

Company Address	SGL Group - The Carbon Company, Werner-von-Siemens-Straße 18 86405 Meitingen, GERMANY
Gasket Type	SIGRAFLEX ECONOMY
Thickness e_{GO} [mm]	2

Minimum stress to seal $Q_{min/L}$ (at assembly), $Q_{Smin/L}$ (after off-loading) for $p = 40$ bar									
L [mg/(s*m)]	$Q_{min/L}$ [MPa]	$Q_{Smin/L}$ [MPa]							
		$Q_A = 20$ [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
10^{-1}	11	<10	<10	<10	<10	<10	<10	<10	<10
10^{-2}	53			44	23	14			
10^{-3}	113								
10^{-4}									
10^{-5}									
10^{-6}									
10^{-7}									
10^{-8}									

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	0,95	0,95
Stress level 2 [50 MPa]	0,98	0,97	0,97
Q_{Smax} [200 /100 /100 MPa]	1,00	0,98	0,98

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]
200	100	100

Sekant unloading modulus of the gasket E_G [MPa]			
Gasket stress [MPa]	ambient temperature	temperature 1 [150 °C]	temperature 2 [300 °C]
20	324	416	552
30	517	655	669
40	711	776	769
50	937	1017	1113
60	1129	1289	1223
80	1680	1667	1678
100	1793	1704	1691
120	2072	2674	2893
140	2496	3149	2981
160	2822	3675	
180	2694		
200	3190		
220			
225			

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

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