

Company Address	Kempchen Dichtungstechnik - 46147 Oberhausen - im Waldteich 21
Gasket Type	Flachdichtung F1 Klinger Sil C4400
Thickness e_{Go} [mm]	49 / 92 x 2.0 mm

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}	17	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
10^{-1}	29		< 10	< 10	< 10	< 10	< 10	< 10	< 10
10^{-2}	42			< 10	< 10	< 10	< 10	< 10	< 10
10^{-3}	51			15	< 10	< 10	< 10	< 10	< 10
10^{-4}	61				10	< 10	< 10	< 10	< 10
10^{-5}	75				33	17	17	17	< 10
10^{-6}	105								75
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 [150 °C]
Stress level 1 [50 MPa]	0,93	0,87	0,84
Stress level 2 [120 MPa]	0,98	0,93	0,90
Q_{Smax} [210 MPa]	0,98	0,95	0,90

Maximal applicable gasket stress Q_{Smax}		
Q_{Smax} [MPa] – ambient temperature	Q_{Smax} [MPa] – temperature 1 [100 °C]	Q_{Smax} [MPa] – temperature 2 [150 °C]
210	210	210

Sekant unloading modulus of the gasket E_G [MPa]			
Gasket stress [MPa]	ambient temperature	temperature 1 [100 °C]	temperature 2 [150 °C]
20	1063	983	1628
30	1167	1471	1526
40	1874	1656	1961
50	1895	2284	2209
60	2711	2675	2537
80	3309	2987	2762
100	3152	3054	3654
120	3896	3582	3195
140	4171	3383	3749
160	4281	4103	3706
180	4479	4264	3776
200	4504	4316	4062
210	4835	4439	3954

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

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