

Company Address	SGL Group - The Carbon Company, Werner-von-Siemens-Straße 18 86405 Meitingen / Germany
Gasket Type	SIGRAFLEX UNIVERSAL PRO
Thickness e_{GO} [mm]	3

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}	<10	<10	<10	<10	<10	<10	<10	<10	<10
10^{-2}	18	12	<10	<10	<10	<10	<10	<10	<10
10^{-3}	35		23	<10	<10	<10	<10	<10	<10
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	0,92	0,90
Stress level 2 [50 MPa]	0,98	0,96	0,95
Q_{Smax} [180 / 160 / 140 MPa]	1,00	0,99	0,99

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]
180	160	140

Sekant unloading modulus of the gasket E_G [MPa]			
Gasket stress [MPa]	ambient temperature	temperature 1 [150 °C]	temperature 2 [300 °C]
20	358	447	414
30	629	649	586
40	789	941	811
50	1265	1136	1300
60	1326	1314	1191
80	1786	1836	1747
100	2328	2255	1949
120	2679	2674	2893
140	3182	3149	2981
160	3293	3675	
180	4090		
200			
220			
225			