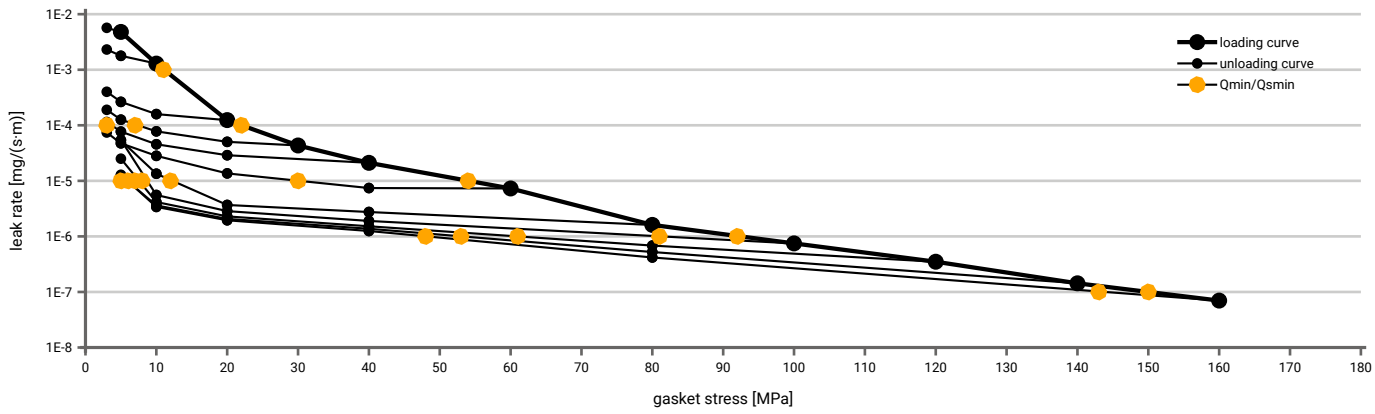
Manufacturer address	Garlock GmbH, Falkenweg 1, 41468 Neuss, DE	According to
Product name	GYLON EPIX® Style 3501-E EPX	prEN 13555
Product dimensions	92 x 49 x 2.4 mm	2019-11

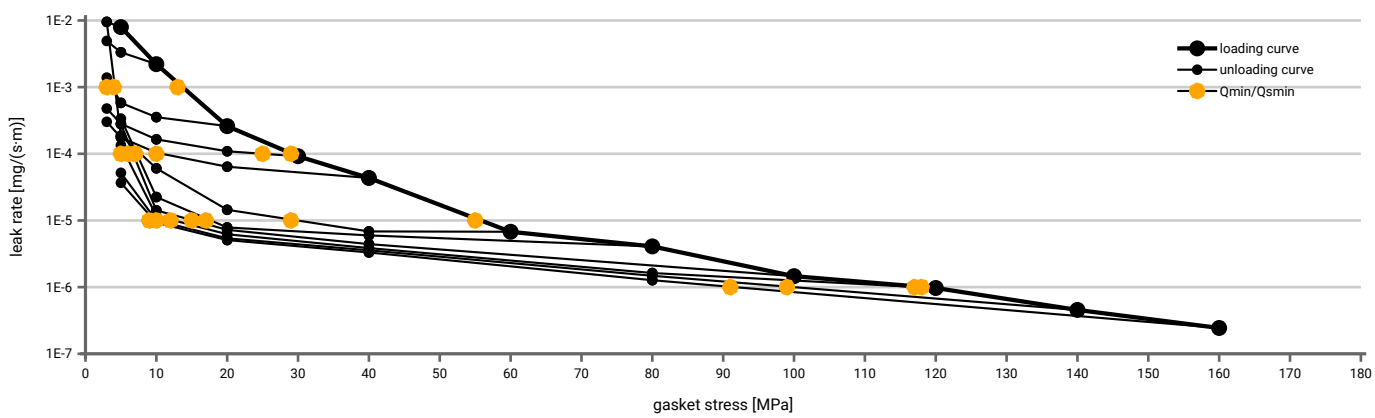
Minimum stress to seal $Q_{min(L)}$ (at assembly), $Q_{smin(L)}$ (after off-loading) for p = 10 bar (T = 23 ± 2 °C)

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-0	5	3	3	3	3	3	3	5	5	5	5	5
1E-1	5	3	3	3	3	3	3	5	5	5	5	5
1E-2	5	3	3	3	3	3	3	5	5	5	5	5
1E-3	11			3	3	3	3	5	5	5	5	5
1E-4	22				7	4	3	5	5	5	5	5
1E-5	54						30	12	9	8	6	6
1E-6	92								81	61	53	48
1E-7	150											144
1E-8												



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



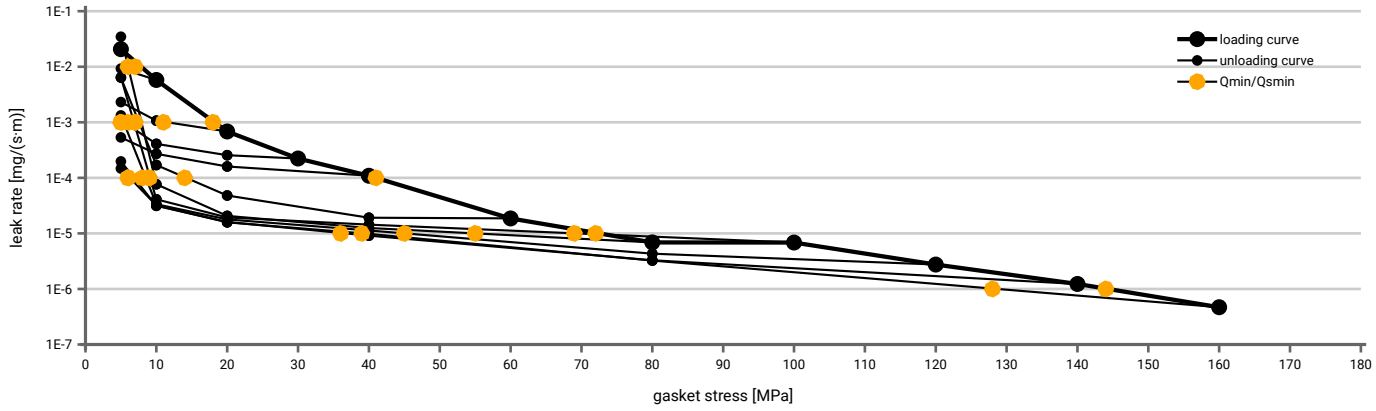
Note: the content of darkened cells was not determined respectively is unnecessary	Rev.-No.: **2**	Creation date of this sheet: **2020-11-11**

Manufacturer address	Garlock GmbH, Falkenweg 1, 41468 Neuss, DE	According to
Product name	GYLON EPIX® Style 3501-E EPX	**prEN 13555**
Product dimensions	92 x 49 x 2.4 mm	**2019-11**

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 = 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-0	5		5	5	5	5	5	5	5	5	5	5
1E-1	5		5	5	5	5	5	5	5	5	5	5
1E-2	8		5	5	5	5	5	6	5	5	5	5
1E-3	18			12	5	5	8	8	7	5	5	5
1E-4	41						14	10	9	9	7	6
1E-5	72							55	69	45	37	39
1E-6	144											129
1E-7												
1E-8												

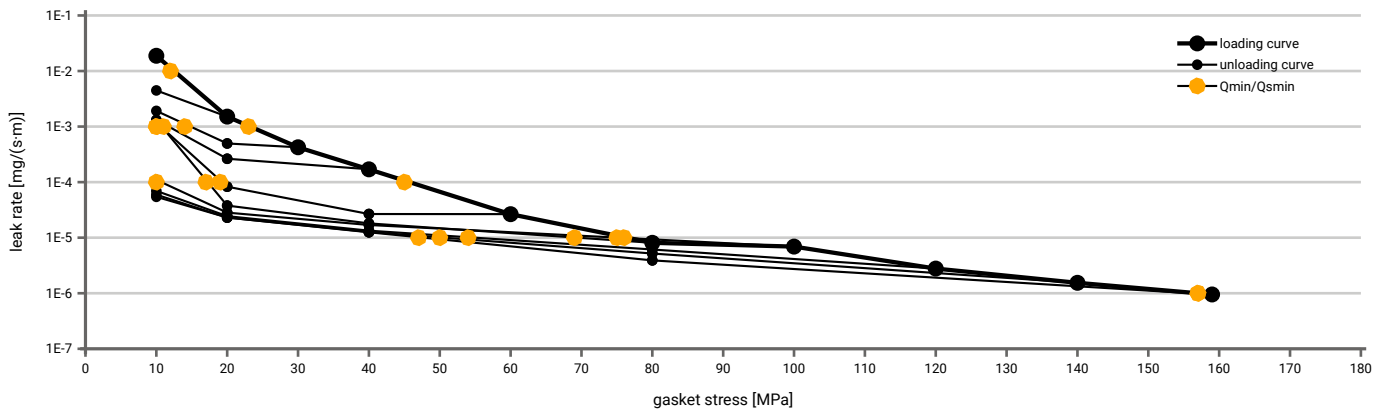
Leakage - 23 ± 2 °C / 40 bar



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 = 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-0	10		10	10	10	10	10	10	10	10	10
1E-1	10		10	10	10	10	10	10	10	10	10
1E-2	12		10	10	10	10	10	10	10	10	10
1E-3	23			15	12	11	11	10	10	10	10
1E-4	46					19	17	11	10	10	10
1E-5	76						69	75	55	51	48
1E-6	158										157
1E-7											
1E-8											

Leakage - 23 ± 2 °C / 80 bar



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

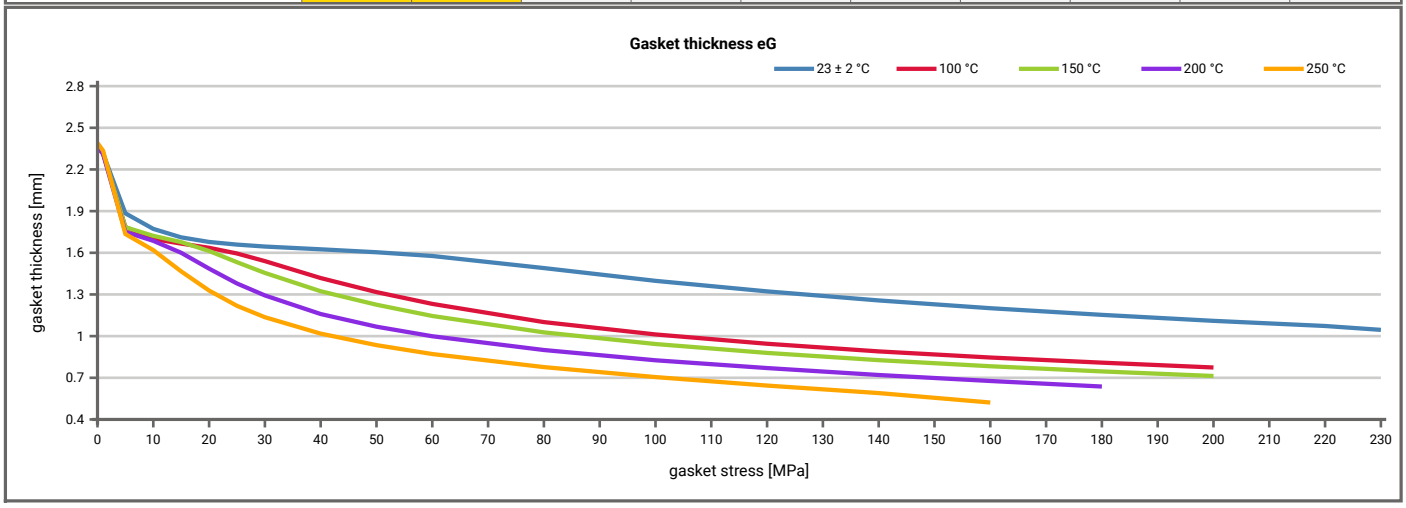
Manufacturer address	Garlock GmbH, Falkenweg 1, 41468 Neuss, DE	According to **prEN 13555 2019-11**
Product name	GYLON EPIX® Style 3501-E EPX	
Product dimensions	92 x 49 x 2.4 mm	

Relaxation ratio P_{QR} for stiffness C = 500 [kN/mm]

Gasket stress	23 ± 2 °C		Temperature 1 [100 °C]		Temperature 2 [150 °C]		Temperature 3 [200 °C]		Temperature 4 [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]	0.83	14	0.57	36	0.52	41	0.48	44	0.45	47
Stress level 2 [20 MPa]	0.93	12	0.74	44	0.56	75	0.46	91	0.36	107
Stress level 3 [30 MPa]									0.32	171
Stress level 4 [40 MPa]					0.47	178	0.40	201		
Stress level 5 [50 MPa]			0.59	172						
Stress level 6 [80 MPa]	0.86	97								
P_{QR} and Δe_{Gc} at maximum gasket stress to be applied (Q_{smax})										
P_{QR} at Q_{smax}	0.94	116	0.81	327	0.77	394	0.72	431	0.62	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]	23 ± 2 °C		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	0	2.378	0	2.376	0	2.369	0	2.359	0	2.391
1	0	2.314	0	2.316	0	2.319	0	2.311	0	2.335
5	170	1.884	275	1.785	277	1.784	298	1.750	328	1.735
10	705	1.772	876	1.699	1122	1.722	1296	1.686	1005	1.619
15	1286	1.711	4049	1.666	3125	1.677	3540	1.600	2752	1.466
20	2025	1.678	6921	1.636	22569	1.613	21766	1.486	4673	1.328
25	2858	1.659	16801	1.595	19767	1.532	7200	1.379	10401	1.218
30	3326	1.645	23788	1.540	34281	1.455	12788	1.293	18902	1.136
40	3826	1.625	18300	1.418	12489	1.323	14505	1.159	8350	1.018
50	4260	1.604	11380	1.317	9371	1.226	7591	1.068	7810	0.935
60	4815	1.577	8663	1.232	5903	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	3564	0.720	4767	0.590
160	8170	1.201	4785	0.846	4262	0.783	4082	0.677	6478	0.522
180	7650	1.153	4904	0.809	4177	0.746	4248	0.637		
200	7200	1.110	4293	0.774	4398	0.713				
220	6809	1.073								
230	6316	1.045								



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.: **2**	Creation date of this sheet: **2020-11-11**