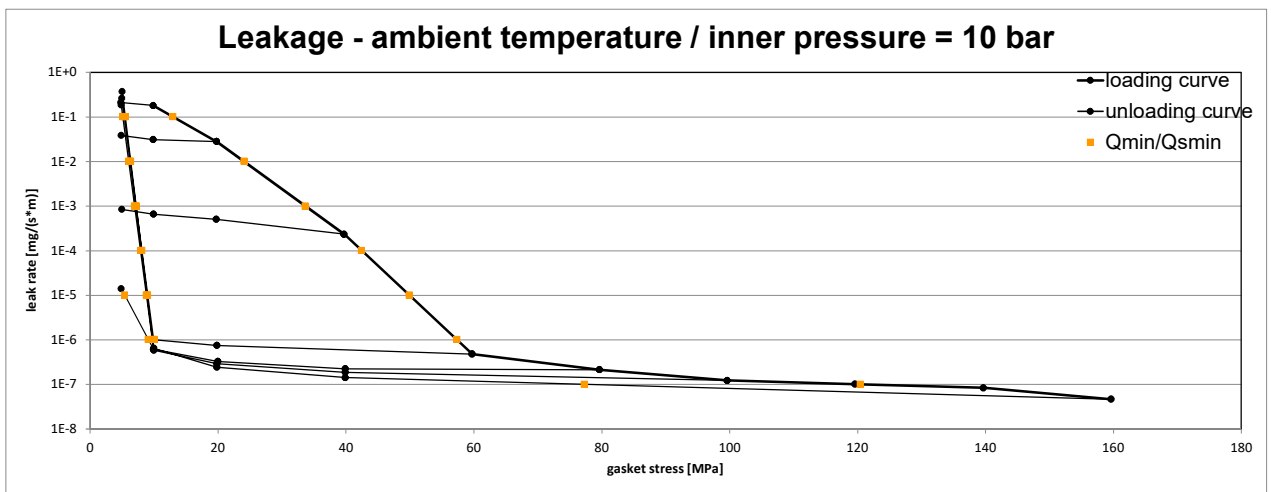
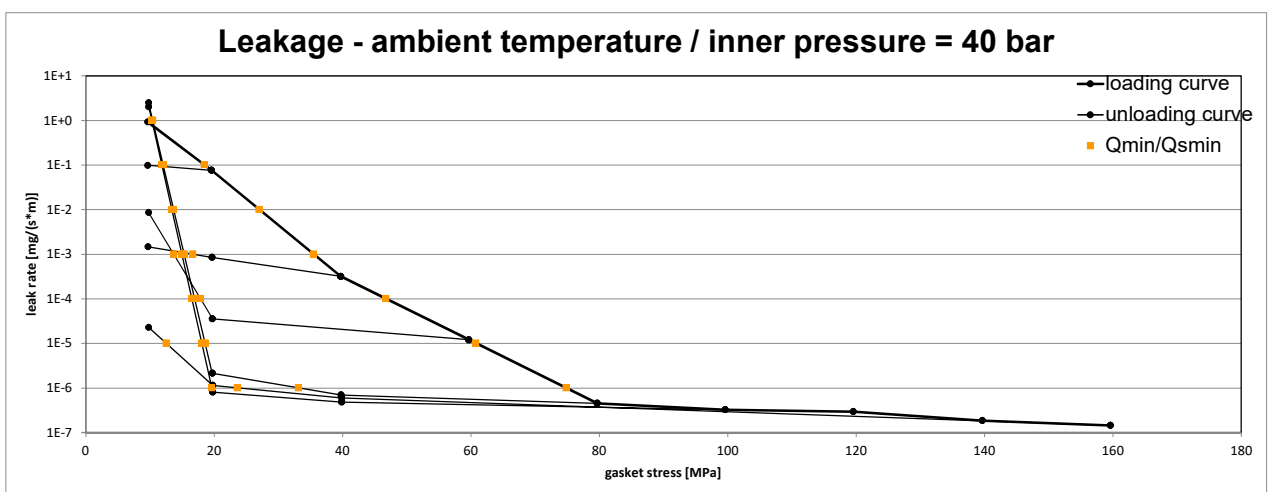


Company Address	Kempchen Dichtungstechnik GmbH, Im Waldteich 21, 46049 Oberhausen, Germany	According to DIN EN 13555 2014-07
Gasket Type	Grooved gasket B7A / B9A / B15A PTFE unsintered (1.4541 / 0.35 mm)	
Sealing element dimensions [mm]	69 x 53 x 4.5 (WN 145, DIN 1514-6)	

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 = 10 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	5	5	5	5	5	5			5	
10 ⁻¹	13	5	5	5	5	5			6	
10 ⁻²	24		5	6	6	5			6	
10 ⁻³	34		5	7	7	5			7	
10 ⁻⁴	42			8	8	5			8	
10 ⁻⁵	50			9	9	5			9	
10 ⁻⁶	57			10	10	9			10	
10 ⁻⁷	120								77	
10 ⁻⁸										



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	18	10	10	10	12	12			10	
10 ⁻²	27		10	10	14	13			10	
10 ⁻³	35		17	14	15	15			10	
10 ⁻⁴	47			18	17	17			10	
10 ⁻⁵	61				19	18			13	
10 ⁻⁶	75				33	20			24	
10 ⁻⁷										
10 ⁻⁸										



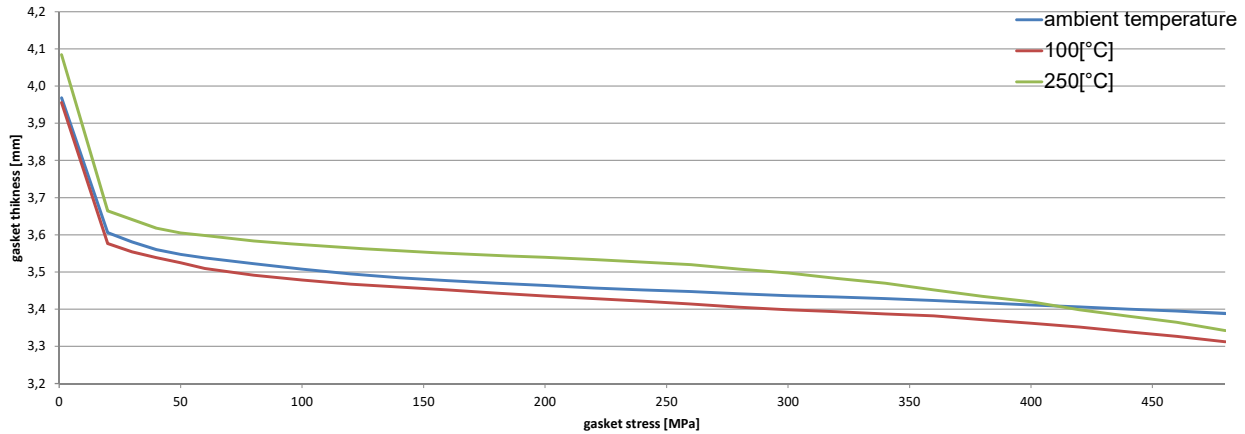
Note: the content of darkened cells was not determined respectively is unnecessary Rev - No: 3 Creation date of this sheet: 2018-09-21

Company Address	Kempchen Dichtungstechnik GmbH, Im Waldteich 21, 46049 Oberhausen, Germany	According to DIN EN 13555 2014-07
Gasket Type	Grooved gasket B7A / B9A / B15A PTFE unsintered (1.4541 / 0.35 mm)	
Sealing element dimensions [mm]	69 x 53 x 4.5 (WN 145, DIN 1514-6)	

Relaxation ratio P_{QR} for stiffness $C = 500$ kN/mm										
Gasket stress	ambient temperature		temperature 1 [100 °C]		temperature 2 [200 °C]		temperature 3 [250 °C]		P_{QR}	Δe_{Gc} [mm]
	P_{QR}	Δe_{Gc} [mm]	P_{QR}	Δe_{Gc} [mm]	P_{QR}	Δe_{Gc} [mm]	P_{QR}	Δe_{Gc} [mm]		
Stress level 1 [90 MPa]	0,99	0,004	0,84	0,044	0,70	0,083	0,63	0,102		
Stress level 2 [180 MPa]	0,98	0,014	0,86	0,077	0,83	0,094	0,80	0,113		
P_{QR} and Δe_{Gc} at maximal applicable gasket stress Q_{Smax}										
P_{QR} at Q_{Smax}	0,99	0,015	0,98	0,037	0,94	0,088	0,95	0,074		
Q_{Smax}	480 MPa		480 MPa		480 MPa		480 MPa			

Sekant unloading modulus of the gasket E_G [MPa] and gasket thickness e_G [mm]										
Gasket stress [MPa]	ambient temperature		temperature 1 [100 °C]		temperature 2 [250 °C]		E_G [MPa]	e_G [mm]	E_G [MPa]	e_G [mm]
	E_G [MPa]	e_G [mm]	E_G [MPa]	e_G [mm]	E_G [MPa]	e_G [mm]				
0		4,400		4,400		4,400				
1		3,969		3,956		4,085				
20	2811	3,606	3654	3,577	3788	3,665				
30	5150	3,581	5100	3,555	5302	3,642				
40	5672	3,560	6595	3,539	8376	3,618				
50	7891	3,548	7308	3,525	10594	3,605				
60	9737	3,538	6707	3,509	12320	3,598				
80	10969	3,523	9546	3,492	11937	3,584				
100	10125	3,508	15313	3,479	12607	3,573				
120	10746	3,495	15571	3,468	14528	3,565				
140	12307	3,484	15934	3,459	14744	3,557				
160	13384	3,477	17597	3,452	15158	3,550				
180	14903	3,470	17077	3,443	17713	3,545				
200	17490	3,464	17424	3,436	19717	3,540				
220	17954	3,457	18303	3,429	20088	3,534				
240	18757	3,452	19054	3,422	18239	3,527				
260	19402	3,448	20037	3,414	17529	3,520				
280	18961	3,441	17309	3,406	17236	3,508				
300	19344	3,437	16280	3,399	19616	3,497				
320	19232	3,433	16297	3,393	19098	3,483				
340	19503	3,428	16350	3,388	19963	3,470				
360	19361	3,424	18305	3,382	19083	3,452				
380	19469	3,418	17972	3,372	17404	3,435				
400	19426	3,412	18555	3,362	20493	3,420				
420	19487	3,406	20372	3,352	17966	3,399				
440	19662	3,400	21907	3,339	17960	3,381				
460	19748	3,395	20707	3,327	21484	3,365				
480	20301	3,389	19276	3,313	20583	3,343				

Gasket thickness e_G



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

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