

Company Address	Klinger GmbH, Am Kanal 8-10, A-2352 Gumpoldskirchen, Austria
Gasket Type	Top-chem 2006
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}	10	10	< 5	< 5	< 5	< 5	< 5			
10^{-3}	27		6	< 5	< 5	< 5	< 5			
10^{-4}	40			38	< 5	< 5	< 5			
10^{-5}	60					7	< 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		< 10	< 10	< 10	< 10	< 10			
10^{-1}	30			< 10	< 10	< 10	< 10			
10^{-2}	41				< 10	< 10	< 10			
10^{-3}	52				< 10	< 10	< 10			
10^{-4}	66					< 10	< 10			
10^{-5}	91						48			
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 [xxx °C]	temperature 3 [xxx °C]
Stress level 1 [10 MPa]		0.87	0.90		
Stress level 2 [20 MPa]		0.88	0.82		
Q_{Smax} [100/40/20 MPa]		0.86	0.82		

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 [xxx °C]	Q_{Smax} [MPa] – temperature 2 [xxx °C]
100	40	20		

Sekant unloading modulus of the gasket E_G [MPa]					
Gasket stress [MPa]	ambient temperature	temperature 1 [100 °C]	temperature 2 [175 °C]	temperature 2 [xxx °C]	temperature 2 [xxx °C]
20	2966	1986	2291		
30	3297	2563			
40	3488	3511			
50	4597				
60	5450				
80	5835				
100					
120					
140					
160					
180					
200					
220					
225					

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

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