10 MPa. The figures are based on additional tests and experience.

Installation Guide

Clean the flange faces and apply the gasket. Tighten the bolts in three steps until recommended torque. Torque tables and installation procedures are available on request.

Available Sizes and Size Selection

Thickness [mm]								
EN		1,5	3,0	6,0**	ANSI	1,5	3,0	6,0
	10	•	•		1/2"	•	•	
	15	•	•		3/4"	•	•	
	20	•	•		1"	•	•	•
	25	•	•	•	1-1/4"	•	•	•
	32	•	•	•	1-1/2"	•	•	•
	40	•	•	•	2"	•	•	•
	50	•	•	•	2-1/2"	•	•	•
	65	•	•	•	3"	•	•	•
	80	•	•	•	3-1/2"	•	•	•
	100	•	•	•	4"	•	•	•
	125	•	•	•	5"	•	•	•
	150	•	•	•	6"	•	•	•
	200	•	•	•	8"	•	•	•
	250	•	•	•	10"	•	•	•
	300	•	•	•	12"	•	•	•
	350	•	•	•	14"	•	•	•
	400	•	•	•	16"	•	•	•
	450	•	•	•	18"	•	•	•
	500	•	•	•	20"	•	•	•
	600	•	•	•	24"	•	•	•

recommended thickness 1.5 for steel piping

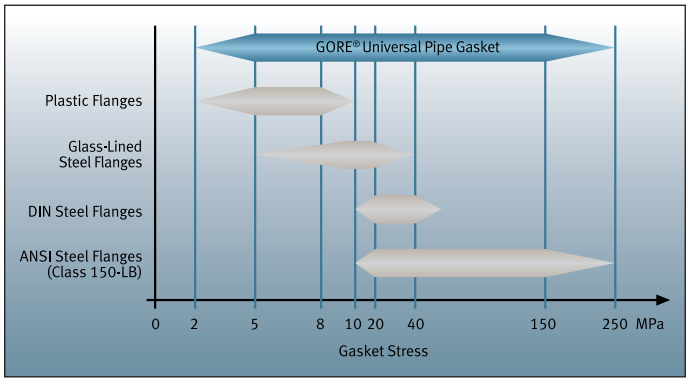
recommended thickness 3.0 for FRP piping

recommended thickness 6.0 for glass-lined steel piping

Pressure rating PN 6 – PN 40 Class 150-LB. Ring, Class 300-LB. Ring

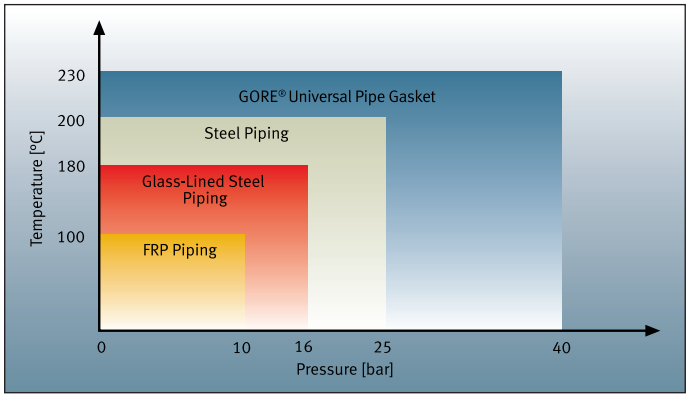
** All 6 mm thicknesses (DN size) deviate from EN 1514-1 by having reduced inner diameter.

Maximum Gasket Stress of Different Flange Materials



Due to the very low minimum gasket load required, **GORE® Universal Pipe Gasket** (Style 800) seals all typical types of flanges.

Application Areas of Standard Piping



95% of all chemical processes run at temperatures of up to 200°C and 25 bar. **GORE® Universal Pipe Gasket** (Style 800) offers the highest performing ePTFE gasket and largest operating zone.

Quality Assurance

The GORE Quality Management System has been certified by DQS in accordance with ISO 9001. Component suppliers are also integrated into this system.

REG. NR. 3567 QM08
by W. L. Gore & Associates GmbH certified according to DIN ISO 9001:2008

Ordering Text

EN: Style 800 - DN - PN - thickness, number of pieces

ANSI: Style 800 - Size (in ") - LB150/300 - thickness, number of pieces

FOR INDUSTRIAL USE ONLY. Not for use in food, drug, cosmetic or medical device manufacturing, processing, or packaging operations.

Supplied by:

For detailed selection criteria, technical information, installation guideline and a complete listing of local sales offices please visit **gore.co.uk/sealants**

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