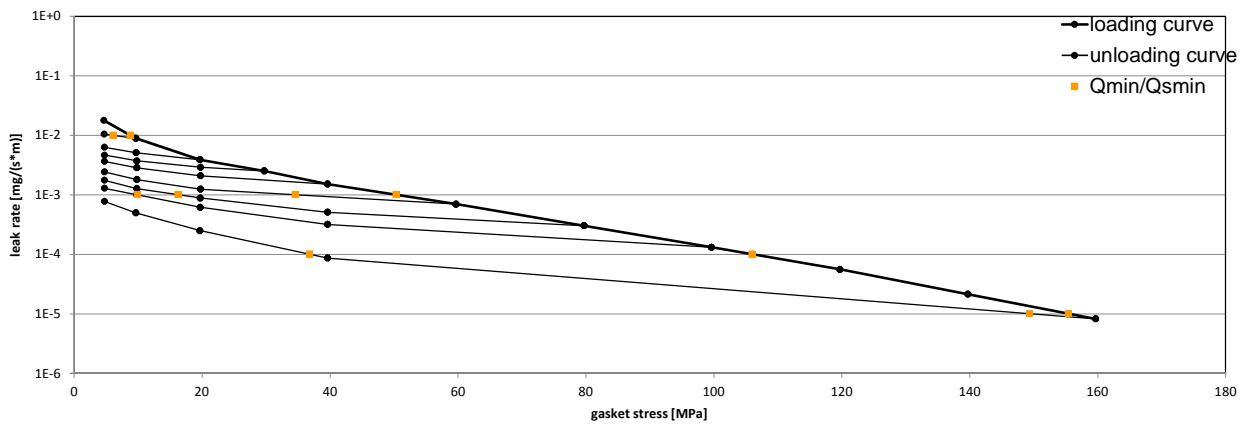


Company Address	SGL Group - The Carbon Company Werner-von-Siemens-Str. 18, 86405 Meitingen, Germany	According to <b>DIN EN 13555</b> 2014-07
Gasket Type	Sigraflex Economy V10010C4	
Sealing element dimensions [mm]	92 x 49 x 1	

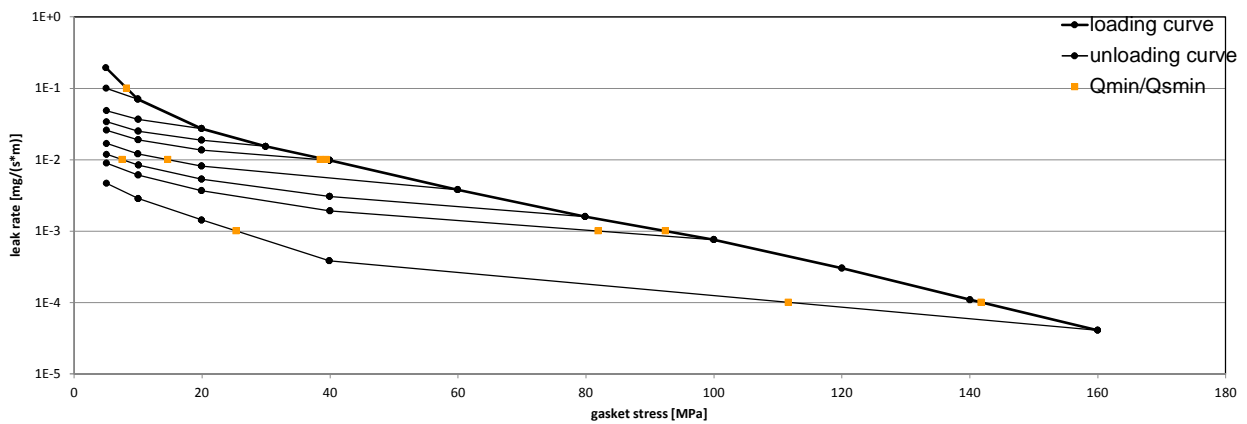
L [mg/(s*m)]	Q <sub>min/L</sub> [MPa]	Minimum stress to seal Q <sub>min/L</sub> (at assembly), Q <sub>Smin/L</sub> (after off-loading) for p = 10 bar									
		Q <sub>Smin/L</sub> [MPa]									
		Q <sub>A</sub> = 10 MPa	Q <sub>A</sub> = 20 MPa	Q <sub>A</sub> = 30 MPa	Q <sub>A</sub> = 40 MPa	Q <sub>A</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>	9	6	5	5	5	5	5	5			5
10 <sup>-3</sup>	50					35	16	10			5
10 <sup>-4</sup>	106										37
10 <sup>-5</sup>	155										149
10 <sup>-6</sup>											
10 <sup>-7</sup>											
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>	8	5	5	5	5	5	5	5			5
10 <sup>-2</sup>	39				38	15	8	5			5
10 <sup>-3</sup>	92							82			25
10 <sup>-4</sup>	142										112
10 <sup>-5</sup>											
10 <sup>-6</sup>											
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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Creation date of this sheet:

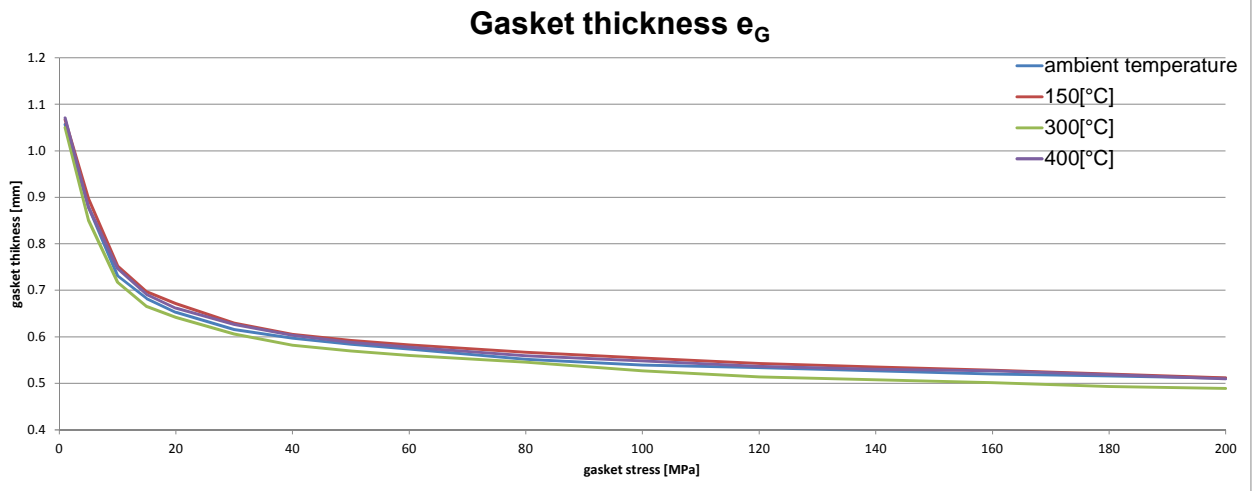
2015-05-12



Company Address	SGL Group - The Carbon Company Werner-von-Siemens-Str. 18, 86405 Meitingen, Germany	According to <b>DIN EN 13555</b> 2014-07
Gasket Type	Sigraflex Economy V10010C4	
Sealing element dimensions [mm]	92 x 49 x 1	

Relaxation ratio $P_{QR}$ for stiffness $C = 500$ kN/mm										
Gasket stress	ambient temperature		temperature 1 [150 °C]		temperature 2 [300 °C]		temperature 3 [400 °C]		$P_{QR}$	$\Delta e_{Gc}$ [mm]
	$P_{QR}$	$\Delta e_{Gc}$ [mm]	$P_{QR}$	$\Delta e_{Gc}$ [mm]	$P_{QR}$	$\Delta e_{Gc}$ [mm]	$P_{QR}$	$\Delta e_{Gc}$ [mm]		
Stress level 1 [30 MPa]	0.99	0.003	0.96	0.011	0.95	0.013	0.94	0.016		
Stress level 2 [50 MPa]	0.99	0.004	0.97	0.013	0.96	0.019	0.95	0.023		
$P_{QR}$ and $\Delta e_{Gc}$ at maximal applicable gasket stress $Q_{Smax}$										
$P_{QR}$ at $Q_{Smax}$	1.00	0.000	0.99	0.017	0.99	0.025	0.98	0.034		
$Q_{Smax}$	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]	ambient temperature		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		1.066		1.056		1.060		1.067		
1		1.057		1.067		1.050		1.071		
5	77	0.879	87	0.897	97	0.851	118	0.879		
10	155	0.732	213	0.753	230	0.718	267	0.747		
15	353	0.683	323	0.697	311	0.665	406	0.691		
20	419	0.653	603	0.671	637	0.642	540	0.662		
30	656	0.615	838	0.630	802	0.606	908	0.626		
40	1383	0.597	1186	0.605	1147	0.582	1151	0.603		
50	1766	0.584	2098	0.592	2191	0.569	1410	0.588		
60	1973	0.573	2664	0.582	3210	0.560	1809	0.578		
80	1686	0.551	2698	0.567	3805	0.545	3078	0.559		
100	3749	0.539	3340	0.554	2227	0.527	4848	0.548		
120	8649	0.534	4011	0.543	2249	0.514	3986	0.537		
140	10484	0.527	5391	0.535	4386	0.507	6064	0.531		
160	10445	0.520	7351	0.528	4912	0.502	16408	0.527		
180	12657	0.516	6583	0.520	4697	0.493	13225	0.519		
200	19277	0.511	7241	0.512	5597	0.489	6459	0.510		



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