

TEXOLON® GASKETS



Our steel reinforced pipe flange gaskets are a proprietary molded PTFE gasket featuring stainless steel grade 304 perforated reinforcement core. TEXOLON® gaskets were initially developed for sealing difficult chemical applications requiring superior cold flow and blowout resistance. The combination of corrosion resistance of void-free PTFE fluorocarbon resins with the structural strength of grade 304 perforated stainless steel provides improved operational safety by markedly reducing the need for repeated retorquing to maintain a leak-free seal.

WHY CHOOSE THE TEXOLON® GASKETS

The TEXOLON® gasket is molded and oven sintered in a proprietary process totally encapsulating a 304 stainless steel perforated reinforcement core. The stainless steel core confines the PTFE and greatly reduces the effect of creep and cold flow of the gasket within the flange. Since the PTFE gasket relaxes and the stainless steel does not, the thickness reduction due to material flow is proportionately less. The unique design of the molded PTFE with the stainless steel stabilizes the seal face and greatly enhances the cold flow resistance. Testing has confirmed that the Texolon® gasket experiences over one-third less stud load loss than virgin and glass filled PTFE gasket materials. The excellent creep and cold flow resistance allows higher temperature and pressure limits.

SIZES

TEXOLON® PTFE flange gaskets are made to a standard of 3/32" thick and can be manufactured to a wide choice of standard dimensions ranging from 1/2" up to 48". Other thicknesses are available upon request and full-face configurations are also available. We also offer blind, fluid blocking configurations with a handle for ease of installation.

FOR USE IN APPLICATIONS WHERE:

- Liquids or gases are corrosive
- High and variable pressures are encountered
- Contamination must be avoided
- Sudden failure in a system would be hazardous
- Long service life is mandatory
- A tight seal is needed to control emissions
- Pressure variations are present



TEXOLON® M & Y VALUES

3/32" Thick Gaskets	1/8" Thick Gaskets
M = 3	M = 4
Y = 2000 psi	Y = 2000 psi

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PROPERTIES



PHYSICAL AND MECHANICAL PROPERTIES

		Dimensions		92mm x 49mm x 3.5mm (OD x ID x thickness)			
		Gasket Type		Texolon		Texolon HP	
Property	Test Method	Units	Typical Value		Typical Value		
Compressibility (23°C)	ASTM F36	%	4.4		4.4		
Recovery (23°C)	ASTM F36	%	42.7		50.6		
Resiliency (23°C)	ASTM F36	%	2.0		2.4		
Sealability (23°C)	ASTM F37, Method B	N ₂ ml/hr	25 ml/hr @ 1020 psi; No leakage @ 2510 psi and above		360 ml/hr @ 1020 psi; No leakage @ 2510 psi and above		
Creep Relaxation (100°C)	ASTM F38, Method B	%	70.4		57.2		
Safe Reserve Temperature	HOBT2	°F	266		449		
Safe Reserve Stress	HOBT2	psi	3029		2156		
Maximum Allowable Gasket Stress (Q _{smax})	EN 13555	psi	17,400 (120 MPa) at 25°C 8,700 (60 MPa) at 150°C 2,900 (20 MPa) at 250°C		17,400 (120 MPa) at 25°C 11,600 (80 MPa) at 150°C 8,700 (60 MPa) at 250°C		

CREEP RELAXATION FACTOR (P_{QR}), per EN 13555

C = 500 kN/mm	Gasket Type	Texolon			Texolon HP		
	T[°C]	25	150	250	25	150	250
	Q _i [MPa]						
	20	0.90	0.39	0.24	0.96	0.68	0.46
	50	0.76	0.25	-	0.88	0.43	-
	80	-	0.26	-	-	0.50	-
	120	0.69	-	-	0.87	0.26	-

MODULUS OF ELASTICITY E_G [MPa], per EN 13555

Gasket Type	Texolon			Texolon™ HP		
T[°C]	25	150	250	25	150	250
Q _i [Mpa]						
20	1555	477	350	1403	516	838
30	1846	770	-	1669	647	555
40	2170	1002	-	1877	827	804
50	2436	1271	-	2107	1059	1026
60	2607	1644	-	2362	1836	1199
80	3036	-	-	2852	2898	-
100	3495	-	-	3922	-	-

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PERFORMANCE



Texolon GASKETS

Pressure [bar]	40													
Test Gas	Helium													
Tightness class	L1		LO.1		LO.01		LO.001		LO.0001		LO.00001		LO.000001	
Initial Gasket Stress [Mpa]	Q _{min} [MPa]	Q _{smin} [MPa]	Q _{min} [MPa]	Q _{smin} [MPa]	Q _{min} [MPa]	Q _{smin} [MPa]	Q _{min} [MPa]	Q _{smin} [MPa]	Q _{min} [MPa]	Q _{smin} [MPa]	Q _{min} [MPa]	Q _{smin} [MPa]	Q _{min} [MPa]	Q _{smin} [MPa]
10	10	8	11	-	-	-	-	-	-	-	-	-	-	-
20	10	5	11	5	14	6	16	7	-	-	-	-	-	-
40	10	5	11	5	14	5	16	5	19	9	-	-	-	-
60	10	5	11	5	14	5	16	5	19	5	-	-	-	-
80	10	5	11	5	14	5	16	5	19	5	-	-	-	-
100	10	5	11	5	14	5	16	5	19	5	-	-	-	-
120	10	5	11	5	14	5	16	5	19	5	-	-	-	-
dimensions [mm]	92 x 49 x 3.5										Tested according EN 13555			

Texolon HP GASKETS

Pressure [bar]	40													
Test Gas	Helium													
Tightness class	L1		LO.1		LO.01		L.001		L.0001		L.00001		L.0000001	
Initial Gasket Stress [Mpa]	Q _{min} [MPa]	Q _{smin} [MPa]	Q _{min} [MPa]	Q _{smin} [MPa]	Q _{min} [MPa]	Q _{smin} [MPa]	Q _{min} [MPa]	Q _{smin} [MPa]	Q _{min} [MPa]	Q _{smin} [MPa]	Q _{min} [MPa]	Q _{smin} [MPa]	Q _{min} [MPa]	Q _{smin} [MPa]
10	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	10	6	13	8	15	9	17	13	20	20	-	-	-	-
40	10	5	13	5	15	6	17	8	20	10	-	-	-	-
60	10	5	13	5	15	5	17	7	20	9	-	-	-	-
80	10	5	13	5	15	5	17	6	20	8	-	-	-	-
100	10	5	13	5	15	5	17	5	20	5	99	99	-	-
120	10	5	13	5	15	5	17	5	20	5	99	38	-	-
dimensions [mm]	92 x 49 x 3.5										Tested according EN 13555			

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TEXOLON® PADDLE GASKETS

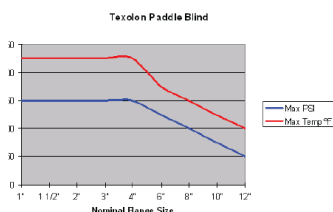


TEXOLON® STATIC DISSIPATIVE PADDLE GASKETS

TEXOLON® static dissipative paddles have all the advantages of the original TEXOLON® gasket and are made specifically for lined pipe applications. These 304 stainless steel encapsulated gaskets dissipate static using a paddle handle extended 2" above the flange. Pre-drilled for grounding hardware these paddles self seat easily to any 150# ANSI eliminating the need for a separate gasket and creating an easy to install solution. Our grounding paddles have a temperature resistance up to 400°F. Chemically resistant to all solvents, caustics, sulfates and more ensure our paddle gaskets have a long service life in your critical application.

RING SIZES

Size (in)	ID x OD
0.75"	0.687 x 2.62
1.75"	1.687 x 4.125
2.75"	2.687 x 5.375
3.75"	3.687 x 5.375
5.625"	5.500 x 8.750



PADDLE GASKET MATERIAL PROPERTIES

Property	Test Method	Units	Typical Value
Specific Gravity	ASTM D792	g/cm ³	2.12
Tensile Strength	ASTM D638	PSI	3,200
Elongation	ASTM D638	%	200
Volume Resistivity	ASTM D257	Ω-cm	10 ⁵

TEXOLON PIPELINE FLUID BLOCKERS

TEXOLON® pipeline fluid blockers utilize the Texolon gaskets molded virgin PTFE around a 304ss perforated inner reinforcement core. For extreme performance in corrosive environments, the chemical resistance of PTFE provides the best sealing and mating service in line blocking applications. The combination of the corrosion resistance with the structural strength of 304 perforated stainless steel, provide improved operational safety by reducing the need for repeated re-torquing to maintain a leak free seal.

FLUID BLOCKER SIZES

Standard fluid block ODs: 1.875", 2.250", 2.625", 3.375", 4.125", 5.375", 6.875", 8.750". Custom sizes are available upon request.

ADVANTAGES TO TEXOLON PADDLE GASKETS

- Non-contaminating
- Temperature Resistance
- Easy Installation
- Corrosion Resistant
- Extreme Protection
- High Performance

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