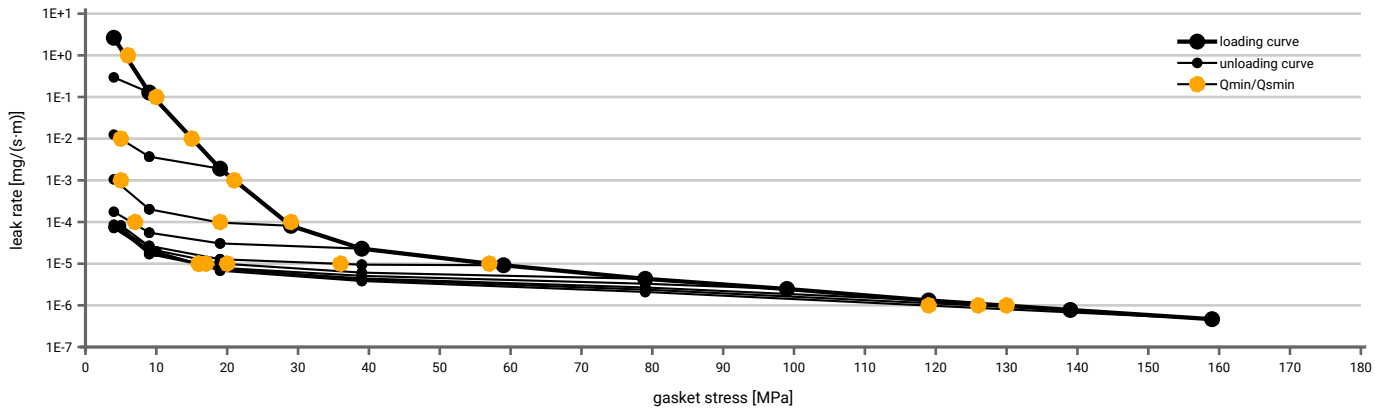
Manufacturer address	Garlock GmbH, Falkenweg 1, 41468 Neuss, DE	According to
Product name	GYLON® Style 3501E	**EN 13555**
Product dimensions	92 x 49 x 3.2 mm	**2021-4**

Minimum stress to seal $Q_{min(L)}$ (at assembly), $Q_{smin(L)}$ (after off-loading) for p = 10 bar (T = 23 ± 2 °C)

L [mg/(s·m)]	$Q_{min(L)}$ [MPa]	$Q_{smin(L)}$ [MPa]										
		Q_A = 5 [MPa]	Q_A = 10 [MPa]	Q_A = 20 [MPa]	Q_A = 30 [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]
1E+1	5		5	5	5	5	5	5	5	5	5	5
1E-0	6		5	5	5	5	5	5	5	5	5	5
1E-1	10			5	5	5	5	5	5	5	5	5
1E-2	16			6	5	5	5	5	5	5	5	5
1E-3	22				5	5	5	5	5	5	5	5
1E-4	29				19	7	5	5	5	5	5	5
1E-5	58						36	20	17	17	16	16
1E-6	130										126	119
1E-7												
1E-8												

Leakage - 23 ± 2 °C / 10 bar



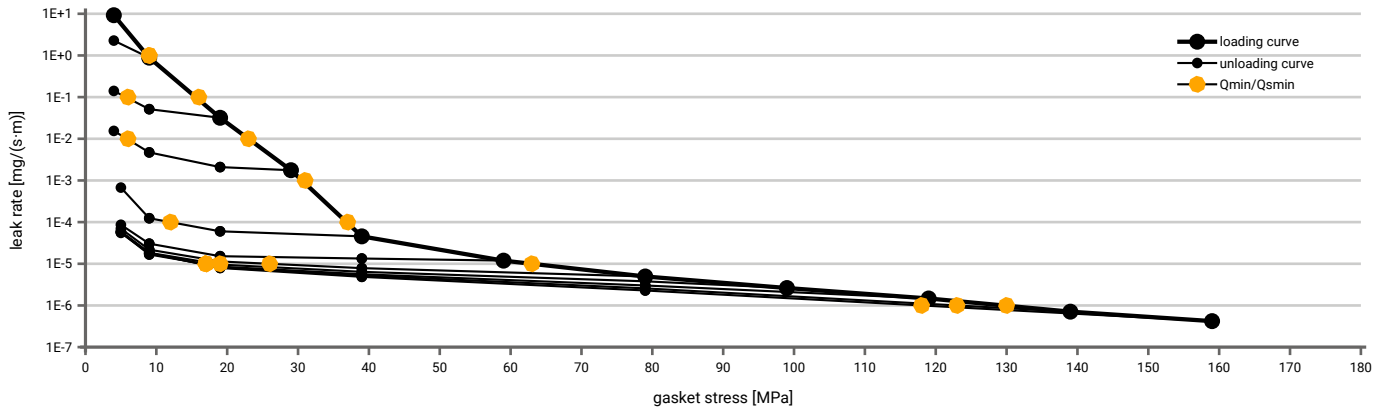
Minimum stress to seal $Q_{min(L)}$ (at assembly), $Q_{smin(L)}$ (after off-loading) for p = 20 bar (T = 23 ± 2 °C)

L [mg/(s·m)]	$Q_{min(L)}$ [MPa]	$Q_{smin(L)}$ [MPa]										
		Q_A = 5 [MPa]	Q_A = 10 [MPa]	Q_A = 20 [MPa]	Q_A = 30 [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]
1E+1	5		5	5	5	5	5	5	5	5	5	5
1E-0	10		9	5	5	5	5	5	5	5	5	5
1E-1	16			7	5	5	5	5	5	5	5	5
1E-2	24				7	5	5	5	5	5	5	5
1E-3	31					5	5	5	5	5	5	5
1E-4	38					13	5	5	5	5	5	5
1E-5	64							27	19	17	17	17
1E-6	130										124	119
1E-7												
1E-8												

Note: the content of darkened cells was not determined respectively is unnecessary | Rev.-No.: **3** | Creation date of this sheet: **2021-03-24**

Manufacturer address	Garlock GmbH, Falkenweg 1, 41468 Neuss, DE	According to EN 13555 2021-4
Product name	GYLON® Style 3501E	
Product dimensions	92 x 49 x 3.2 mm	

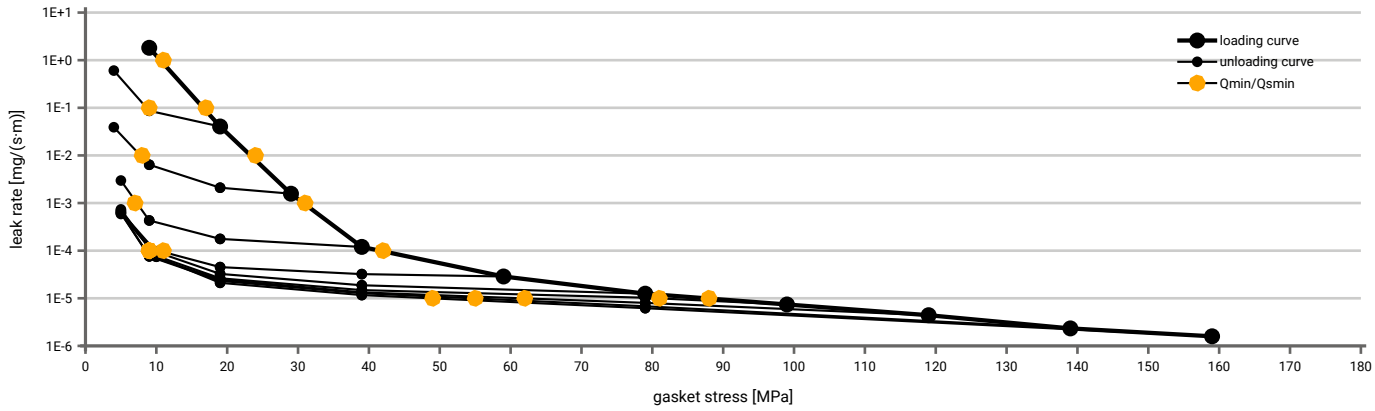
Leakage - 23 ± 2 °C / 20 bar



Minimum stress to seal $Q_{min(L)}$ (at assembly), $Q_{smin(L)}$ (after off-loading) for p = 40 bar (T = 23 ± 2 °C)

L [mg/(s·m)]	$Q_{min(L)}$ [MPa]	$Q_{smin(L)}$ [MPa]									
		Q_A = 10 [MPa]	Q_A = 20 [MPa]	Q_A = 30 [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]
1E+1	10		5	5	5	5	5	5	5	5	5
1E-0	11		5	5	5	5	5	5	5	5	5
1E-1	17		10	5	5	5	5	5	5	5	5
1E-2	24			9	5	5	5	5	5	5	5
1E-3	32				8	5	5	5	5	5	5
1E-4	42					11	10	9	9	9	9
1E-5	88							81	62	55	50
1E-6											
1E-7											
1E-8											

Leakage - 23 ± 2 °C / 40 bar



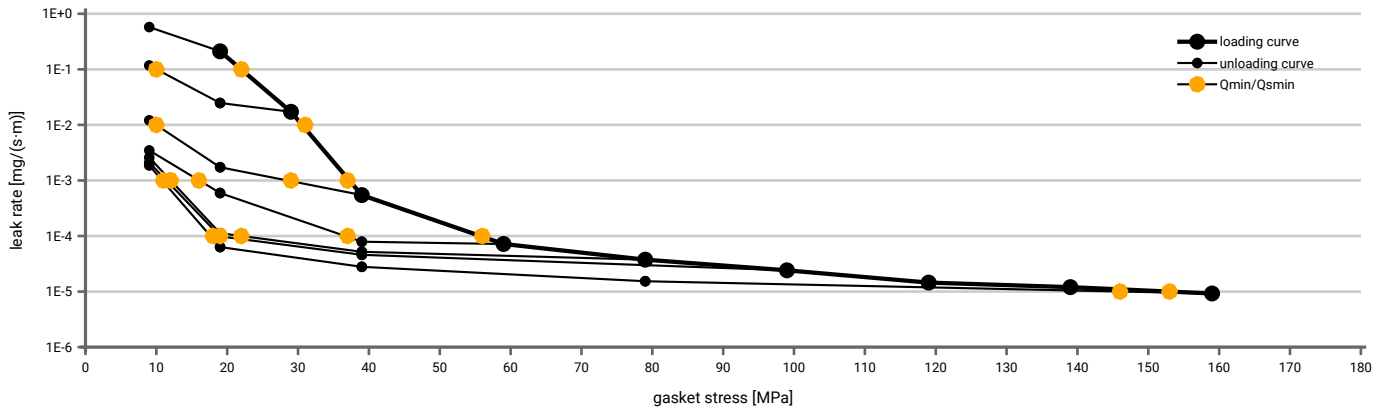
Minimum stress to seal $Q_{min(L)}$ (at assembly), $Q_{smin(L)}$ (after off-loading) for p = 80 bar (T = 23 ± 2 °C)

L [mg/(s·m)]	$Q_{min(L)}$ [MPa]	$Q_{smin(L)}$ [MPa]								
		Q_A = 20 [MPa]	Q_A = 30 [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 = 159 [MPa]
1E-0	20	10	10	10	10	10	10			10
1E-1	23		11	10	10	10	10			10
1E-2	31			11	10	10	10			10
1E-3	38			29	17	13	12			12
1E-4	56				37	23	20			18
1E-5	153									147
1E-6										
1E-7										
1E-8										

Note: the content of darkened cells was not determined respectively is unnecessary	Rev.-No.: **3**	Creation date of this sheet: **2021-03-24**

Manufacturer address	Garlock GmbH, Falkenweg 1, 41468 Neuss, DE	According to **EN 13555 2021-4**
Product name	GYLON® Style 3501E	
Product dimensions	92 x 49 x 3.2 mm	

Leakage - 23 ± 2 °C / 80 bar

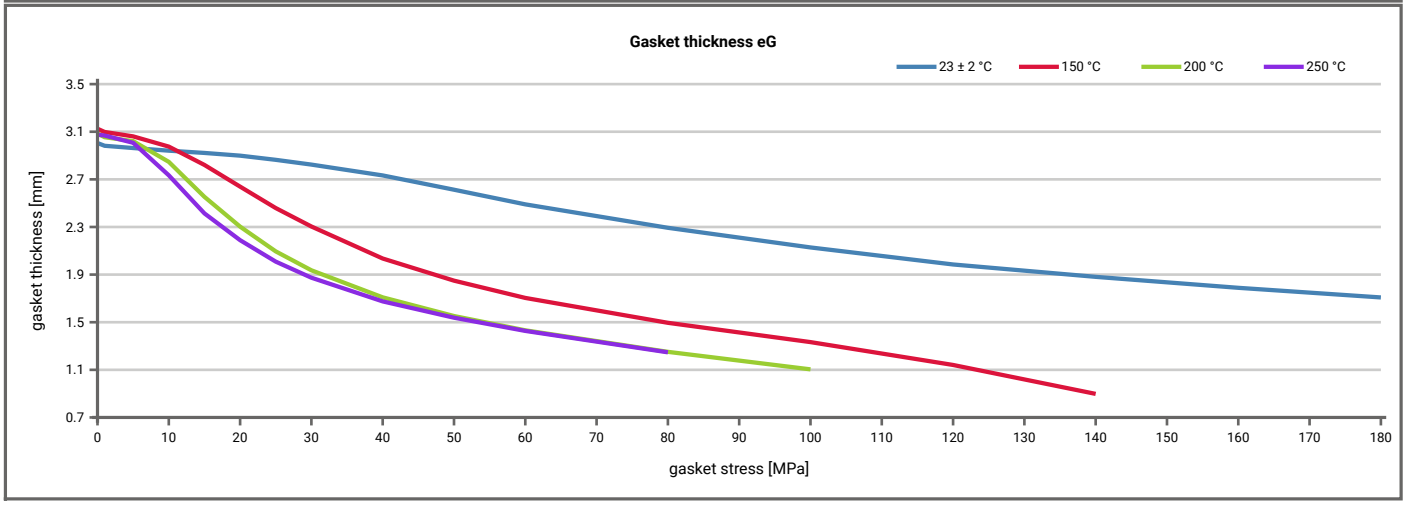


Note: the content of darkened cells was not determined respectively is unnecessary	Rev.-No.: **3**	Creation date of this sheet: **2021-03-24**

Manufacturer address	Garlock GmbH, Falkenweg 1, 41468 Neuss, DE	According to **EN 13555 2021-4**
Product name	GYLON® Style 3501E	
Product dimensions	92 x 49 x 3.2 mm	

Relaxation ratio P_{QR} for stiffness C = 500 [kN/mm]										
Gasket stress	**23 ± 2 °C**		**Temperature 1 [150 °C]**		**Temperature 2 [200 °C]**		**Temperature 3 [250 °C]**			
	P_{QR}	**Δe_{Gc} [µm]**	**P_{QR}**	**Δe_{Gc} [µm]**	**P_{QR}**	**Δe_{Gc} [µm]**	**P_{QR}**	**Δe_{Gc} [µm]**	**P_{QR}**	**Δe_{Gc} [µm]**
Stress level 1 [10 MPa]	0.86	12	0.67	28	0.64	30	0.47	44		
Stress level 2 [30 MPa]	0.90	25	0.48	132	0.35	165	0.25	189		
Stress level 3 [40 MPa]							0.24	257		
Stress level 4 [50 MPa]			0.38	260	0.34	279				
Stress level 5 [60 MPa]	0.78	111								
P_{QR} and Δe_{Gc} at maximum gasket stress to be applied (Q_{smax})										
P_{QR} at Q_{smax}	0.88	181	0.51	582	0.47	445	0.25	507		
Q_{smax}	180 MPa		140 MPa		100 MPa		80 MPa			

Sekant unloading modulus of the gasket E_G [MPa] and gasket thickness e_G [mm]										
Gasket stress [MPa]	**23 ± 2 °C**		**Temperature 1 [150 °C]**		**Temperature 2 [200 °C]**		**Temperature 3 [250 °C]**			
	E_G [MPa]	**e_G [mm]**	**E_G [MPa]**	**e_G [mm]**	**E_G [MPa]**	**e_G [mm]**	**E_G [MPa]**	**e_G [mm]**	**E_G [MPa]**	**e_G [mm]**
0	0	3.005	0	3.125	0	3.085	0	3.075		
1	0	2.982	0	3.098	0	3.054	0	3.068		
5	2404	2.963	815	3.061	804	3.021	460	3.007		
10	1367	2.941	801	2.975	712	2.847	498	2.734		
15	1874	2.922	828	2.821	840	2.553	615	2.414		
20	1984	2.899	1065	2.639	1033	2.303	631	2.189		
25	1880	2.864	1197	2.459	1259	2.095	717	2.009		
30	2109	2.824	1646	2.304	1348	1.936	948	1.874		
40	2797	2.733	1643	2.035	1760	1.709	1183	1.675		
50	2887	2.613	1918	1.849	2095	1.552	1417	1.538		
60	3278	2.490	2383	1.704	2438	1.432	1897	1.427		
80	4527	2.293	2467	1.495	3340	1.251	2006	1.247		
100	5852	2.128	2655	1.333	3915	1.104				
120	4950	1.985	5438	1.141						
140	5758	1.881	3620	0.898						
160	6988	1.789								
180	5608	1.708								



Fields marked: Intrusion into bore was detected. Determined after the corresponding P_{QR}-Test.

Note: the content of darkened cells was not determined respectively is unnecessary	Rev.-No.: **3**	Creation date of this sheet: **2021-03-24**