

Company Address	Klinger GmbH, Rich.-Klinger-Strasse 37, 65510 Idstein, Deutschland
Gasket Type	Klinger Graphite Laminate PSM150B
Thickness e_{GO} [mm]	1.5 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}	21		19	< 5	< 5	< 5	< 5		< 5
10^{-3}	62					29	14		< 5
10^{-4}	103								27
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}	18	12	< 10	< 10	< 10	< 10			< 10
10^{-2}	53			38	13	< 10			< 10
10^{-3}	94					82			18
10^{-4}	125								85
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]	0,99	0,95	0,92
Stress level 2 [50 MPa]	0,99	0,96	0,94
Q_{Smax} [220 / 220 / 220 MPa]	1,00	0,99	0,98

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	220

Sekant unloading modulus of the gasket E_G [MPa]			
Gasket stress [MPa]	ambient temperature	temperature 1 [150°C]	temperature 2 [300°C]
20	509	504	656
30	800	845	702
40	1217	1213	1142
50	1578	1522	1623
60	1944	2006	2076
80	2590	2693	2769
100	3340	3488	3200
120	4911	4003	3681
140	4456	4746	4409
160	5538	5409	5067
180	5629	5422	5318
200	6198	5945	5455
220	6620	6356	6174
225			

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

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