

Company Address	Klinger GmbH, Rich.-Klinger-Strasse 37, 65510 Idstein, Deutschland
Gasket Type	Klinger Graphite Laminate SLS150B
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
$10^{-2}$	12	< 5	< 5	< 5	< 5	< 5	< 5		< 5
$10^{-3}$	45				18	< 5	< 5		< 5
$10^{-4}$	83						43		9
$10^{-5}$									
$10^{-6}$									
$10^{-7}$									
$10^{-8}$									

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
$10^{-1}$	< 10	< 10	< 10	< 10	< 10	< 10			< 10
$10^{-2}$	36		27	< 10	< 10	< 10			< 10
$10^{-3}$	70				49	21			< 10
$10^{-4}$	89					67			17
$10^{-5}$									
$10^{-6}$									
$10^{-7}$									
$10^{-8}$									

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	0,94	0,90
Stress level 2 [50 MPa]	0,99	0,97	0,95
$Q_{Smax}$ [200 / 180 / 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]
200	180	180

Sekant unloading modulus of the gasket $E_G$ [MPa]			
Gasket stress [MPa]	ambient temperature	temperature 1 [150°C]	temperature 2 [300°C]
20	422	455	512
30	714	710	711
40	1021	966	980
50	1394	1343	1250
60	1826	1897	1618
80	2477	2451	2442
100	3199	3389	3342
120	3666	4317	3955
140	4704	5477	4528
160	5204	5892	5148
180	5715	6817	5331
200	6483		
220			
225			

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

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