

Company Address	Klinger GmbH, Rich.-Klinger-Strasse 37, 65510 Idstein, Deutschland
Gasket Type	Klinger Graphite Laminate PSM200B
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}	18		12	< 5	< 5	< 5	< 5		< 5
10^{-3}	47				17	6	< 5		< 5
10^{-4}	80					76	27		< 5
10^{-5}									13
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}	16			12	< 10	< 10			< 10
10^{-2}	43				64	27			< 10
10^{-3}	75					68			19
10^{-4}	89								
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	0,93	0,92
Stress level 2 [50 MPa]	0,99	0,96	0,94
Q_{Smax} [220 / 220 / 180 MPa]	1,00	0,99	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	497	532	588
30	800	786	749
40	1166	1069	1077
50	1536	1478	1422
60	2038	1938	1690
80	2664	2746	2621
100	3415	3361	2847
120	4042	3910	4055
140	5091	4992	4940
160	5268	5490	5237
180	5601	5795	5245
200	5966	5869	
220	6102	6658	
225			

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

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