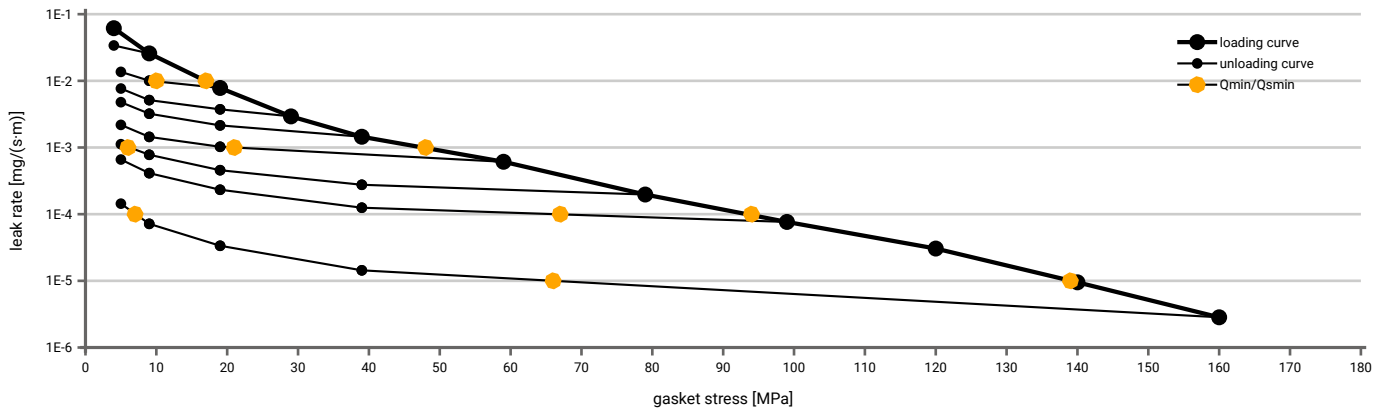
Manufacturer address	SGL Carbon GmbH, Werner-von-Siemens-Straße 16, 86405 Meitingen, DE	According to
Product name	Sigraflex Universal V20010C2I	**DIN EN 13555**
Product dimensions	92 x 49 x 2 mm (DIN EN 1514-1 1997-8)	**2005-2**

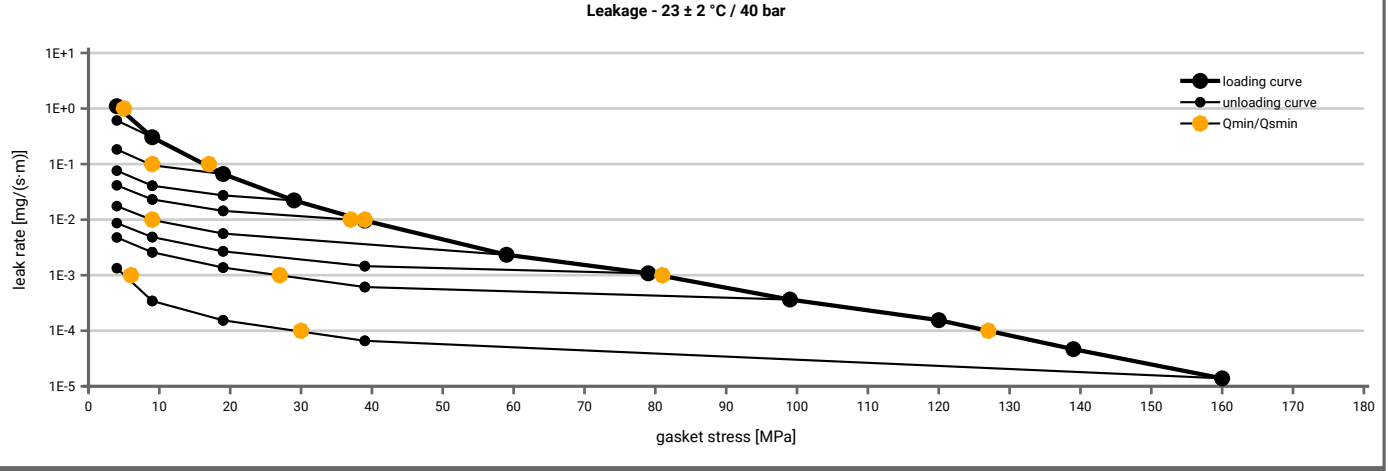
Minimum stress to seal $Q_{min(L)}$ (at assembly), $Q_{smin(L)}$ (after off-loading) for p = 10 bar (T = 23 ± 2 °C)

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	18			10	5	5	5	5	5			5
1E-3	48						22	7	5			5
1E-4	94								67			8
1E-5	139											67
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+1	5		5	5	5	5	5	5	5			5
1E-0	5		5	5	5	5	5	5	5			5
1E-1	17			9	5	5	5	5	5			5
1E-2	39					38	10	5	5			5
1E-3	81								28			6
1E-4	127											30
1E-5												
1E-6												
1E-7												
1E-8												

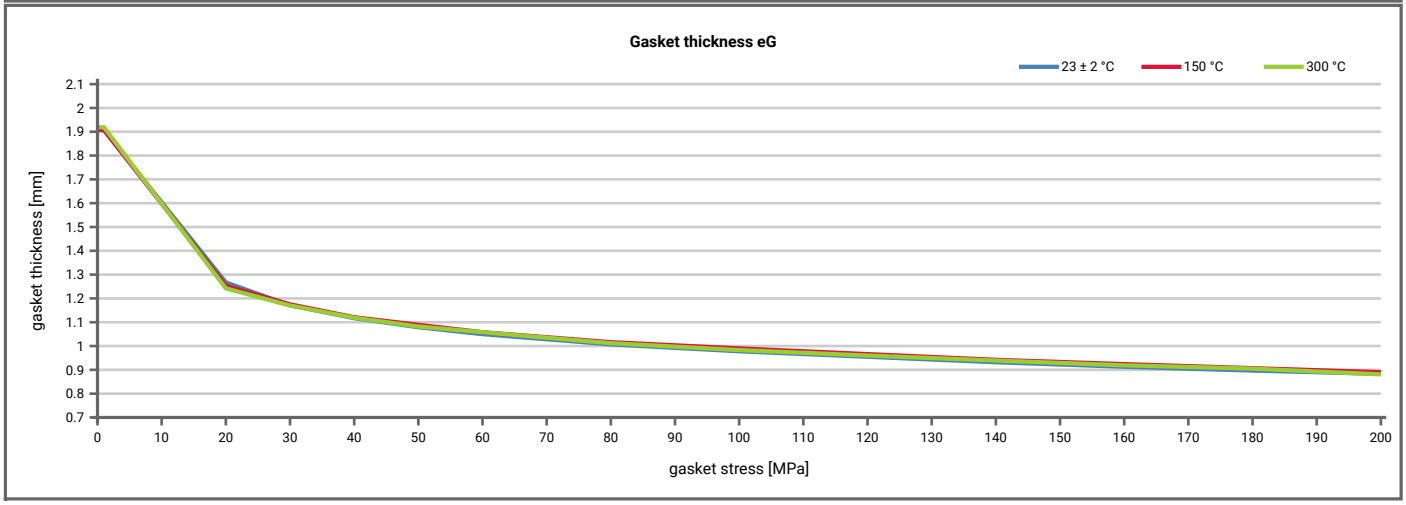


Note: the content of darkened cells was not determined respectively is unnecessary | Rev.-No.: **1** | Creation date of this sheet: **2012-12-20**

Manufacturer address	SGL Carbon GmbH, Werner-von-Siemens-Straße 16, 86405 Meitingen, DE	According to **DIN EN 13555 2005-2**
Product name	Sigraflex Universal V20010C2I	
Product dimensions	92 x 49 x 2 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]**					
	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]	0.98	6	0.92	20	0.91	24				
Stress level 2 [50 MPa]	0.98	8	0.96	19	0.94	27				
P_{QR} and Δe_{Gc} at maximum gasket stress to be applied Q_{smax}										
P_{QR} at Q_{smax}	1.00	8	0.99	17	0.99	17				
Q_{smax}	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]**					
	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	1.907	0	1.908	0	1.919				
1	0	1.907	0	1.908	0	1.919				
20	405	1.267	491	1.253	524	1.242				
30	627	1.171	756	1.175	750	1.170				
40	798	1.117	778	1.121	860	1.119				
50	1035	1.079	1225	1.089	1097	1.082				
60	1196	1.050	1181	1.058	1511	1.058				
80	1797	1.007	1747	1.016	1597	1.012				
100	2186	0.978	2268	0.990	1922	0.983				
120	2393	0.955	2647	0.966	2440	0.960				
140	2449	0.932	2364	0.942	2742	0.939				
160	2517	0.913	2498	0.924	2693	0.919				
180	2836	0.897	2743	0.907	3120	0.905				
200	3141	0.883	2664	0.890	2665	0.881				



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