

Company Address	Klinger GmbH, Rich.-Klinger-Strasse 37, 65510 Idstein, Deutschland
Gasket Type	Klinger Graphite Laminate PDM200B
Thickness e_{GO} [mm]	2.0 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]	$Q_A = 160$ [MPa]
10^{-0}	< 5	< 5	< 5	< 5	< 5	< 5	< 5		< 5
10^{-1}	< 5	< 5	< 5	< 5	< 5	< 5	< 5		< 5
10^{-2}	26	< 5	< 5	< 5	< 5	< 5	< 5		< 5
10^{-3}	61					29	13		< 5
10^{-4}	100						98		19
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]							
		$Q_A = 20$ [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^{-1}	21	< 10	< 10	< 10	< 10	< 10			< 10
10^{-2}	56			48	17	< 10			< 10
10^{-3}	95					84			17
10^{-4}	123								84
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]	0,98	0,89	0,89
Stress level 2 [50 MPa]	0,99	0,94	0,92
Q_{Smax} [220 / 220 / 180 MPa]	1,00	0,98	0,97

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]
220	220	180

Sekant unloading modulus of the gasket E_G [MPa]			
Gasket stress [MPa]	ambient temperature	temperature 1 [150°C]	temperature 2 [300°C]
20	531	541	608
30	765	774	800
40	1113	1170	1066
50	1481	1498	1367
60	1923	1892	1746
80	2687	2810	2422
100	3325	3655	3356
120	4100	4370	3983
140	4808	4732	4679
160	5336	5440	5244
180	6000	5866	5705
200	6269	6138	
220	6823	7143	
225			

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

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