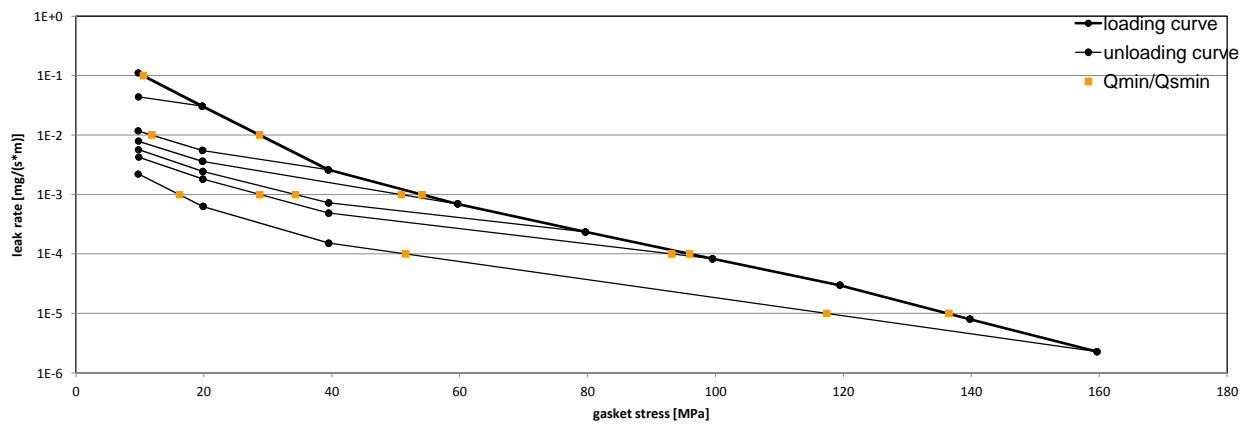


Company Address	Kempchen Dichtungstechnik GmbH, Im Waldteich 21, 46147 Oberhausen, Germany
Gasket Type	Grooved gasket B7A / B9A / B15 Graphite (1.4571 / 0,5 mm; 1,0 g/cm ³)
Sealing element dimensions [mm]	53 / 73 x 92 x 4,80 (WN 101)

L [mg/(s*m)]	Q _{min/L} [MPa]	Minimum stress to seal Q _{min/L} (at assembly), Q _{Smin/L} (after off-loading) for p = 40 bar								
		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 ⁻¹	11	10	10	10	10	10			10	
10 ⁻²	29		12	10	10	10			10	
10 ⁻³	54			51	34	29			16	
10 ⁻⁴	96					93			52	
10 ⁻⁵	137								117	
10 ⁻⁶										
10 ⁻⁷										
10 ⁻⁸										

Leakage - ambient temperature / inner pressure = 40 bar



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

Rev - No: 1

Creation date of this sheet:

20.01.2014

page 1 of 2



Center of Sealing Technologies, Bürgerkamp 3, 48565 Steinfurt, Germany

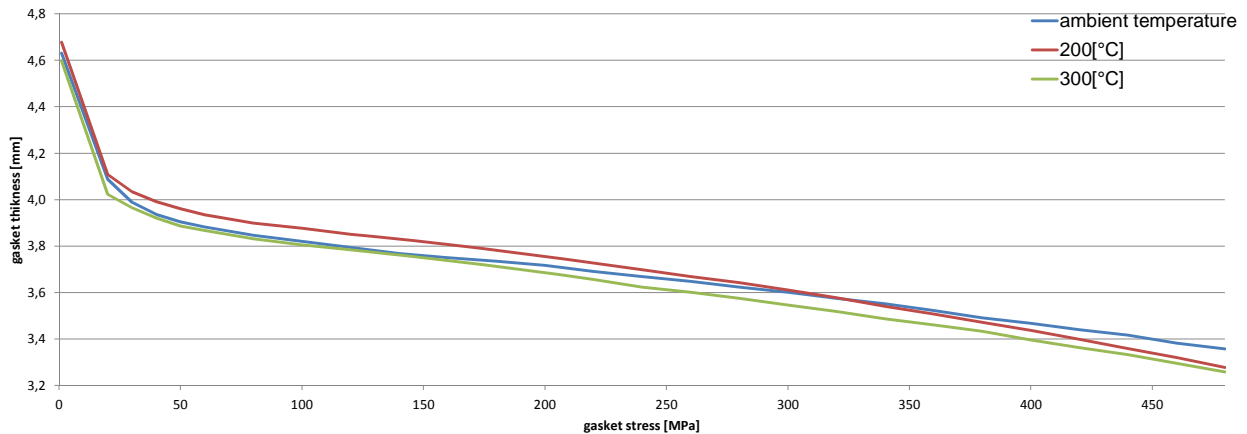
Company Address	Kempchen Dichtungstechnik GmbH, Im Waldteich 21, 46147 Oberhausen, Germany
Gasket Type	Grooved gasket B7A / B9A / B15 Graphite (1.4571 / 0,5 mm; 1,0 g/cm ³)
Sealing element dimensions [mm]	53 / 73 x 92 x 4,80 (WN 101)

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 [15 MPa]	0,98	0,83	0,75	
Stress level 2 [90 MPa]	0,99	0,95	0,98	
PQR at Q_{Smax}	0,99 at 480 MPa	0,98 at 480 MPa	0,99 at 480 MPa	

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] and gasket thickness e_G [mm]						
Gasket stress [MPa]	ambient temperature		temperature 1 [200 °C]		temperature 2 [300 °C]	
	E_G [MPa]	e_G [mm]	E_G [MPa]	e_G [mm]	E_G [MPa]	e_G [mm]
0						
1		4,631		4,678		4,598
20	1312	4,088	1624	4,109	1451	4,023
30	2385	3,989	2909	4,034	2972	3,965
40	3083	3,937	4333	3,992	3953	3,921
50	3926	3,905	4167	3,961	4880	3,887
60	4605	3,883	4149	3,935	5925	3,868
80	5218	3,847	5533	3,899	5898	3,832
100	5968	3,821	7275	3,877	7280	3,806
120	6603	3,795	8568	3,851	8222	3,784
140	6765	3,768	8946	3,832	8328	3,762
160	8021	3,751	8012	3,807	9494	3,739
180	10406	3,735	9171	3,782	9639	3,713
200	11061	3,717	10042	3,756	9983	3,685
220	10346	3,691	9414	3,728	10699	3,657
240	9962	3,670	11394	3,700	8865	3,624
260	11772	3,648	11940	3,670	10872	3,602
280	10779	3,624	11804	3,643	11659	3,576
300	10836	3,601	11755	3,612	11303	3,547
320	11733	3,575	11929	3,578	12467	3,519
340	13077	3,553	11546	3,541	9753	3,487
360	12003	3,523	12777	3,508	13368	3,462
380	10626	3,492	11317	3,473	12442	3,433
400	11410	3,468	13135	3,438	10959	3,396
420	13223	3,441	12321	3,399	10951	3,364
440	13750	3,417	12295	3,359	13116	3,333
460	13602	3,382	14091	3,321	11661	3,296
480	12550	3,358	12597	3,278	11862	3,259

Gasket thickness e_G



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

Rev - No: 1

Creation date of this sheet:

20.01.2014

page 2 of 2



Center of Sealing Technologies, Bürgerkamp 3, 48565 Steinfurt, Germany