

GYLON®

High performance PTFE gasketing

Description

GYLON® - A high performance PTFE (Polytetrafluoroethylene) gasketing material. Excellent chemical resistance in combination with stopped cold flow based on the special GYLON® production process.



Main Segments*

» Metal Industry
» Pharma Industry
» Chemical Industry
» Petrochem. Industry
» Food & Beverage

Key Benefits

» Minimum surface pressure: 10N/mm ² (Style 3504)
» Wide temperature range
» Stopped cold flow
» High resilience
» Can be used on high pressure and vacuum duties
» Excellent chemical resistance**
» Available with inner-/outer eyelet
» Good electrical insulating properties*
» Weather and UV resistant
» Unlimited shelf-life
» Weather and UV resistant

Products

» GYLON® Style 3501-E
» GYLON® Style 3504
» GYLON® Style 3510
» GYLON® Style 3545

Features*

» Temperature range: -268 °C up to +260 °C
» Shore hardness: D59
» Pressure: GYLON® Style 3504: 55bar
GYLON® Style 3501-E, GYLON® Style 3510, GYLON® Style 3545: 83bar
» Compressibility (ASTM F36) up to 70%*
» Recovery (ASTM F36) up to 40%*
» Available thicknesses*: 0.8mm, 1.0mm, 1.6mm, 2.0mm, 3.2mm, 4.8mm, 6.4mm (More thicknesses on request)

* Depending on product and application details.

** See Garlock resistance table.

Certificates/Declaration*

» FDA
» BAM
» EC1935/2004
» EC10/2011
» TA – Luft + Blow-out Proof
» 3A-Sanitary St. (20-27)
» USP Class VI <88>
» USP <87>
» USP <31>
» DIN EN 13555 values
» Phthalat, Silicone, BSE, TSE & ADI free

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GYLON® Welding

This process can be done for GYLON® Style 3501-E (brick red), GYLON® Style 3504 (blue) and GYLON® Style 3510 (white). A bar thickness from 1.6 mm up to 3.2 mm is possible with a maximum width of 85 mm. By this process the material yield is optimized without affecting the operational capability.



Omega Joint



Delta Joint



Multi Button Joint



Double Head Joint

Sealing characteristics in accordance with DIN EN 13555

		Test Method	Unit	GYLON® Style 3501-E 2,0 mm	GYLON® Style 3504 2,0 mm	GYLON® Style 3510 2,0 mm
Maximum load during installation $Q_{s \max}$	20 °C	EN 13555	MPa	230	200	200
	150 °C	EN 13555	MPa	180	80	160
	200 °C	EN 13555	MPa	180	80	140
	250 °C	EN 13555	MPa	140	60	100
Minimum load during installation $Q_{\min} (L = 0,01)$	10 bar	EN 13555	MPa	15	13	10
	40 bar	EN 13555	MPa	19,5	13,2	16
	80 bar	EN 13555	MPa	30	20	20
Minimum load during operation $Q_{s \min} (L = 0,01)$		EN 13555	MPa (10, 20 and 40 bar)	<10	<5	<20
Maximum sealand class $T_{p=20\text{ °C}, p=40\text{ bar}}$		EN 13555	L[mg/(s*m)]	1,0x10E-05	1,0x10E-04	1,0x10E-05

(L) = Sealability rate

Relaxation value P_{QR} under stiffness $C = 500 \text{ kN/mm}$

	Test Method	Unit	GYLON® Style 3501-E				GYLON® Style 3504				GYLON® Style 3510			
			20	150	200	250	20	150	200	250	20	150	200	250
Temperature		°C	20	150	200	250	20	150	200	250	20	150	200	250
Stress Level 1	EN 13555	(10 MPa)	0,92	0,84	0,81	0,65	0,90	0,46	0,41	0,31	0,89	0,87	0,61	0,58
Stress Level 2	EN 13555	(30 MPa)	0,93	0,75	0,45	0,53	0,78	0,41	0,32	0,23	0,89	0,50	0,34	0,30
$Q_{s \max}$	EN 13555	(230/180/140 MPa)	0,92	0,72	0,74	0,59	0,95	0,55	0,52	0,36	0,94	0,73	0,71	0,45

Note:
Properties/applications shown throughout this brochure are typical. Your specific application should not be undertaken without independent study and evaluation for suitability. For specific application recommendations consult Garlock. Failure to select the proper sealing products could result in property damage and/or serious personal injury. Performance data published in this brochure has been developed from field testing, customer field reports and/or in-house testing. While the utmost care has been used in compiling this brochure, we assume no responsibility for errors. Specifications subject to change without notice. This edition cancels all previous issues. Subject to change without notice GARLOCK is a registered trademark for packings, seals, gaskets, and other products of Garlock.
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