

Company Address	Garlock GmbH, Falkenweg 1, 41468 Neuss, Germany
Gasket Type	GYLON® Style 3501E
Thickness e_{G0} [mm]	3.2 mm

Minimum stress to seal $Q_{min/L}$ (at assembly), $Q_{Smin/L}$ (after off-loading) for $p = 40$ bar									
L [mg/(s*m)]	$Q_{min/L}$ [MPa]	$Q_{Smin/L}$ [MPa]							
		$Q_A = 20$ [MPa]	$Q_A = 40$ [MPa]	$Q_A = 60$ [MPa]	$Q_A = 80$ [MPa]	$Q_A = 100$ [MPa]	$Q_A = 120$ [MPa]	$Q_A = 140$ [MPa]	$Q_A = 160$ [MPa]
10^{-0}	11,6	<10	<10	<10	<10	<10			<10
10^{-1}	16,9	<10	<10	<10	<10	<10			<10
10^{-2}	24,8		<10	<10	<10	<10			<10
10^{-3}	35,6		<10	<10	<10	<10			<10
10^{-4}	53,7			29,7	11,0	<10			<10
10^{-5}	87,4					75,5			47,1
10^{-6}									
10^{-7}									
10^{-8}									

Relaxation ratio P_{QR} for stiffness $C = 500$ kN/mm			
Gasket stress [MPa]	ambient temperature	temperature 1 [150°C]	temperature 2 [250°C]
Stress level 1 [10 MPa]	0,86	0,67	0,47
Stress level 2 [30 MPa]	0,90	0,48	0,25
Q_{Smax} [180 / 140 / 80 MPa]	0,88	0,51	0,25

Maximal applicable gasket stress Q_{Smax}		
Q_{Smax} [MPa] – ambient temperature	Q_{Smax} [MPa] – temperature 1 [150°C]	Q_{Smax} [MPa] – temperature 2 [250°C]
180	140	80

Sekant unloading modulus of the gasket E_G [MPa]			
Gasket stress [MPa]	ambient temperature	temperature 1 [150°C]	temperature 2 [250°C]
20	1675	852	663
30	2055	1156	789
40	2447	1539	1292
50	2638	1704	1375
60	3592	1940	1452
80	5503	2221	1607
100	5150	2474	
120	5392	3031	
140	5954	3673	
160	5160		
180	5199		
200			
220			
225			

Note: the content of darkened cells was not determined respectively is unnecessary

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