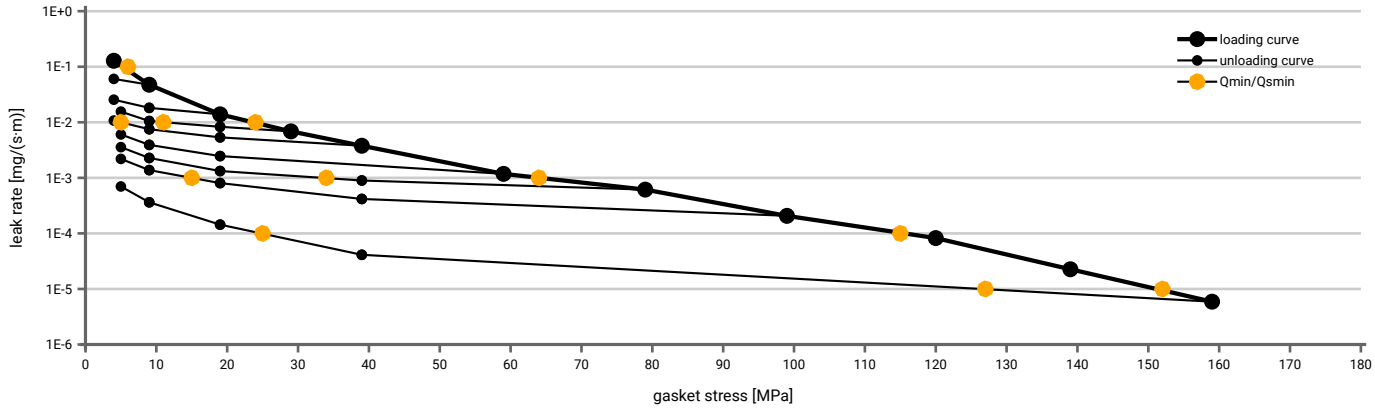
Manufacturer address	SGL Carbon GmbH, Werner-von-Siemens-Straße 16, 86405 Meitingen, DE	According to
Product name	Sigraflex Universal V30010C2I	**DIN EN 13555**
Product dimensions	92 x 49 x 3 mm (DIN EN 1514-1 1997-8)	**2005-2**

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 = 9.8 [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	6		5	5	5	5	5	5	5			5
1E-2	24				12	6	5	5	5			5
1E-3	65							34	16			5
1E-4	116											26
1E-5	152											127
1E-6												
1E-7												
1E-8												

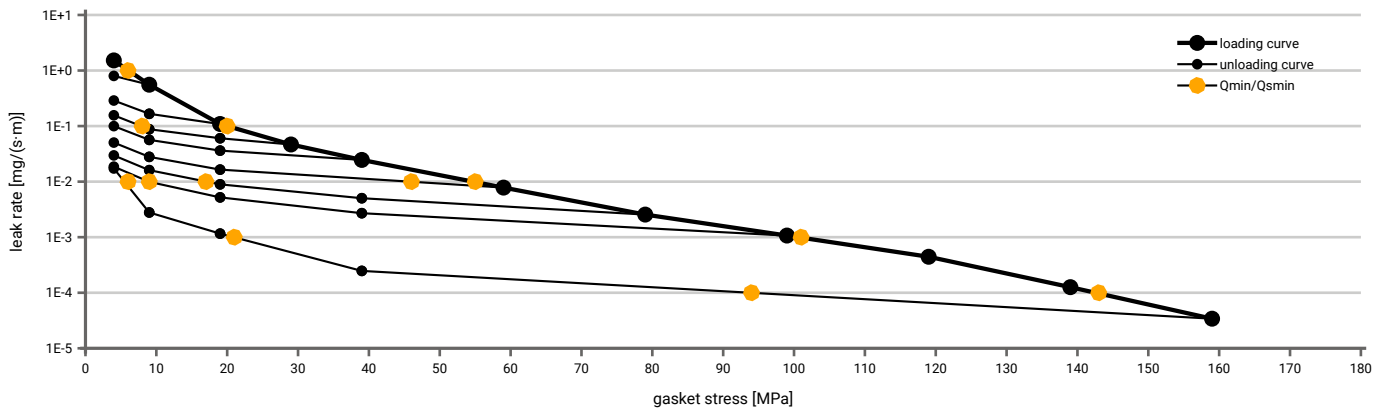
Leakage - 23 ± 2 °C / 10 bar



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 = 9.8 [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+1	5		5	5	5	5	5	5	5			5
1E-0	7		5	5	5	5	5	5	5			5
1E-1	21				9	5	5	5	5			5
1E-2	55						47	18	10			6
1E-3	101											22
1E-4	143											95
1E-5												
1E-6												
1E-7												
1E-8												

Leakage - 23 ± 2 °C / 40 bar

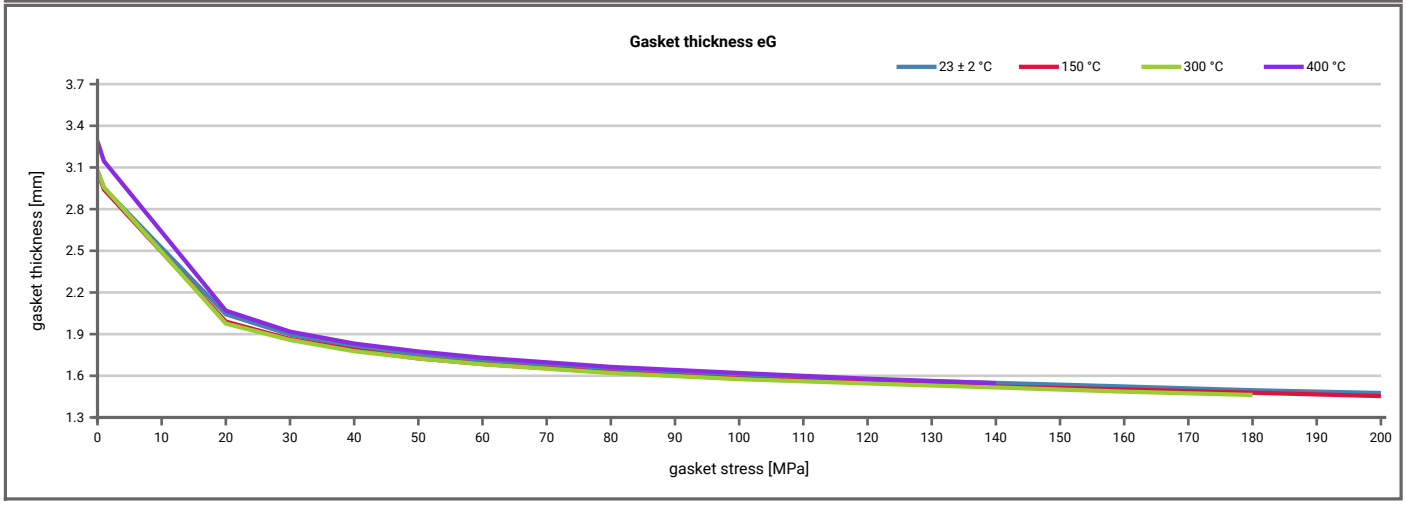


Note: the content of darkened cells was not determined respectively is unnecessary	Rev.-No.: **1**	Creation date of this sheet: **2014-02-17**

Manufacturer address	SGL Carbon GmbH, Werner-von-Siemens-Straße 16, 86405 Meitingen, DE	According to **DIN EN 13555 2005-2**
Product name	Sigraflex Universal V30010C2I	
Product dimensions	92 x 49 x 3 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	4	0.90	25	0.85	39	0.88	31		
Stress level 2 [50 MPa]	0.99	4	0.94	27	0.91	40	0.92	34		
P_{QR} and Δe_{Gc} at maximum gasket stress to be applied Q_{smax}										
P_{QR} at Q_{smax}	1.00	0	0.98	34	0.97	45	0.99	18		
Q_{smax}	200 MPa		200 MPa		180 MPa		140 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	3.076	0	3.074	0	3.076	0	3.288		
1	0	2.952	0	2.942	0	2.958	0	3.146		
20	472	2.043	579	1.990	725	1.976	510	2.069		
30	841	1.897	812	1.865	808	1.858	797	1.918		
40	1091	1.810	1158	1.786	1079	1.777	1097	1.832		
50	1210	1.747	1331	1.725	1611	1.725	1372	1.775		
60	1868	1.705	1897	1.685	1853	1.683	1666	1.730		
80	2739	1.645	2449	1.624	2474	1.620	2404	1.664		
100	3121	1.599	3312	1.580	3129	1.576	3558	1.620		
120	5335	1.572	4955	1.552	4368	1.545	3763	1.579		
140	7150	1.549	4888	1.522	5366	1.516	4530	1.547		
160	5941	1.523	6558	1.502	5263	1.486				
180	5597	1.496	8242	1.478	9662	1.462				
200	7364	1.476	7849	1.454						



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