

Company Address	Kempchen Dichtungstechnik - 46049 Oberhausen - Alleestraße 4
Gasket Type	Kammprofilichtung B9A-PTFE ungesintert (0,35 mm)
Thickness e_{GO} [mm]	4,80

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}	18				12	< 10			
10^{-2}	24				13	< 10			
10^{-3}	28				14	< 10			
10^{-4}	33				15	< 10			
10^{-5}	38				17	< 10			
10^{-6}	51			26	22	20	< 10		
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 [250 °C]
Stress level 1 [90 MPa]	0,99	0,84	0,63
Stress level 2 [180 MPa]	0,98	0,86	0,80
Q_{Smax} [480 MPa]	1,00	0,97	0,98

Maximal applicable gasket stress Q_{Smax}		
Q_{Smax} [MPa] – ambient temperature	Q_{Smax} [MPa] – temperature 1 [100 °C]	Q_{Smax} [MPa] – temperature 2 [250 °C]
480	480	480

Sekant unloading modulus of the gasket E_G [MPa]			
Gasket stress [MPa]	ambient temperature	temperature 1 [100 °C]	temperature 2 [250 °C]
20	2811	3655	3936
30	5150	5100	5542
40	5672	6595	8768
50	7891	7308	11133
60	9737	6708	13299
80	10969	9546	12781
100	10126	15131	13423
120	10744	15571	15366
140	12307	15934	15773
160	13385	17597	16301
180	14904	17077	18874
200	17491	17424	20859
300	19348	16281	21432
400	19427	18556	23050
480	20301	19276	23073

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

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