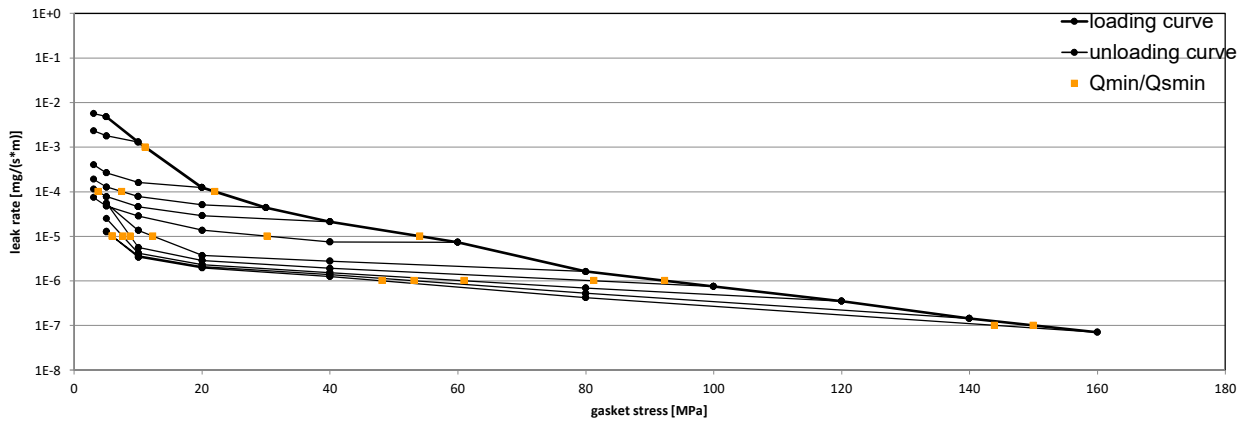


Company Address	Garlock GmbH, Falkenweg 1, 41468 Neuss, Germany	According to prEN 13555 2019-12
Gasket Type	GYLON EPIX® Style 3501-E EPX	
Sealing element dimensions [mm]	92 x 49 x 2.4	

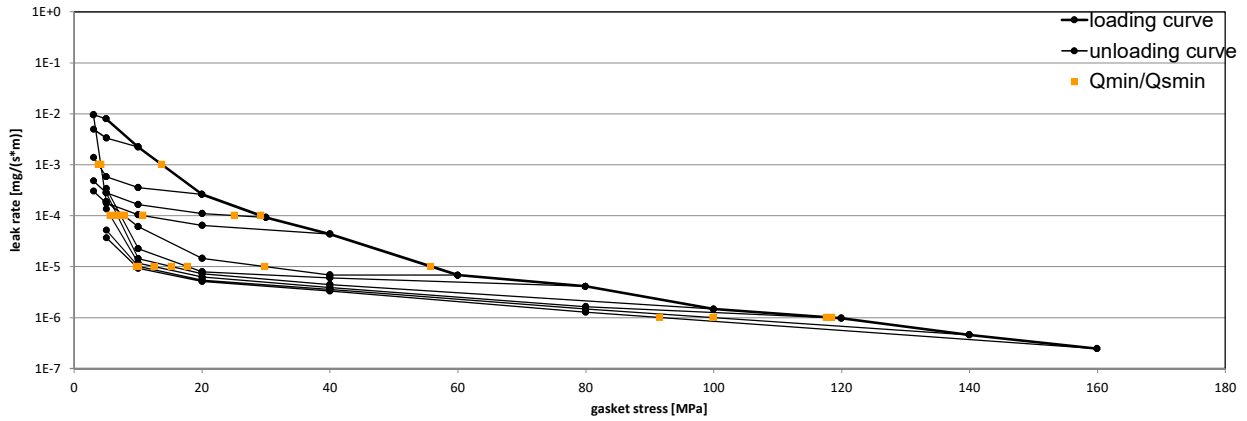
L [mg/(s*m)]	Q _{min/L} [MPa]	Q _{Smin/L} [MPa]									
		Q _A = 10 MPa	Q _A = 20 MPa	Q _A = 30 MPa	Q _A = 40 MPa	Q _A = 60 MPa	Q _A = 80 MPa	Q _A = 100 MPa	Q _A = 120 MPa	Q _A = 140 MPa	Q _A = 160 MPa
10 ⁰	5	3	3	3	3	3	5	5	5	5	5
10 ⁻¹	5	3	3	3	3	3	5	5	5	5	5
10 ⁻²	5	3	3	3	3	3	5	5	5	5	5
10 ⁻³	11		3	3	3	3	5	5	5	5	5
10 ⁻⁴	22			7	4	3	5	5	5	5	5
10 ⁻⁵	54					30	12	9	8	6	6
10 ⁻⁶	92							81	61	53	48
10 ⁻⁷	150										144
10 ⁻⁸											

Leakage - ambient temperature / inner pressure = 10 bar



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
10 ⁰	5	3	3	3	3	3	5	5	5	5	5
10 ⁻¹	5	3	3	3	3	3	5	5	5	5	5
10 ⁻²	5	3	3	3	3	3	5	5	5	5	5
10 ⁻³	14		4	3	3	4	5	5	5	5	5
10 ⁻⁴	29			25	11	8	7	7	6	5	5
10 ⁻⁵	56					30	18	15	13	10	10
10 ⁻⁶	118								118	100	92
10 ⁻⁷											
10 ⁻⁸											

Leakage - ambient temperature / inner pressure = 20 bar

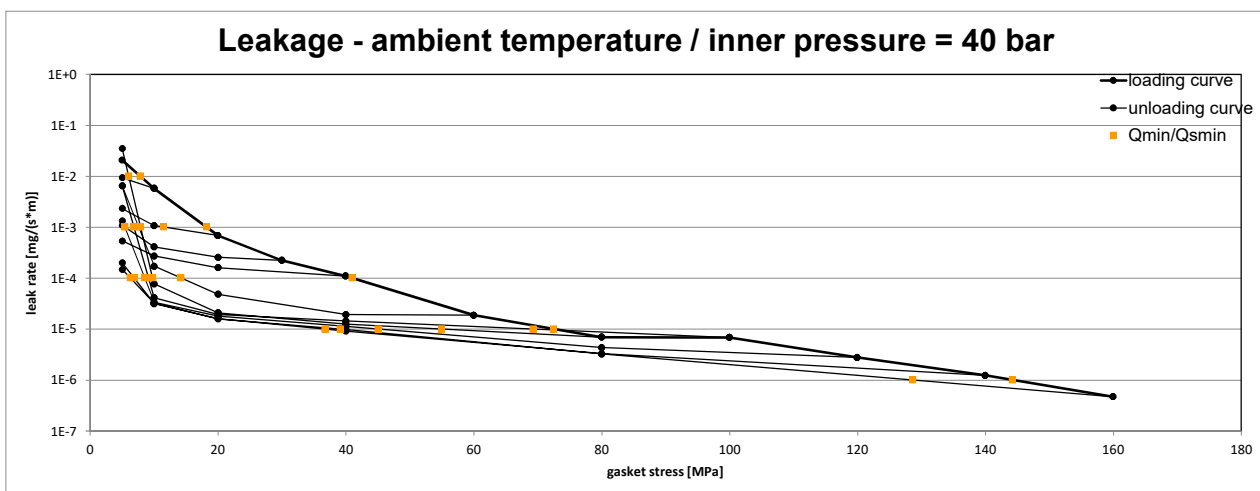


Note: the content of darkened cells was not determined respectively is unnecessary Rev - No: 2 Creation date of this sheet: 2020-11-11

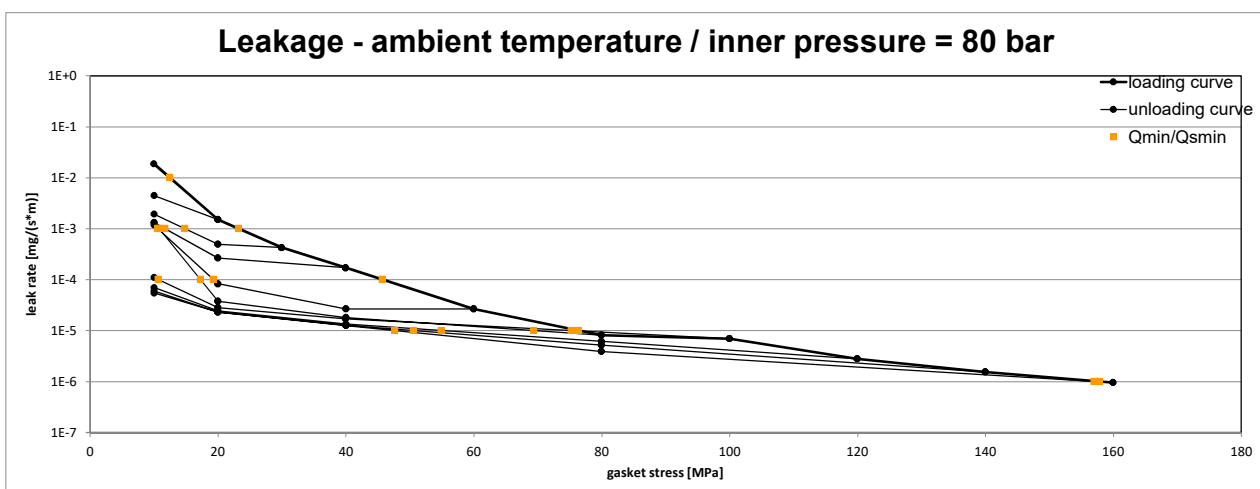


Company Address	Garlock GmbH, Falkenweg 1, 41468 Neuss, Germany	According to prEN 13555 2019-12
Gasket Type	GYLON EPIX® Style 3501-E EPX	
Sealing element dimensions [mm]	92 x 49 x 2.4	

L [mg/(s*m)]	Q _{min/L} [MPa]	Minimum stress to seal Q _{min/L} (at assembly), Q _{Smin/L} (after off-loading) for p = 40 bar									
		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
10 ⁰	5	5	5	5	5	5	5	5	5	5	5
10 ⁻¹	5	5	5	5	5	5	5	5	5	5	5
10 ⁻²	8	5	5	5	5	5	6	5	5	5	5
10 ⁻³	18		12	5	5	8	8	7	5	5	5
10 ⁻⁴	41					14	10	9	9	7	6
10 ⁻⁵	72						55	69	45	37	39
10 ⁻⁶	144										129
10 ⁻⁷											
10 ⁻⁸											



L [mg/(s*m)]	Q _{min/L} [MPa]	Minimum stress to seal Q _{min/L} (at assembly), Q _{Smin/L} (after off-loading) for p = 80 bar								
		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 = 160 MPa
10 ⁰	10	10	10	10	10	10	10	10	10	10
10 ⁻¹	10	10	10	10	10	10	10	10	10	10
10 ⁻²	12	10	10	10	10	10	10	10	10	10
10 ⁻³	23		15	12	11	11	10	10	10	10
10 ⁻⁴	46				19	17	11	10	10	10
10 ⁻⁵	76					69	75	55	51	48
10 ⁻⁶	158									157
10 ⁻⁷										
10 ⁻⁸										



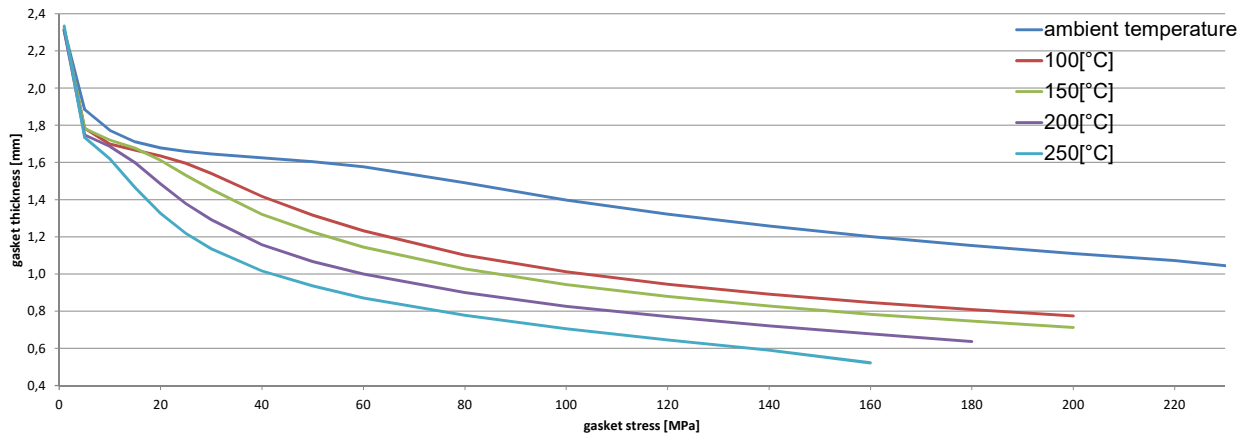
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Company Address	Garlock GmbH, Falkenweg 1, 41468 Neuss, Germany	According to prEN 13555 2019-12
Gasket Type	GYLON EPIX® Style 3501-E EPX	
Sealing element dimensions [mm]	92 x 49 x 2.4	

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}	Δe_{Gc} [mm]	P_{QR}	Δe_{Gc} [mm]	P_{QR}	Δe_{Gc} [mm]	P_{QR}	Δe_{Gc} [mm]	P_{QR}	Δe_{Gc} [mm]
Stress level 1 [10 MPa]	0.83	0.014	0.57	0.036	0.52	0.041	0.48	0.044	0.45	0.047
Stress level 2 [20 MPa]	0.93	0.012	0.74	0.044	0.56	0.075	0.46	0.091	0.36	0.107
Stress level 3 [30 MPa]									0.32	0.171
Stress level 4 [40 MPa]					0.47	0.178	0.40	0.201		
Stress level 5 [50 MPa]			0.59	0.172						
Stress level 6 [80 MPa]	0.86	0.097								
P_{QR} and Δe_{Gc} at maximal applicable gasket stress Q_{Smax}										
P_{QR} at Q_{Smax}	0.94	0.116	0.81	0.327	0.77	0.394	0.72	0.431	0.62	0.517
Q_{Smax}	230 MPa		200 MPa		200 MPa		180 MPa		160 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		2.378		2.376		2.370		2.360		2.392
1		2.315		2.316		2.320		2.311		2.335
5	169	1.884	275	1.785	276	1.784	298	1.750	328	1.735
10	705	1.772	875	1.699	1122	1.722	1296	1.686	1005	1.619
15	1286	1.711	4049	1.666	3125	1.677	3539	1.600	2752	1.466
20	2025	1.678	6920	1.636	22568	1.613	21766	1.486	4673	1.328
25	2858	1.659	16800	1.595	19767	1.532	7199	1.379	10401	1.218
30	3326	1.646	23788	1.540	34280	1.455	12787	1.293	18902	1.136
40	3826	1.625	18299	1.418	12488	1.323	14504	1.159	8350	1.018
50	4259	1.604	11380	1.317	9371	1.226	7591	1.068	7810	0.935
60	4815	1.577	8663	1.232	5902	1.145	4514	0.999	4080	0.871
80	8272	1.490	7132	1.101	6435	1.027	4654	0.900	3753	0.777
100	9367	1.398	6285	1.012	4867	0.943	4506	0.826	3800	0.705
120	9485	1.322	5694	0.945	4333	0.879	4281	0.770	4127	0.644
140	8959	1.257	4793	0.890	4461	0.827	3563	0.720	4767	0.590
160	8169	1.201	4785	0.846	4262	0.783	4082	0.677	6478	0.522
180	7649	1.153	4904	0.809	4177	0.746	4248	0.638		
200	7200	1.110	4292	0.774	4398	0.713				
220	6809	1.073								
230	6316	1.045								

Gasket thickness e_G



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

