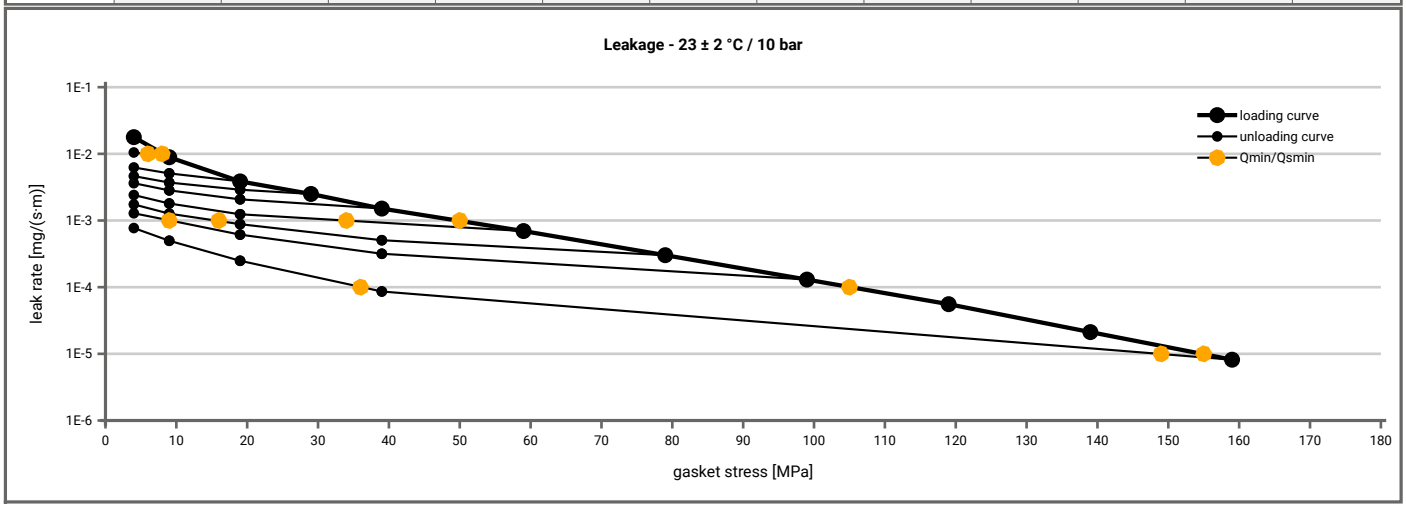
Manufacturer address	SGL Carbon GmbH, Werner-von-Siemens-Straße 16, 86405 Meitingen, DE	According to **DIN EN 13555 2014-7**
Product name	Sigraflex Economy V10010C4	
Product dimensions	92 x 49 x 1 mm (DIN EN 1514-1 1997-8)	

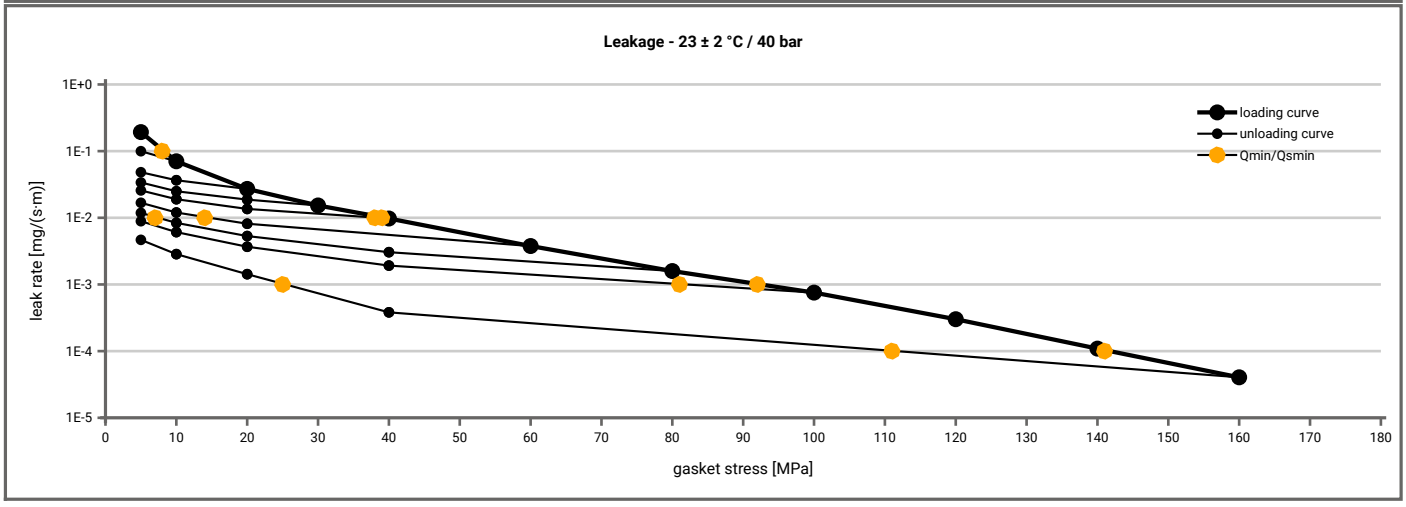
Minimum stress to seal $Q_{min(L)}$ (at assembly), $Q_{smin(L)}$ (after off-loading) for p = 10 bar (T = 23 ± 2 °C)

L [mg/(s·m)]	$Q_{min(L)}$ [MPa]	$Q_{smin(L)}$ [MPa]										
		Q_A = 4.7 [MPa]	Q_A = 9.7 [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	9		6	5	5	5	5	5	5			5
1E-3	50						35	16	10			5
1E-4	106											37
1E-5	155											149
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	8		5	5	5	5	5	5	5			5
1E-2	39					39	15	7	5			5
1E-3	92								82			25
1E-4	142											112
1E-5												
1E-6												
1E-7												
1E-8												

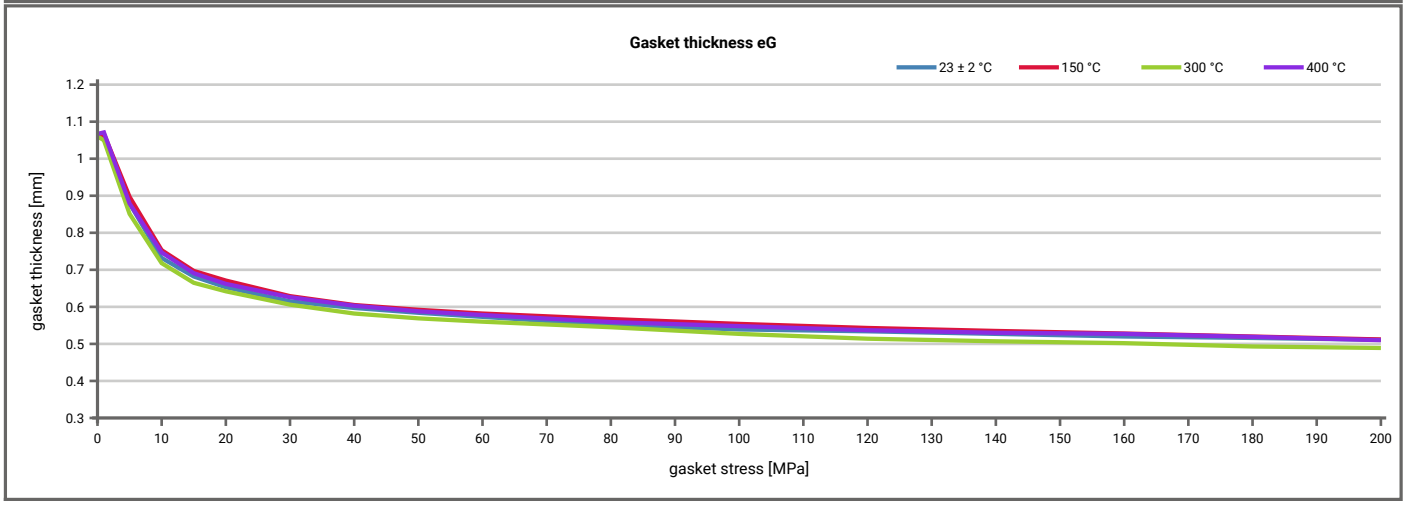


Note: the content of darkened cells was not determined respectively is unnecessary	Rev.-No.: **1**	Creation date of this sheet: **2015-05-12**

Manufacturer address	SGL Carbon GmbH, Werner-von-Siemens-Straße 16, 86405 Meitingen, DE	According to **DIN EN 13555 2014-7**
Product name	Sigraflex Economy V10010C4	
Product dimensions	92 x 49 x 1 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]	0.99	3	0.96	11	0.95	13	0.94	16		
Stress level 2 [50 MPa]	0.99	4	0.97	13	0.96	19	0.95	23		
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	25	0.98	34		
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	1.066	0	1.055	0	1.060	0	1.067		
1	0	1.057	0	1.067	0	1.050	0	1.071		
5	77	0.879	87	0.897	97	0.851	119	0.879		
10	155	0.732	213	0.753	230	0.718	767	0.747		
15	353	0.682	323	0.697	311	0.665	406	0.691		
20	419	0.653	603	0.671	638	0.642	541	0.662		
30	656	0.615	839	0.629	802	0.606	908	0.626		
40	1383	0.597	1186	0.605	1148	0.582	1151	0.603		
50	1766	0.584	2098	0.592	2192	0.569	1411	0.588		
60	1973	0.573	2664	0.582	3210	0.560	1809	0.578		
80	1686	0.551	2699	0.567	3805	0.545	3079	0.559		
100	3749	0.539	3340	0.554	2227	0.527	4849	0.548		
120	8649	0.534	4011	0.543	2250	0.514	3986	0.537		
140	10485	0.527	5392	0.535	4387	0.507	6064	0.530		
160	10446	0.520	7351	0.528	4913	0.502	16408	0.527		
180	12657	0.516	6583	0.520	4698	0.493	13225	0.519		
200	19278	0.511	7242	0.512	5597	0.489	6460	0.510		



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