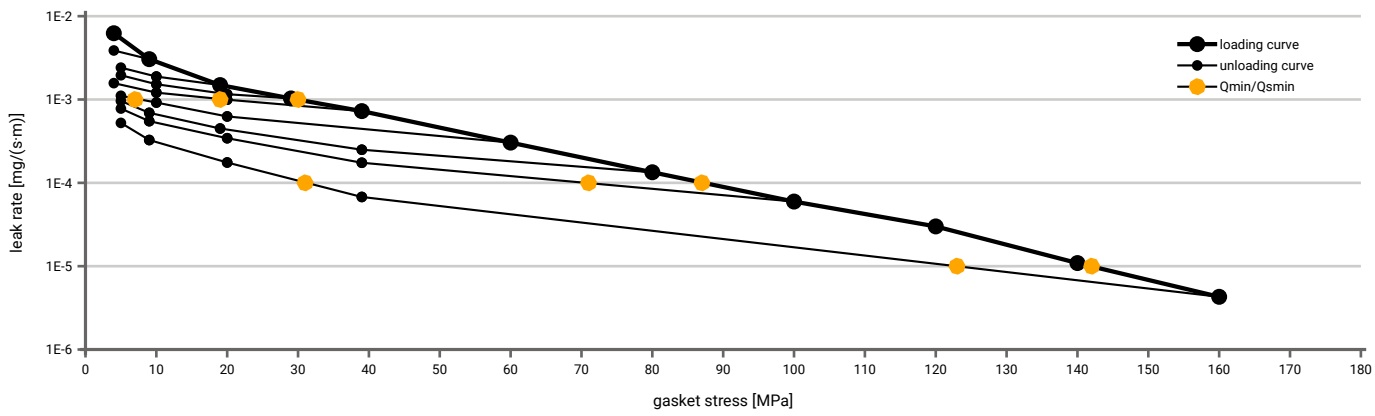
Manufacturer address	SGL Carbon GmbH, Werner-von-Siemens-Straße 16, 86405 Meitingen, DE	According to
Product name	Sigraflex Economy V05510C4	**DIN EN 13555**
Product dimensions	92 x 49 x 0.55 mm (DIN EN 1514-1 1997-8)	**2005-2**

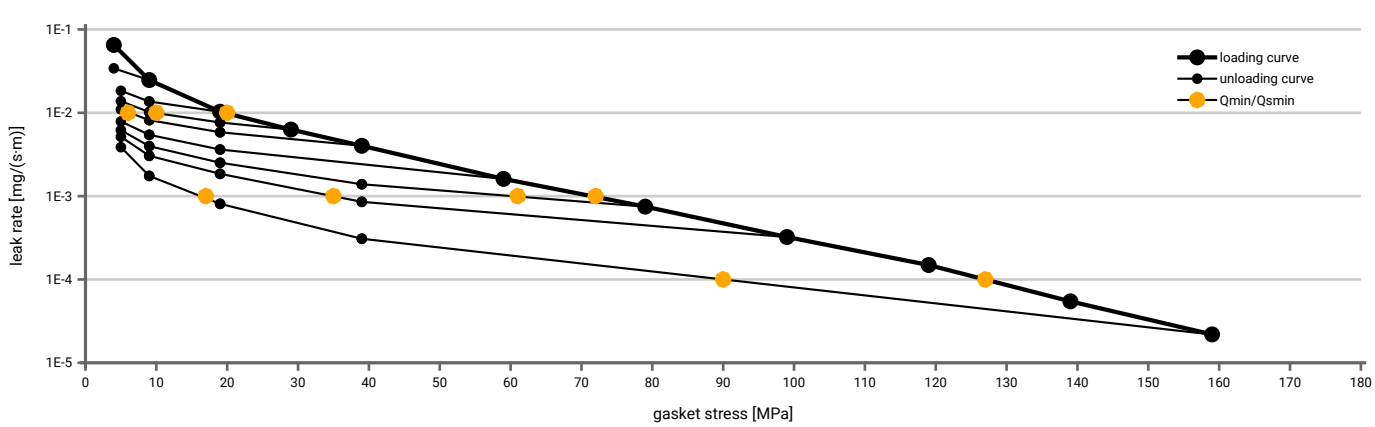
Minimum stress to seal $Q_{min(L)}$ (at assembly), $Q_{smin(L)}$ (after off-loading) for p = 10 bar (T = 23 ± 2 °C)

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		5	5	5	5	5	5	5			5
1E-1	5		5	5	5	5	5	5	5			5
1E-2	5		5	5	5	5	5	5	5			5
1E-3	31					20	8	5	5			5
1E-4	87								71			32
1E-5	142											123
1E-6												
1E-7												
1E-8												



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
1E-1	5		5	5	5	5	5	5	5			5
1E-2	20				11	7	5	5	5			5
1E-3	72							61	36			17
1E-4	128											91
1E-5												
1E-6												
1E-7												
1E-8												

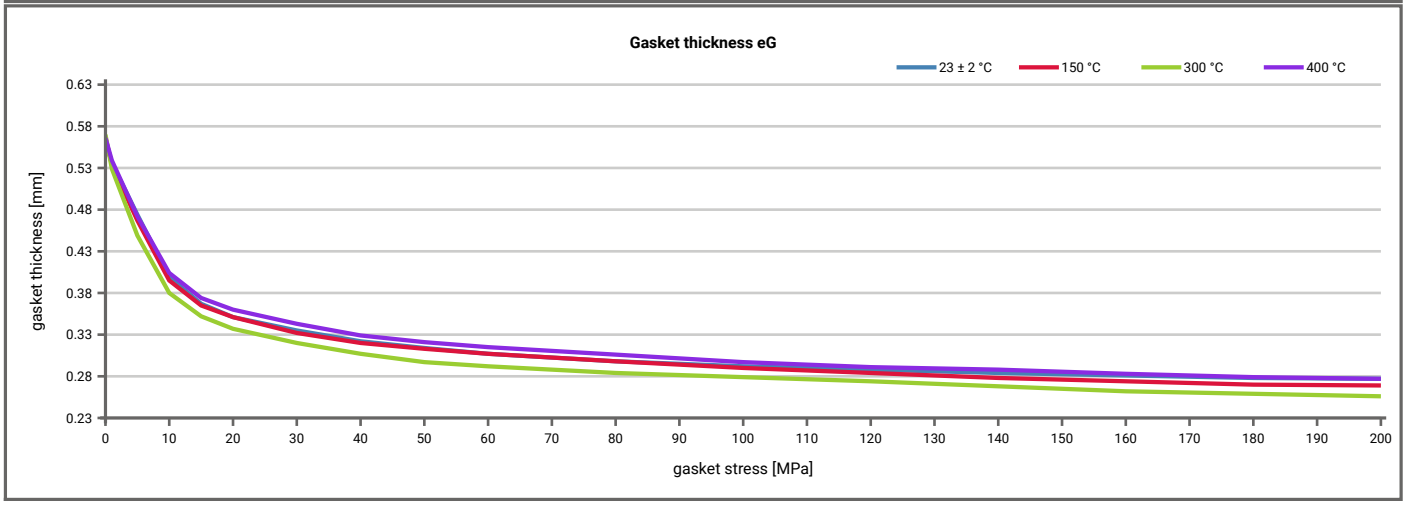


Note: the content of darkened cells was not determined respectively is unnecessary	Rev.-No.: **1**	Creation date of this sheet: **2014-02-17**

Manufacturer address	SGL Carbon GmbH, Werner-von-Siemens-Straße 16, 86405 Meitingen, DE	According to **DIN EN 13555 2005-2**
Product name	Sigraflex Economy V05510C4	
Product dimensions	92 x 49 x 0.55 mm (DIN EN 1514-1 1997-8)	

Relaxation ratio P_{QR} for stiffness C = 500 [kN/mm]										
Gasket stress	**23 ± 2 °C**		**Temperature 1 [150 °C]**		**Temperature 2 [300 °C]**		**Temperature 3 [400 °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 [30 MPa]	1.00	1	0.97	8	0.96	10	0.96	10		
Stress level 2 [50 MPa]	1.00	0	0.98	10	0.97	13	0.98	10		
P_{QR} and Δe_{Gc} at maximum gasket stress to be applied Q_{smax}										
P_{QR} at Q_{smax}	1.00	0	0.99	17	0.99	17	0.99	17		
Q_{smax}	200 MPa		200 MPa		200 MPa		200 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 [300 °C]**		**Temperature 3 [400 °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	0.564	0	0.566	0	0.570	0	0.566		
1	0	0.536	0	0.534	0	0.529	0	0.539		
5	88	0.474	191	0.467	152	0.449	227	0.472		
10	374	0.399	460	0.395	453	0.380	389	0.404		
15	259	0.367	402	0.365	395	0.352	404	0.374		
20	507	0.351	801	0.351	643	0.337	614	0.360		
30	1206	0.335	1056	0.332	1396	0.320	2755	0.343		
40	1020	0.322	1667	0.320	1334	0.307	2057	0.329		
50	1611	0.314	3964	0.313	1516	0.297	2176	0.321		
60	1983	0.307	3004	0.307	3176	0.292	2603	0.315		
80	3266	0.298	4887	0.298	3112	0.284	3704	0.306		
100	4348	0.292	7228	0.290	6001	0.279	3489	0.297		
120	5485	0.288	8470	0.284	6915	0.274	5044	0.291		
140	7103	0.284	8988	0.278	9188	0.268	7352	0.288		
160	8050	0.281	10567	0.274	8737	0.262	5762	0.283		
180	7814	0.278	10488	0.270	7902	0.259	5266	0.279		
200	7801	0.277	10119	0.269	6398	0.256	5664	0.277		



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