

Company Address	Kempchen Dichtungstechnik - 46049 Oberhausen - Im Waldteich 21
Gasket Type	Kammprofilichtung B29A-Graphit (0,5 mm: D 1,0 g/cm ³)
Thickness e _{Go} [mm]	53 / 71 x 92 x 4.85 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 ⁻⁰	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
10 ⁻¹	14	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
10 ⁻²	32		25	23	18	16	16	16	12
10 ⁻³	68				57	52	52	52	31
10 ⁻⁴	102								76
10 ⁻⁵	145								139
10 ⁻⁶									
10 ⁻⁷									
10 ⁻⁸									

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 [90 MPa]	1.00	0,99	0.97
Stress level 2 [180 MPa]	0.99	0.99	0.99
Q_{Smax} [480 MPa]	1.00	0.98	0.98

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	3244	2761	2986
30	4775	5358	5521
40	6024	6553	5901
50	6630	6856	6771
60	7251	8715	6387
80	10067	13110	13400
100	11379	11295	17868
120	12565	11176	13889
140	14950	13727	12016
160	19502	17238	13243
180	19066	14200	13487
200	16015	12466	16002
300	17428	21487	17450
400	20010	16347	22136
500	23162	19532	19039

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

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