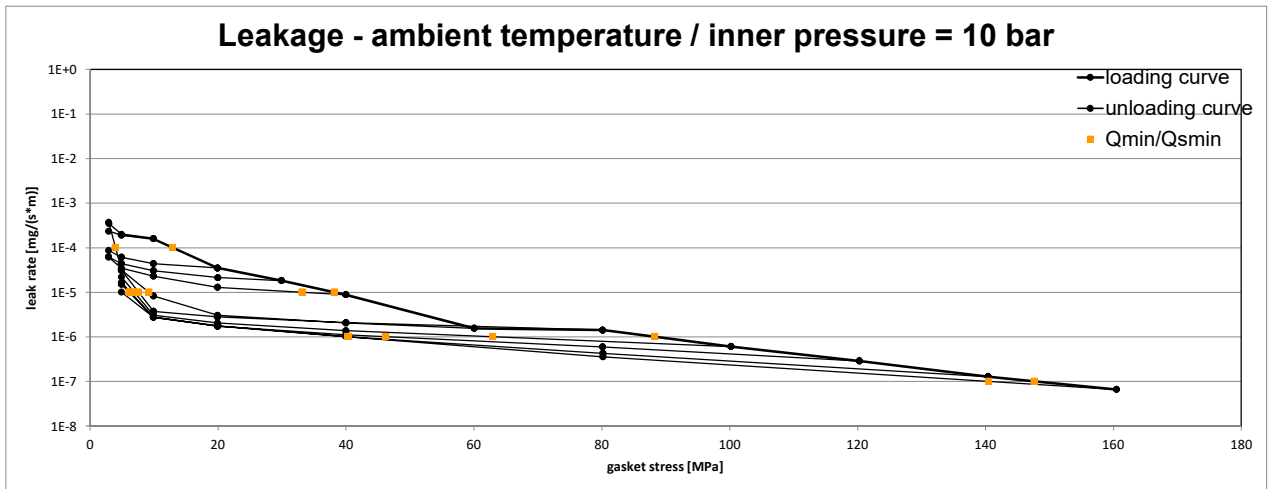
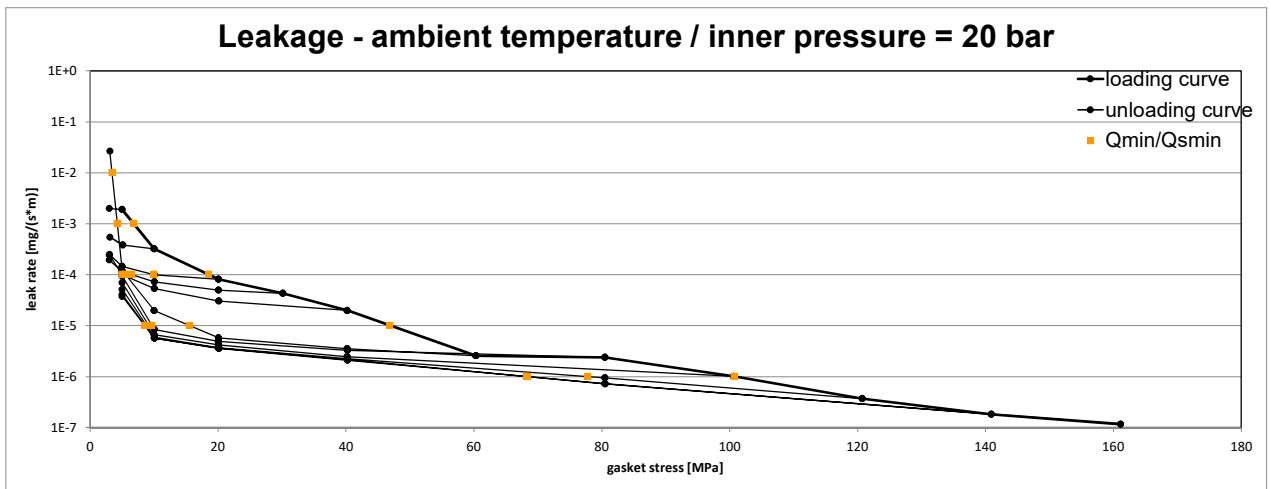


Company Address	Garlock GmbH, Falkenweg 1, 41468 Neuss, Germany	According to <b>EN 13555</b> <b>2021-04</b>
Gasket Type	GYLON EPIX® Style 3510 EPX	
Sealing element dimensions [mm]	92 x 49 x 2.4	

L [mg/(s*m)]	Q <sub>min/L</sub> [MPa]	Minimum stress to seal Q <sub>min/L</sub> (at assembly), Q <sub>Smin/L</sub> (after off-loading) for p = 10 bar									
		Q <sub>Smin/L</sub> [MPa]									
		Q <sub>A</sub> = 10 MPa	Q <sub>A</sub> = 20 MPa	Q <sub>A</sub> = 30 MPa	Q <sub>A</sub> = 40 MPa	Q <sub>A</sub> = 60 MPa	Q <sub>A</sub> = 80 MPa	Q <sub>A</sub> = 100 MPa	Q <sub>A</sub> = 120 MPa	Q <sub>A</sub> = 140 MPa	Q <sub>A</sub> = 160 MPa
10 <sup>0</sup>	5	3	3	3	3	3	5	5	5	5	5
10 <sup>-1</sup>	5	3	3	3	3	3	5	5	5	5	5
10 <sup>-2</sup>	5	3	3	3	3	3	5	5	5	5	5
10 <sup>-3</sup>	5	3	3	3	3	3	5	5	5	5	5
10 <sup>-4</sup>	13		3	3	3	4	5	5	5	5	5
10 <sup>-5</sup>	38				33	9	8	7	6	6	5
10 <sup>-6</sup>	88							63	46	40	40
10 <sup>-7</sup>	148										141
10 <sup>-8</sup>											



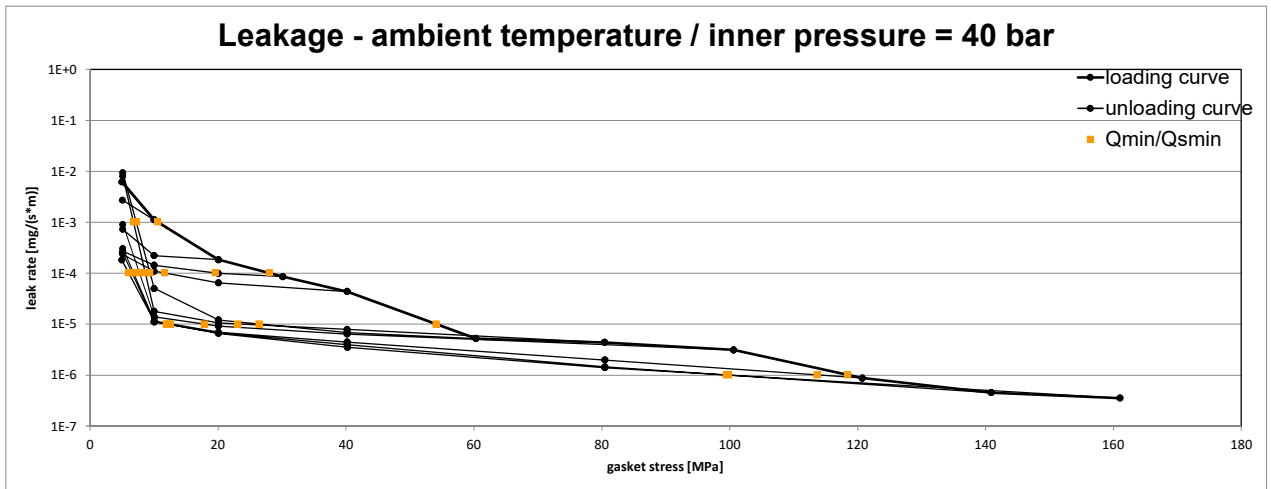
L [mg/(s*m)]	Q <sub>min/L</sub> [MPa]	Minimum stress to seal Q <sub>min/L</sub> (at assembly), Q <sub>Smin/L</sub> (after off-loading) for p = 20 bar									
		Q <sub>Smin/L</sub> [MPa]									
		Q <sub>A</sub> = 10 MPa	Q <sub>A</sub> = 20 MPa	Q <sub>A</sub> = 30 MPa	Q <sub>A</sub> = 40 MPa	Q <sub>A</sub> = 60 MPa	Q <sub>A</sub> = 80 MPa	Q <sub>A</sub> = 100 MPa	Q <sub>A</sub> = 120 MPa	Q <sub>A</sub> = 140 MPa	Q <sub>A</sub> = 160 MPa
10 <sup>0</sup>	5	3	3	3	3	3	5	5	5	5	5
10 <sup>-1</sup>	5	3	3	3	3	3	5	5	5	5	5
10 <sup>-2</sup>	5	3	3	3	3	3	5	5	5	5	5
10 <sup>-3</sup>	7	3	3	3	3	4	5	5	5	5	5
10 <sup>-4</sup>	19		10	7	5	6	5	5	5	5	5
10 <sup>-5</sup>	47					16	10	9	9	9	9
10 <sup>-6</sup>	101								78	68	68
10 <sup>-7</sup>											
10 <sup>-8</sup>											



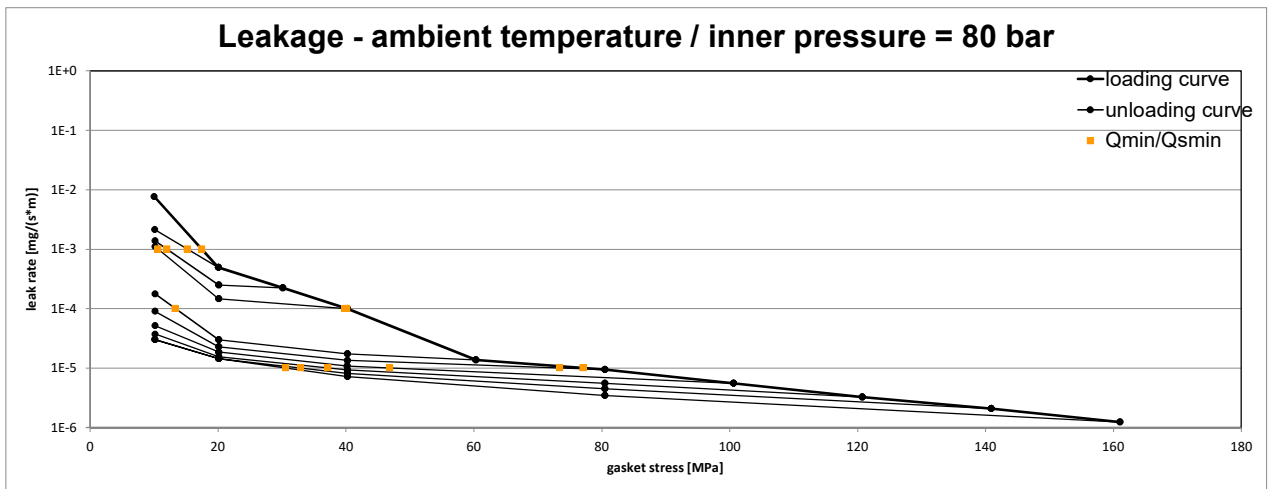
Note: the content of darkened cells was not determined respectively is unnecessary      Rev - No: 1      Creation date of this sheet: 2021-03-24

Company Address	Garlock GmbH, Falkenweg 1, 41468 Neuss, Germany	According to <b>EN 13555</b> <b>2021-04</b>
Gasket Type	GYLON EPIX® Style 3510 EPX	
Sealing element dimensions [mm]	92 x 49 x 2.4	

L [mg/(s*m)]	Q <sub>min/L</sub> [MPa]	Minimum stress to seal Q <sub>min/L</sub> (at assembly), Q <sub>Smin/L</sub> (after off-loading) for p = 40 bar									
		Q <sub>Smin/L</sub> [MPa]									
		Q <sub>A</sub> = 10 MPa	Q <sub>A</sub> = 20 MPa	Q <sub>A</sub> = 30 MPa	Q <sub>A</sub> = 40 MPa	Q <sub>A</sub> = 60 MPa	Q <sub>A</sub> = 80 MPa	Q <sub>A</sub> = 100 MPa	Q <sub>A</sub> = 120 MPa	Q <sub>A</sub> = 140 MPa	Q <sub>A</sub> = 160 MPa
10 <sup>0</sup>	5	5	5	5	5	5	5	5	5	5	5
10 <sup>-1</sup>	5	5	5	5	5	5	5	5	5	5	5
10 <sup>-2</sup>	5	5	5	5	5	5	5	5	5	5	5
10 <sup>-3</sup>	11		5	5	5	7	7	5	5	5	5
10 <sup>-4</sup>	28			20	12	9	9	8	7	7	6
10 <sup>-5</sup>	54					26	23	18	13	12	12
10 <sup>-6</sup>	118								114	99	100
10 <sup>-7</sup>											
10 <sup>-8</sup>											



L [mg/(s*m)]	Q <sub>min/L</sub> [MPa]	Minimum stress to seal Q <sub>min/L</sub> (at assembly), Q <sub>Smin/L</sub> (after off-loading) for p = 80 bar								
		Q <sub>Smin/L</sub> [MPa]								
		Q <sub>A</sub> = 20 MPa	Q <sub>A</sub> = 30 MPa	Q <sub>A</sub> = 40 MPa	Q <sub>A</sub> = 60 MPa	Q <sub>A</sub> = 80 MPa	Q <sub>A</sub> = 100 MPa	Q <sub>A</sub> = 120 MPa	Q <sub>A</sub> = 140 MPa	Q <sub>A</sub> = 160 MPa
10 <sup>0</sup>	10	10	10	10	10	10	10	10	10	
10 <sup>-1</sup>	10	10	10	10	10	10	10	10	10	10
10 <sup>-2</sup>	10	10	10	10	10	10	10	10	10	10
10 <sup>-3</sup>	17	15	12	11	10	10	10	10	10	10
10 <sup>-4</sup>	40			40	13	10	10	10	10	10
10 <sup>-5</sup>	77					73	47	37	33	31
10 <sup>-6</sup>										
10 <sup>-7</sup>										
10 <sup>-8</sup>										



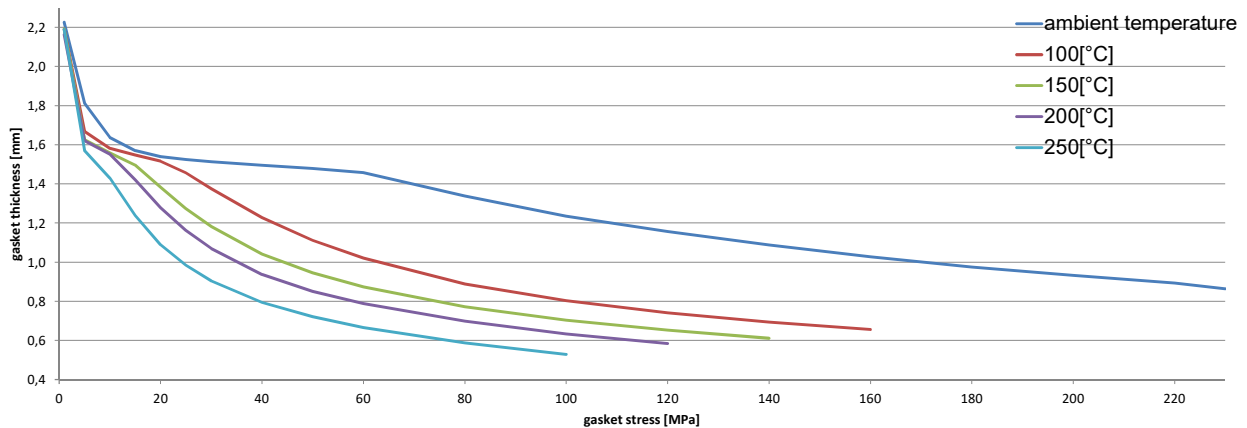
Note: the content of darkened cells was not determined respectively is unnecessary      Rev - No: 1      Creation date of this sheet: 2021-03-24

Company Address	Garlock GmbH, Falkenweg 1, 41468 Neuss, Germany	According to <b>EN 13555</b> <b>2021-04</b>
Gasket Type	GYLON EPIX® Style 3510 EPX	
Sealing element dimensions [mm]	92 x 49 x 2.4	

Relaxation ratio $P_{QR}$ for stiffness $C = 500$ kN/mm										
Gasket stress	ambient temperature		temperature 1 [100 °C]		temperature 2 [150 °C]		temperature 3 [200 °C]		temperature 4 [250 °C]	
	$P_{QR}$	$\Delta e_{GC}$ [mm]	$P_{QR}$	$\Delta e_{GC}$ [mm]	$P_{QR}$	$\Delta e_{GC}$ [mm]	$P_{QR}$	$\Delta e_{GC}$ [mm]	$P_{QR}$	$\Delta e_{GC}$ [mm]
Stress level 1 [10 MPa]	0.82	0.016	0.56	0.037	0.50	0.042	0.48	0.044	0.39	0.051
Stress level 2 [20 MPa]	0.90	0.017	0.72	0.047	0.63	0.062	0.52	0.080	0.40	0.101
Stress level 3 [30 MPa]							0.50	0.126	0.44	0.142
Stress level 4 [40 MPa]					0.51	0.166				
Stress level 5 [50 MPa]			0.63	0.154						
Stress level 6 [80 MPa]	0.89	0.073								
<b><math>P_{QR}</math> and <math>\Delta e_{GC}</math> at maximal applicable gasket stress <math>Q_{Smax}</math></b>										
$P_{QR}$ at $Q_{Smax}$	0.96	0.084	0.74	0.345	0.70	0.348	0.61	0.394	0.53	0.392
$Q_{Smax}$	230 MPa		160 MPa		140 MPa		120 MPa		100 MPa	

Sekant unloading modulus of the gasket $E_G$ [MPa] and gasket thickness $e_G$ [mm]										
Gasket stress [MPa]	ambient temperature		temperature 1 [100 °C]		temperature 2 [150 °C]		temperature 3 [200 °C]		temperature 4 [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		2.300		2.345		2.265		2.295		2.260
1		2.227		2.191		2.193		2.163		2.190
5	167	1.812	283	1.668	255	1.626	384	1.622	399	1.570
10	530	1.637	638	1.581	803	1.559	916	1.552	739	1.430
15	851	1.570	1244	1.547	1291	1.496	1141	1.421	981	1.238
20	1362	1.539	1786	1.516	1571	1.384	1299	1.279	941	1.089
25	1934	1.524	2302	1.458	1757	1.274	1531	1.163	1092	0.984
30	2445	1.513	2650	1.376	1976	1.183	1552	1.070	1122	0.905
40	3144	1.496	3273	1.228	2339	1.042	1575	0.938	1261	0.795
50	3706	1.479	3692	1.113	2513	0.945	1755	0.850	1445	0.721
60	4800	1.458	4272	1.020	2863	0.873	2062	0.788	1639	0.665
80	10955	1.338	4666	0.889	3071	0.771	2463	0.697	1951	0.587
100	10818	1.235	4885	0.804	3396	0.704	2321	0.633	2014	0.529
120	10171	1.156	4715	0.741	3423	0.653	2597	0.584		
140	10262	1.087	4779	0.694	3201	0.611				
160	9083	1.027	4563	0.656						
180	7918	0.975								
200	7260	0.932								
220	6640	0.893								
230	6088	0.865								

### Gasket thickness $e_G$



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

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2021-03-24

Fields marked in dark yellow: After testing the gasket was intruding into the bore.

