

Company Address	Klinger GmbH, Am Kanal 8-10, A-2352 Gumpoldskirchen, Austria
Gasket Type	Top-chem 2000
Thickness e_{GO} [mm]	2 mm

Minimum stress to seal $Q_{min/L}$ (at assembly), $Q_{Smin/L}$ (after off-loading) for $p = 10$ bar										
L [mg/(s*m)]	$Q_{min/L}$ [MPa]	$Q_{Smin/L}$ [MPa]								
		$Q_A = 10$ [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^{-1}	< 5	< 5	< 5	< 5	< 5	< 5	< 5			
10^{-2}	9	6	< 5	< 5	< 5	< 5	< 5			
10^{-3}	29			14	7	< 5	< 5			
10^{-4}	66					18	6			
10^{-5}										
10^{-6}										
10^{-7}										
10^{-8}										

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]								
		$Q_A = 10$ [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^{-1}	< 10		< 10	< 10	< 10	< 10	< 10			
10^{-2}	20		19	< 10	< 10	< 10	< 10			
10^{-3}	52				40	< 10	< 10			
10^{-4}	85						18			
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 [100 °C]	temperature 2 [175 °C]	temperature 3 [200 °C]	temperature 3 [250 °C]
Stress level 1 [20 MPa]		0.97	0.95	0.96	0.95
Stress level 2 [50 MPa]		0.97	0.97	0.95	0.93
Q_{Smax} [>200/160/160/140/50 MPa]		0.73	0.77	0.67	0.93

Maximal applicable gasket stress Q_{Smax}				
Q_{Smax} [MPa] – ambient temperature	Q_{Smax} [MPa] – temperature 1 [100 °C]	Q_{Smax} [MPa] – temperature 2 [175 °C]	Q_{Smax} [MPa] – temperature 2 [200 °C]	Q_{Smax} [MPa] – temperature 2 [250 °C]
>200	160	160	140	50

Sekant unloading modulus of the gasket E_G [MPa]					
Gasket stress [MPa]	ambient temperature	temperature 1 [100 °C]	temperature 2 [175 °C]	temperature 2 [200 °C]	temperature 2 [250 °C]
20	2667	2153	2119	1904	1484
30	3589	2574	3461	2478	2210
40	3770	3018	3445	2628	2166
50	5022	3968	3593	3250	
60	5596	5446	3711	3532	
80	5430	4359	5663	4212	
100	6718	4770	5794	5234	
120	6331	5922	5461	4486	
140	7629	6813	5694	5027	
160	7952	8191	6410		
180	8539				
200	7914				
220					
225					

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

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