

Company Address	Klinger GmbH, Rich.-Klinger-Straße 37, 65510 Idstein
Gasket Type	KLINGERSIL® C-8200
Thickness e_{G0} [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]							
		$Q_A = 20$ [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}	11	<5	<5	<5	<5	<5			
10^{-2}	19	16	<5	<5	<5	<5			
10^{-3}	31		8	<5	<5	<5			
10^{-4}	45			10	<5	<5			
10^{-5}	60				14	8			
10^{-6}	80					28			
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^{-1}	17	<10	<10	<10	<10	<10			
10^{-2}	27		<10	<10	<10	<10			
10^{-3}	37		17	<10	<10	<10			
10^{-4}	49			13	<10	<10			
10^{-5}	64				16	11			
10^{-6}	88					64			
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 [200 °C]
Stress level 1 [xx MPa]				
Stress level 2 [xx MPa]				
Q_{Smax} [200 MPa]		0,67	0,60	0,54

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 3 [200 °C]
> 200	> 200	> 200	> 200

Sekant unloading modulus of the gasket E_G [MPa]				
Gasket stress [MPa]	ambient temperature	temperature 1 [100 °C]	temperature 2 [175 °C]	temperature 3 [200 °C]
20	984	1543	2705	1650
30	1745	2038	3329	2479
40	2305	3061	2697	2883
50	2829	4072	3162	2994
60	3769	4254	3785	2831
80	4249	4958	4089	4453
100	5520	5441	4587	4342
120	5997	5271	5575	4062
140	6092	4878	4552	4560
160	6172	5740	4762	4099
180			5271	4874
200				5003
220				
225				

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

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