

Company Address	Kempchen Dichtungstechnik - 46049 Oberhausen - Im Waldteich 21
Gasket Type	Kammprofildichtung B9A-Graphit (1.4571 / 0,5 mm; D 1,0 g/cm <sup>3</sup> )
Thickness e <sub>Go</sub> [mm]	53 / 73 x 92 x 4.80 mm (WN 101)

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 <sup>-0</sup>	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
10 <sup>-1</sup>	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
10 <sup>-2</sup>	30		14	< 10	< 10	< 10	< 10	< 10	< 10
10 <sup>-3</sup>	56			53	35	30	30	30	17
10 <sup>-4</sup>	98					96	96	96	49
10 <sup>-5</sup>	138								116
10 <sup>-6</sup>									
10 <sup>-7</sup>									
10 <sup>-8</sup>									

Relaxation ratio $P_{QR}$ for stiffness C = 500 kN/mm			
Gasket stress [MPa]	ambient temperature	temperature 1 [200 °C]	temperature 2 [300 °C]
Stress level 1 [50 MPa]	0.95	0.83	0.75
Stress level 2 [90 MPa]	0.99	0.95	0.93
$Q_{Smax}$ [480 MPa]	0.99	0.98	0.99

Maximal applicable gasket stress $Q_{Smax}$		
$Q_{Smax}$ [MPa] – ambient temperature	$Q_{Smax}$ [MPa] – temperature 1 [200 °C]	$Q_{Smax}$ [MPa] – temperature 2 [300 °C]
480	480	480

Sekant unloading modulus of the gasket $E_G$ [MPa]			
Gasket stress [MPa]	ambient temperature	temperature 1 [200 °C]	temperature 2 [300 °C]
20	1312	1624	1452
30	2385	2909	2972
40	3083	4334	3953
50	3926	4167	4880
60	4605	4149	5925
80	5218	5533	5898
100	5968	7275	7280
120	6603	8568	8222
140	6765	8946	8328
160	8021	8012	9495
180	10406	9171	9639
200	11062	10043	9983
300	10836	11755	11304
400	11410	13136	10959
500	12670	12825	12015

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

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