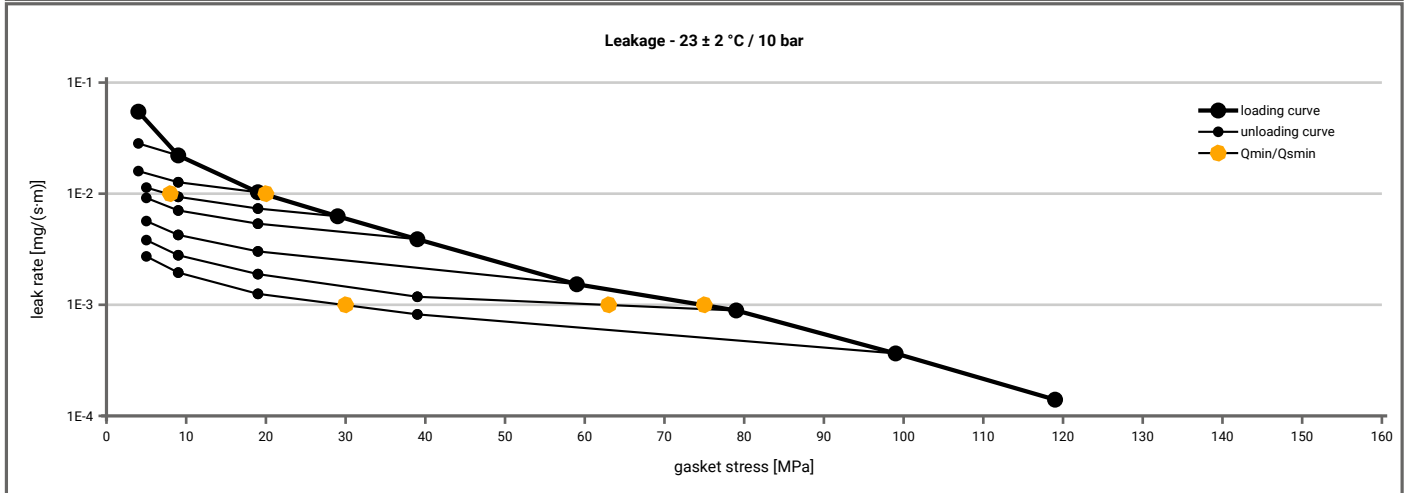
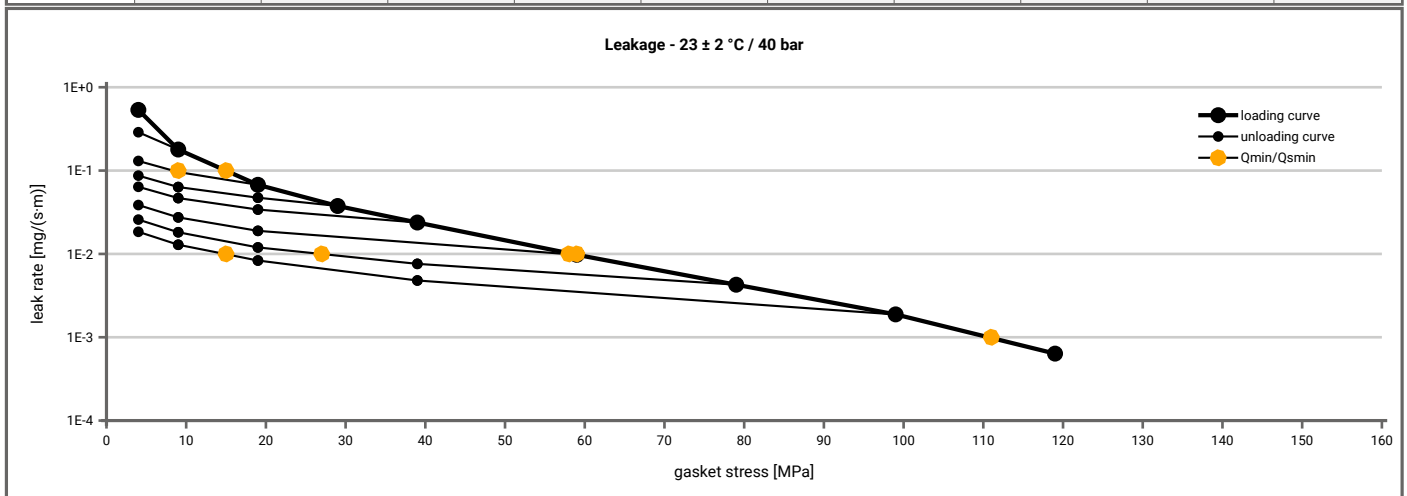


Manufacturer address	SGL Carbon GmbH, Werner-von-Siemens-Straße 16, 86405 Meitingen, DE	According to DIN EN 13555 2014-7
Product name	Sigraflex Standard L20010Cl	
Product dimensions	92 x 49 x 2 mm (DIN EN 1514-1 1997-8)	

Minimum stress to seal $Q_{min(L)}$ (at assembly), $Q_{smin(L)}$ (after off-loading) for $p = 10$ bar ($T = 23 \pm 2$ °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]
1E-0	5		5	5	5	5	5	5	5	
1E-1	5		5	5	5	5	5	5	5	
1E-2	20				8	5	5	5	5	
1E-3	75							63	30	
1E-4										
1E-5										
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 ($T = 23 \pm 2$ °C)										
L [mg/(s·m)]	$Q_{min(L)}$ [MPa]	$Q_{smin(L)}$ [MPa]								
		$Q_A = 5$ [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]
1E-0	5		5	5	5	5	5	5	5	
1E-1	16			9	5	5	5	5	5	
1E-2	59						58	28	16	
1E-3	111									
1E-4										
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: 2012-08-27

Manufacturer address	SGL Carbon GmbH, Werner-von-Siemens-Straße 16, 86405 Meitingen, DE	According to DIN EN 13555 2014-7
Product name	Sigraflex Standard L20010Cl	
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]	0.97	9	0.92	20	0.88	30				
Stress level 2 [50 MPa]	0.98	8	0.95	21	0.94	27				
P_{QR} and Δe_{Gc} at maximum gasket stress to be applied Q_{smax}										
P_{QR} at Q_{smax}	0.99	10	0.98	20	0.97	30				
Q_{smax}	120 MPa		120 MPa		120 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	2.014	0	2.014	0	2.028				
1	0	2.014	0	2.014	0	2.028				
20	336	1.232	361	1.208	468	1.211				
30	542	1.148	570	1.141	554	1.143				
40	743	1.099	823	1.095	878	1.099				
50	983	1.064	980	1.058	1136	1.065				
60	1023	1.031	1164	1.029	1223	1.035				
80	1598	0.988	1478	0.984	1651	0.990				
100	1930	0.954	1831	0.948	1932	0.953				
120	2507	0.927	2082	0.917	1860	0.836				

