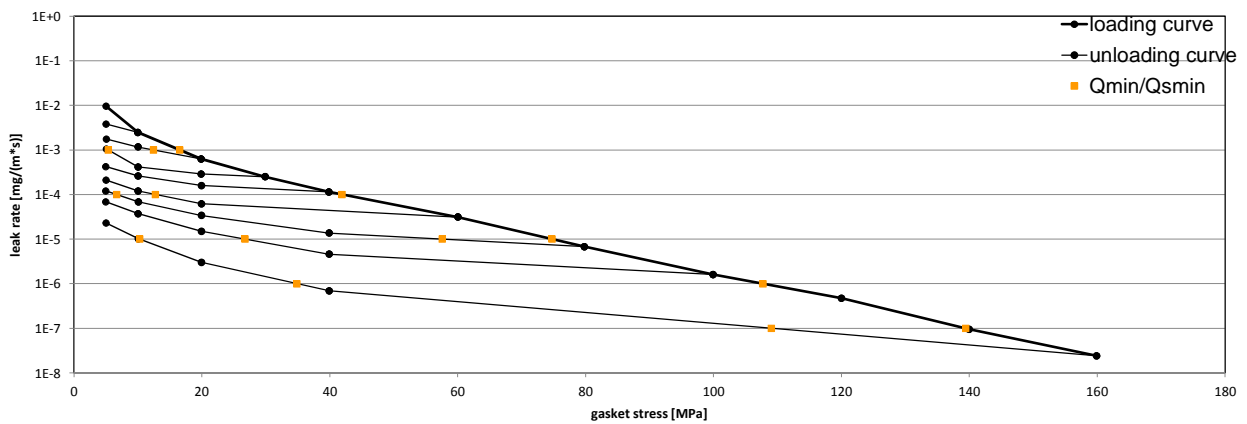


Company Address	SGL Group - The Carbon Company, Werner-von-Siemens-Str. 18, 86405 Meitingen, Germany
Gasket Type	Sigraflex Universal Pro V20010C2I-P
Sealing element dimensions [mm]	92 x 49 x 2

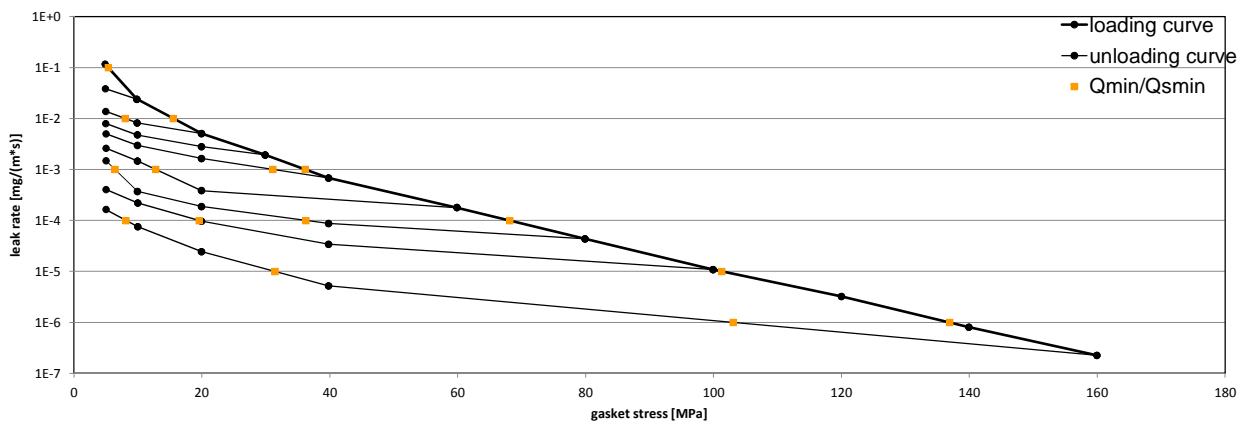
L [mg/(s*m)]	Q <sub>min/L</sub> [MPa]	Minimum stress to seal Q <sub>min/L</sub> (at assembly), Q <sub>Smin/L</sub> (after off-loading) for p = 10 bar									
		Q <sub>Smin/L</sub> [MPa]									
		Q <sub>A</sub> = 10 MPa	Q <sub>A</sub> = 20 MPa	Q <sub>A</sub> = 30 MPa	Q <sub>A</sub> = 40 MPa	Q <sub>A</sub> = 60 MPa	Q <sub>A</sub> = 80 MPa	Q <sub>A</sub> = 100 MPa	Q <sub>A</sub> = 120 MPa	Q <sub>A</sub> = 140 MPa	Q <sub>A</sub> = 160 MPa
10 <sup>0</sup>	5	5	5	5	5	5	5	5			5
10 <sup>-1</sup>	5	5	5	5	5	5	5	5			5
10 <sup>-2</sup>	5	5	5	5	5	5	5	5			5
10 <sup>-3</sup>	17		12	5	5	5	5	5			5
10 <sup>-4</sup>	42					13	7	5			5
10 <sup>-5</sup>	75						58	27			10
10 <sup>-6</sup>	108										35
10 <sup>-7</sup>	139										109
10 <sup>-8</sup>											

### Leakage - ambient temperature / inner pressure = 10 bar



L [mg/(s*m)]	Q <sub>min/L</sub> [MPa]	Minimum stress to seal Q <sub>min/L</sub> (at assembly), Q <sub>Smin/L</sub> (after off-loading) for p = 40 bar									
		Q <sub>Smin/L</sub> [MPa]									
		Q <sub>A</sub> = 10 MPa	Q <sub>A</sub> = 20 MPa	Q <sub>A</sub> = 30 MPa	Q <sub>A</sub> = 40 MPa	Q <sub>A</sub> = 60 MPa	Q <sub>A</sub> = 80 MPa	Q <sub>A</sub> = 100 MPa	Q <sub>A</sub> = 120 MPa	Q <sub>A</sub> = 140 MPa	Q <sub>A</sub> = 160 MPa
10 <sup>0</sup>	5	5	5	5	5	5	5	5			5
10 <sup>-1</sup>	5	5	5	5	5	5	5	5			5
10 <sup>-2</sup>	16		8	5	5	5	5	5			5
10 <sup>-3</sup>	36				31	13	6	5			5
10 <sup>-4</sup>	68						36	20			8
10 <sup>-5</sup>	101										31
10 <sup>-6</sup>	137										103
10 <sup>-7</sup>											
10 <sup>-8</sup>											

### Leakage - ambient temperature / inner pressure = 40 bar



Note: the content of darkened cells was not determined respectively is unnecessary

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Center of Sealing Technologies, Bürgerkamp 3, 48565 Steinfurt, Germany

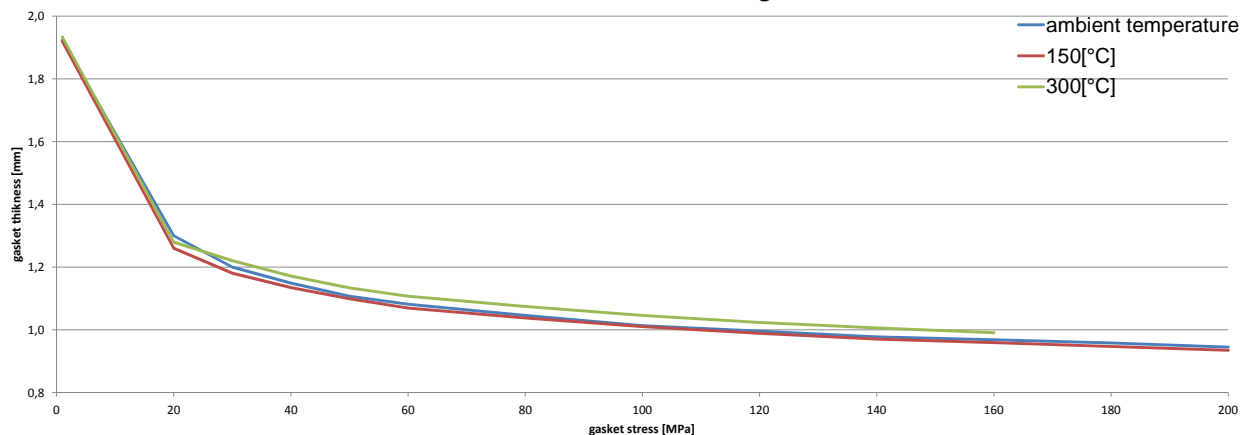
Company Address	SGL Group - The Carbon Company, Werner-von-Siemens-Str. 18, 86405 Meitingen, Germany
Gasket Type	Sigraflex Universal Pro V20010C2I-P
Sealing element dimensions [mm]	92 x 49 x 2

Relaxation ratio $P_{QR}$ for stiffness $C = 500$ kN/mm				
Gasket stress [MPa]	ambient temperature	temperature 1 [150 °C]	temperature 2 [300 °C]	
Stress level 1 [30 MPa]	0,97	0,94	0,89	
Stress level 2 [50 MPa]	0,99	0,97	0,95	
PQR at $Q_{Smax}$	1,00 at 200 MPa	0,99 at 200 MPa	0,99 at 160 MPa	

Maximal applicable gasket stress $Q_{Smax}$				
$Q_{Smax}$ [MPa] ambient temperature	$Q_{Smax}$ [MPa] – temperature 1 [150 °C]	$Q_{Smax}$ [MPa] – temperature 2 [300 °C]	$Q_{Smax}$ [MPa] – temperature 3	$Q_{Smax}$ [MPa] – temperature 4
200	200	160		

Sekant unloading modulus of the gasket $E_G$ [MPa] and gasket thickness $e_G$ [mm]										
Gasket stress [MPa]	ambient temperature		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		1,99		1,99		1,98				
1		1,92		1,92		1,93				
20	433	1,30	569	1,26	547	1,28				
30	814	1,20	1030	1,18	1032	1,22				
40	1066	1,15	1086	1,13	1170	1,17				
50	1077	1,11	1289	1,10	1339	1,13				
60	1645	1,08	1366	1,07	1550	1,11				
80	2628	1,05	3210	1,04	3184	1,07				
100	2375	1,01	2859	1,01	2984	1,05				
120	4666	1,00	3119	0,99	3266	1,02				
140	4919	0,98	4768	0,97	4307	1,01				
160	7545	0,97	6044	0,96	5493	0,99				
180	11339	0,96	8752	0,95						
200	9901	0,94	7804	0,93						

### Gasket thickness $e_G$



Note: the content of darkened cells was not determined respectively is unnecessary

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