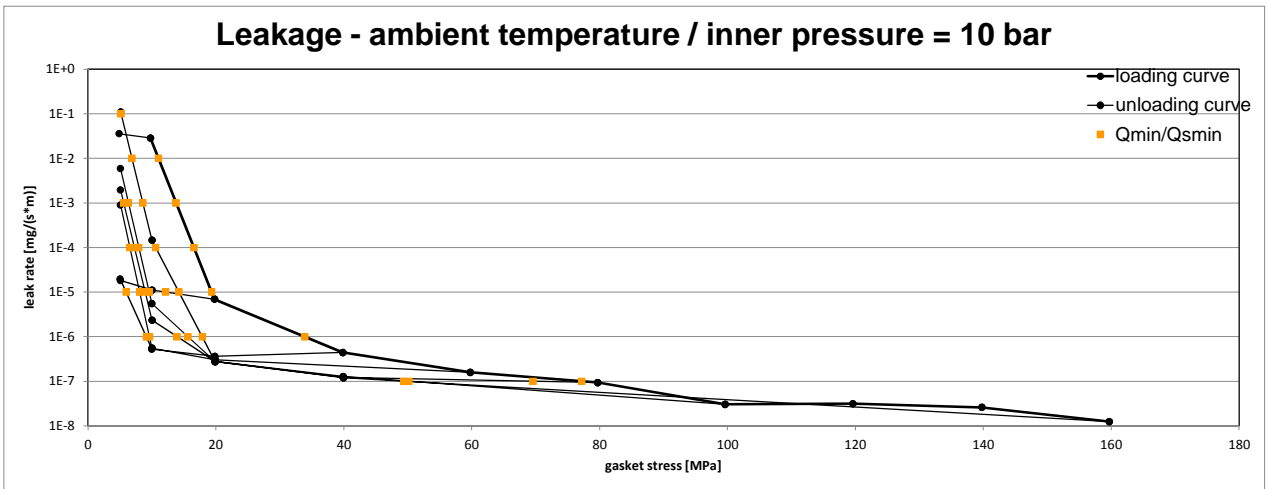
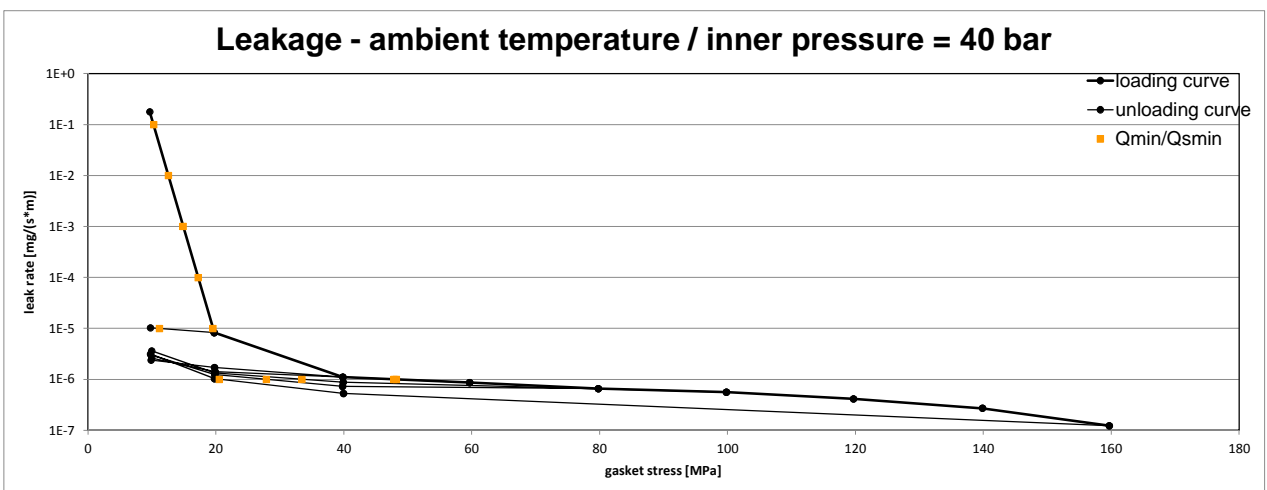


Company Address	Kempchen Dichtungstechnik GmbH, Im Waldteich 21, 46147 Oberhausen, Germany
Gasket Type	Grooved gasket B25A / B27A / B29A-PTFE unsintered (1.4541 / 0,35 mm)
Sealing element dimensions [mm]	53 / 69 x 4.8 (WN 145 , DIN 1514-6)

L [mg/(s*m)]	Q <sub>min/L</sub> [MPa]	Minimum stress to seal Q <sub>min/L</sub> (at assembly), Q <sub>Smin/L</sub> (after off-loading) for p = 10 bar								
		Q <sub>Smin/L</sub> [MPa]								
		Q <sub>A</sub> = 20 MPa	Q <sub>A</sub> = 40 MPa	Q <sub>A</sub> = 60 MPa	Q <sub>A</sub> = 80 MPa	Q <sub>A</sub> = 100 MPa	Q <sub>A</sub> = 120 MPa	Q <sub>A</sub> = 140 MPa	Q <sub>A</sub> = 160 MPa	
10 <sup>0</sup>	10	5	5	5	5	5			5	
10 <sup>-1</sup>	10	5	5	5	5	5			5	
10 <sup>-2</sup>	11	5	5	5	5	7			5	
10 <sup>-3</sup>	14	5	5	5	6	9			6	
10 <sup>-4</sup>	17	5	5	7	8	11			7	
10 <sup>-5</sup>	19	12	6	8	10	14			9	
10 <sup>-6</sup>	34		9	10	16	18			14	
10 <sup>-7</sup>	77				70	50			49	
10 <sup>-8</sup>										



L [mg/(s*m)]	Q <sub>min/L</sub> [MPa]	Minimum stress to seal Q <sub>min/L</sub> (at assembly), Q <sub>Smin/L</sub> (after off-loading) for p = 40 bar								
		Q <sub>Smin/L</sub> [MPa]								
		Q <sub>A</sub> = 20 MPa	Q <sub>A</sub> = 40 MPa	Q <sub>A</sub> = 60 MPa	Q <sub>A</sub> = 80 MPa	Q <sub>A</sub> = 100 MPa	Q <sub>A</sub> = 120 MPa	Q <sub>A</sub> = 140 MPa	Q <sub>A</sub> = 160 MPa	
10 <sup>0</sup>	10	10	10	10	10	10			10	
10 <sup>-1</sup>	10	10	10	10	10	10			10	
10 <sup>-2</sup>	13	10	10	10	10	10			10	
10 <sup>-3</sup>	15	10	10	10	10	10			10	
10 <sup>-4</sup>	17	10	10	10	10	10			10	
10 <sup>-5</sup>	20	11	10	10	10	10			10	
10 <sup>-6</sup>	48			48	28	33			21	



Note: the content of darkened cells was not determined respectively is unnecessary      Rev - No: 1      Creation date of this sheet: 20.01.2014



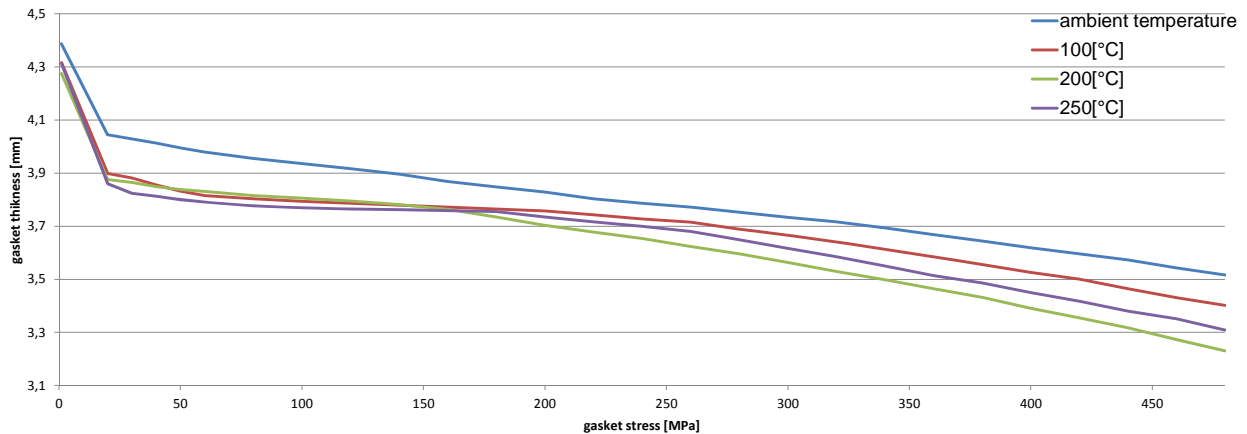
Company Address	Kempchen Dichtungstechnik GmbH, Im Waldteich 21, 46147 Oberhausen, Germany
Gasket Type	Grooved gasket B25A / B27A / B29A-PTFE unsintered (1.4541 / 0,35 mm)
Sealing element dimensions [mm]	53 / 69 x 4.8 (WN 145 , DIN 1514-6)

Relaxation ratio $P_{GR}$ for stiffness $C = 500$ kN/mm					
Gasket stress [MPa]	ambient temperature	temperature 1 [100 °C]	temperature 2 [200 °C]	temperature 3 [250 °C]	
Stress level 1 [50 MPa]	0,79	0,60	0,39	0,34	
PQR at $Q_{Smax}$	0,99 at 480 MPa	0,98 at 480 MPa	0,95 at 480 MPa	0,96 at 480 MPa	

Maximal applicable gasket stress $Q_{Smax}$				
$Q_{Smax}$ [MPa] ambient temperature	$Q_{Smax}$ [MPa] – temperature 1 [100 °C]	$Q_{Smax}$ [MPa] – temperature 2 [200 °C]	$Q_{Smax}$ [MPa] – temperature 3 [250 °C]	
480	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 [100 °C]		temperature 2 [200 °C]		temperature 3 [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]	
0									
1		4,387		4,316		4,275		4,312	
20	33784	4,045	8338	3,899	10861	3,875	6742	3,860	
30	59577	4,028	13114	3,881	23081	3,864	49604	3,824	
40	32660	4,013	19389	3,855	21646	3,849	25291	3,813	
50	79193	3,995	25168	3,832	52600	3,839	19686	3,800	
60	18016	3,979	48555	3,815	89824	3,831	17315	3,791	
80	103360	3,955	1055273	3,803	40845	3,816	28321	3,777	
100	35497	3,936	95961	3,794	55771	3,806	22949	3,770	
120	27895	3,917	86668	3,786	54738	3,794	24036	3,765	
140	24558	3,896	51443	3,780	63217	3,781	24550	3,762	
160	15626	3,868	49211	3,772	74375	3,763	25021	3,759	
180	20005	3,848	42020	3,765	38043	3,735	26999	3,755	
200	22210	3,829	38413	3,758	33777	3,703	18332	3,734	
220	17395	3,804	29283	3,743	42841	3,678	15017	3,716	
240	16847	3,787	29764	3,728	67587	3,654	21534	3,700	
260	19787	3,772	73800	3,715	33677	3,624	26479	3,680	
280	18368	3,752	35820	3,689	69210	3,596	21092	3,650	
300	17819	3,733	37122	3,666	45533	3,563	18465	3,617	
320	21476	3,716	34927	3,640	36306	3,529	20526	3,586	
340	20464	3,694	45206	3,613	40136	3,499	18467	3,550	
360	18751	3,668	32089	3,584	33000	3,465	20007	3,514	
380	19334	3,644	46214	3,557	53825	3,433	21408	3,487	
400	18790	3,619	52541	3,526	46024	3,391	22890	3,450	
420	21907	3,596	53058	3,501	55175	3,354	19676	3,417	
440	23577	3,573	41725	3,465	41862	3,317	20422	3,380	
460	19555	3,543	33139	3,431	55203	3,273	23705	3,351	
480	19273	3,516	46769	3,402	149064	3,231	21746	3,309	

### 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

