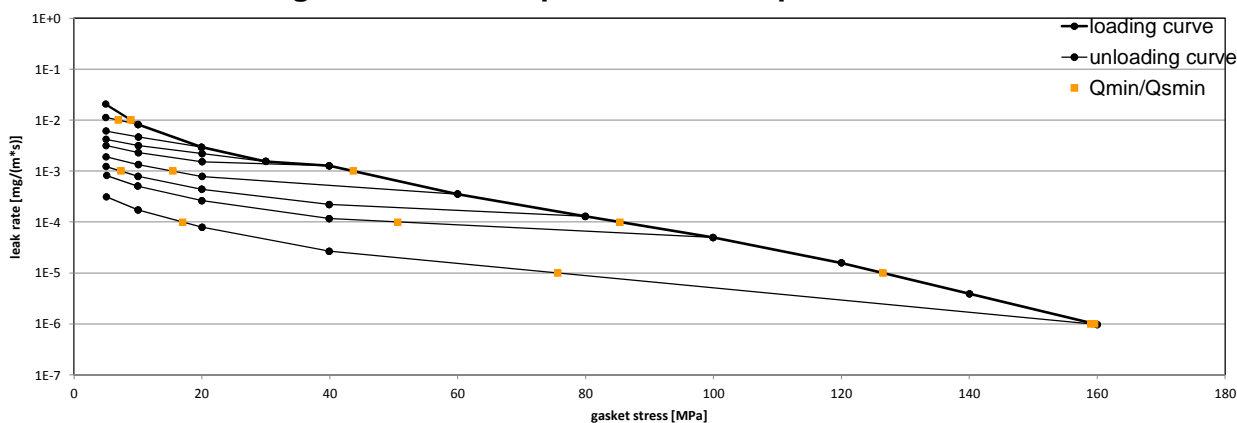


Company Address	SGL Group - The Carbon Company, Werner-von-Siemens-Str. 18, 86405 Meitingen, Germany
Gasket Type	Sigraflex Hochdruck V30011Z3I
Sealing element dimensions [mm]	92 x 49 x 3

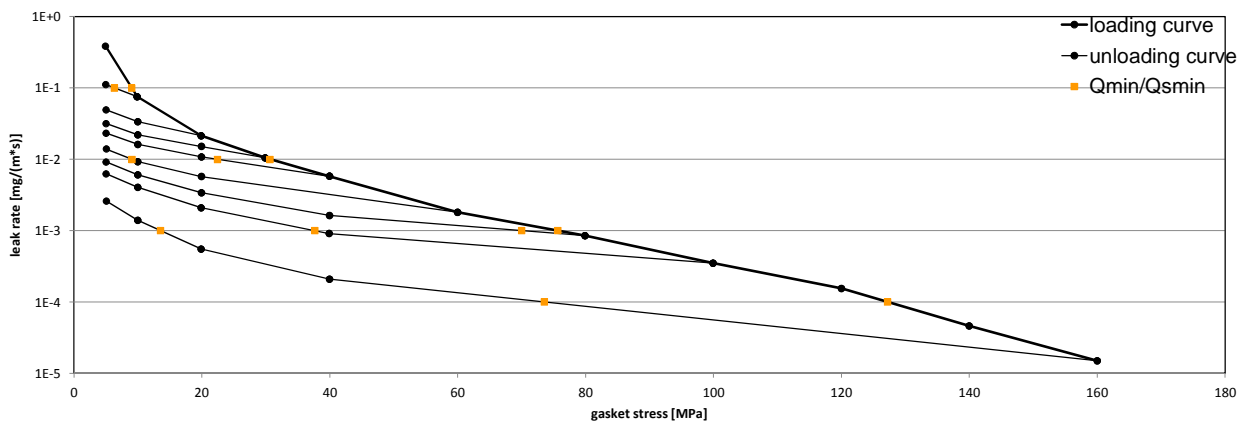
L [mg/(s*m)]	Q _{min/L} [MPa]	Minimum stress to seal Q _{min/L} (at assembly), Q _{Smin/L} (after off-loading) for p = 10 bar									
		Q _{Smin/L} [MPa]									
		Q _A = 10 MPa	Q _A = 20 MPa	Q _A = 30 MPa	Q _A = 40 MPa	Q _A = 60 MPa	Q _A = 80 MPa	Q _A = 100 MPa	Q _A = 120 MPa	Q _A = 140 MPa	Q _A = 160 MPa
10 ⁰	5	5	5	5	5	5	5	5			5
10 ⁻¹	5	5	5	5	5	5	5	5			5
10 ⁻²	9	7	5	5	5	5	5	5			5
10 ⁻³	44					15	7	5			5
10 ⁻⁴	85							51			17
10 ⁻⁵	126										76
10 ⁻⁶	160										159
10 ⁻⁷											
10 ⁻⁸											

Leakage - ambient temperature / inner pressure = 10 bar



L [mg/(s*m)]	Q _{min/L} [MPa]	Minimum stress to seal Q _{min/L} (at assembly), Q _{Smin/L} (after off-loading) for p = 40 bar									
		Q _{Smin/L} [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
10 ⁰	5	5	5	5	5	5	5	5			5
10 ⁻¹	9	6	5	5	5	5	5	5			5
10 ⁻²	31				22	9	5	5			5
10 ⁻³	76						70	38			14
10 ⁻⁴	127										74
10 ⁻⁵											
10 ⁻⁶											
10 ⁻⁷											
10 ⁻⁸											

Leakage - ambient temperature / inner pressure = 40 bar



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

Rev - No: 1

Creation date of this sheet:

18.10.2011

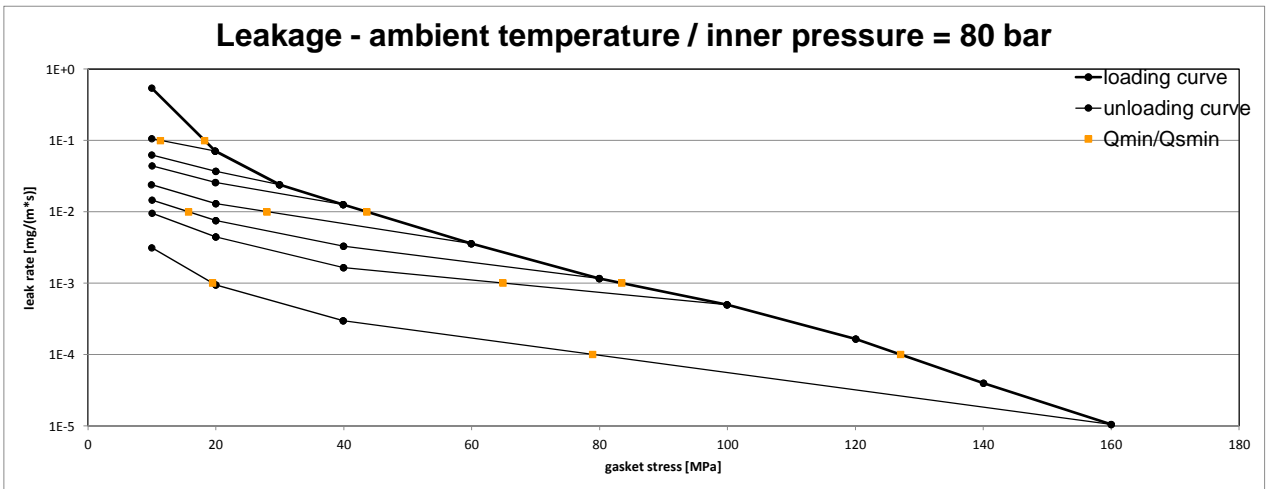
page 1 of 3



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 Hochdruck V30011Z3I
Sealing element dimensions [mm]	92 x 49 x 3

L [mg/(s*m)]	Q _{min/L} [MPa]	Minimum stress to seal Q _{min/L} (at assembly), Q _{Smin/L} (after off-loading) for p = 80 bar									
		Q _{Smin/L} [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	
10 ⁰	10	10	10	10	10	10	10			10	
10 ⁻¹	18	11	10	10	10	10	10			10	
10 ⁻²	44				28	16	10			10	
10 ⁻³	83						65			19	
10 ⁻⁴	127									79	
10 ⁻⁵											
10 ⁻⁶											
10 ⁻⁷											
10 ⁻⁸											



Note: the content of darkened cells was not determined respectively is unnecessary Rev - No: 1 Creation date of this sheet: 18.10.2011

Company Address	SGL Group - The Carbon Company, Werner-von-Siemens-Str. 18, 86405 Meitingen, Germany
Gasket Type	Sigraflex Hochdruck V30011Z3I
Sealing element dimensions [mm]	92 x 49 x 3

Relaxation ratio P _{GR} for stiffness C = 500 kN/mm				
Gasket stress [MPa]	ambient temperature	temperature 1 [150 °C]	temperature 2 [300 °C]	
Stress level 1 [30 MPa]	0,98	0,93	0,92	
Stress level 2 [50 MPa]	0,98	0,96	0,95	
PQR at Q _{Smax}	1,00 at 200 MPa	0,99 at 200 MPa	0,98 at 180 MPa	

Maximal applicable gasket stress Q _{Smax}				
Q _{Smax} [MPa]	Q _{Smax} [MPa] – temperature 1	Q _{Smax} [MPa] – temperature 2		
ambient temperature	[150 °C]	[300 °C]		
200	200	180		

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		2,89		2,90		2,77				
20	409	2,04	432	2,02	466	1,98				
30	631	1,93	660	1,93	670	1,89				
40	935	1,86	1002	1,87	994	1,83				
50	1089	1,81	1038	1,81	1423	1,79				
60	1274	1,77	1400	1,77	1323	1,74				
80	1949	1,71	1837	1,71	2025	1,68				
100	2578	1,67	2582	1,67	2426	1,64				
120	2839	1,64	2868	1,64	3163	1,61				
140	3145	1,61	3155	1,61	3322	1,58				
160	3960	1,59	3294	1,58	3190	1,55				
180	4279	1,56	3892	1,56	3245	1,52				
200	3694	1,54	4153	1,53						

Gasket thickness e_G

