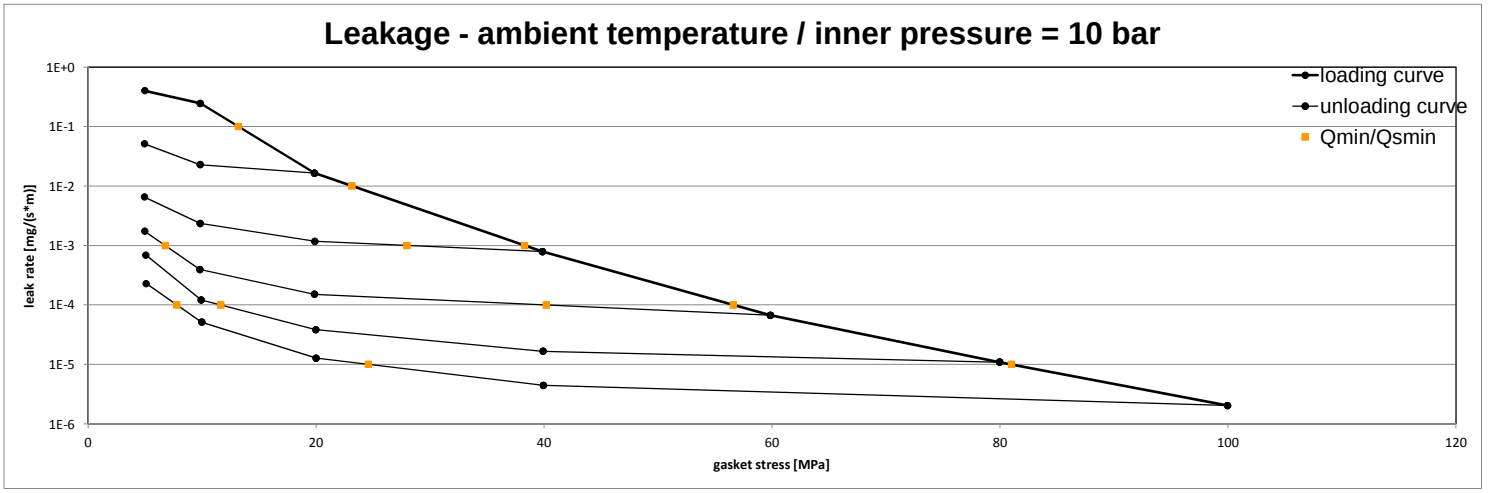
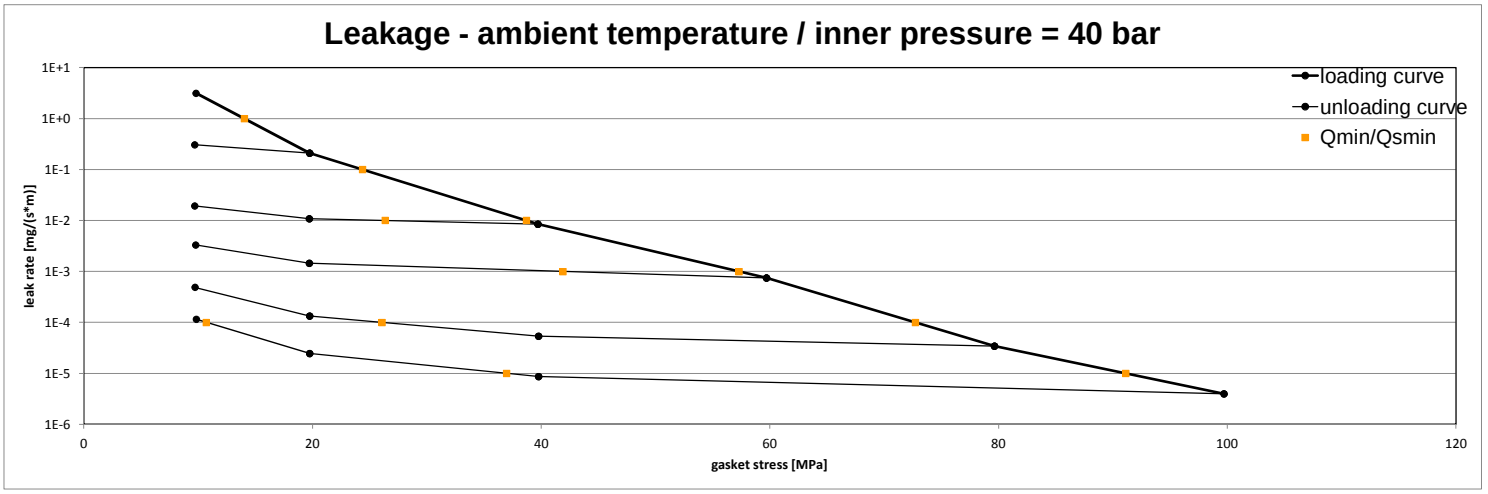
Company Address	*KLINGER® GmbH & Co. KG, Richard-Klinger-Straße 37, 65510 Idstein, Germany*
Gasket Type	*KLINGER® top-graph-2000*
Sealing element dimensions [mm]	*92 x 49 x 2*

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								
10^{-0}	5	5	5	5	5	5								
10^{-1}	13	5	5	5	5	5								
10^{-2}	23		5	5	5	5								
10^{-3}	38		28	7	5	5								
10^{-4}	57			40	12	8								
10^{-5}	81					25								
10^{-6}														
10^{-7}														
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								
10^{-0}	14	10	10	10	10	10								
10^{-1}	24		10	10	10	10								
10^{-2}	39		26	10	10	10								
10^{-3}	57			42	10	10								
10^{-4}	73				26	11								
10^{-5}	91					37								
10^{-6}														
10^{-7}														
10^{-8}														



Note: the content of darkened cells was not determined respectively is unnecessary	Rev - No: 1	Creation date of this sheet:	*03.07.2012*

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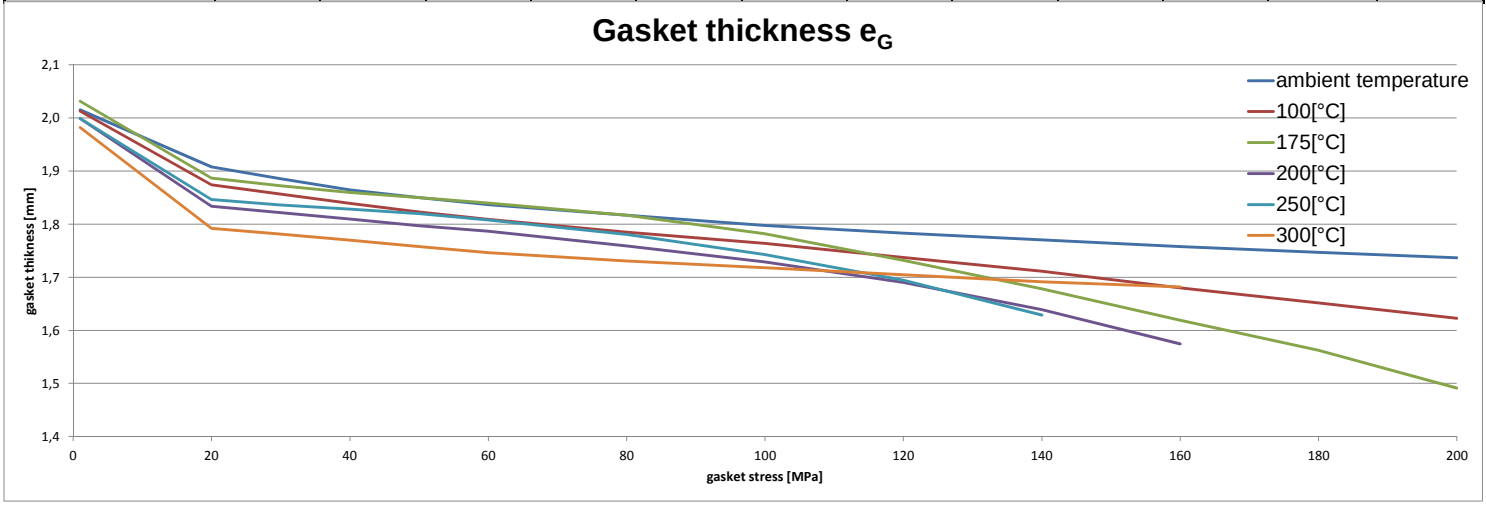
Company Address	*KLINGER® GmbH & Co. KG, Richard-Klinger-Straße 37, 65510 Idstein, Germany*
Gasket Type	*KLINGER® top-graph-2000*
Sealing element dimensions [mm]	*92 x 49 x 2*

Relaxation ratio P_{QR} for stiffness **C** = 500 kN/mm						
Gasket stress [MPa]	ambient temperature	temperature 1 [100 °C]	temperature 2 [175 °C]	temperature 3 [200 °C]	temperature 4 [250 °C]	temperature 5 [300 °C]
Stress level 1 [30 MPa]	0,96	0,83	0,79	0,77	0,71	0,61
Stress level 2 [50 MPa]	0,97	0,89	0,87	0,87	0,79	0,71
PQR at Q_{Smax}	0,99 *at 200 MPa*	0,91 *at 200 MPa*	0,85 *at 200 MPa*	0,80 *at 160 MPa*	0,75 *at 140 MPa*	0,36 *at 160 MPa*

Maximal applicable gasket stress Q_{Smax}					
Q_{Smax} [MPa] ambient temperature	Q_{Smax} [MPa] – temperature 1 [100 °C]	Q_{Smax} [MPa] – temperature 2 [175 °C]	Q_{Smax} [MPa] – temperature 3 [200 °C]	Q_{Smax} [MPa] – temperature 4 [250 °C]	Q_{Smax} [MPa] – temperature 5 [300 °C]
200	200	200	160	140	160

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 [175 °C]		temperature 3 [200 °C]		temperature 4 [250 °C]		temperature 5 [300 °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]	E_G [MPa]	e_G [mm]
0												
1		2,015		2,013		2,032		1,999		1,999		1,982
20	2632	1,908	1313	1,874	1617	1,887	1620	1,834	8350	1,846	2366	1,792
30	3923	1,886	2404	1,857	2243	1,872	2769	1,822	7234	1,836	4361	1,781
40	3336	1,864	4077	1,839	2887	1,860	4167	1,810	9698	1,828	10640	1,769
50	5771	1,850	3972	1,823	4132	1,850	3988	1,797	15989	1,820	8447	1,758
60	7377	1,837	4517	1,809	4801	1,840	5172	1,787	9627	1,808	5955	1,746
80	12917	1,817	5717	1,785	5698	1,817	4426	1,759	9640	1,781	5977	1,731
100	12728	1,798	8376	1,764	8259	1,782	5293	1,729	9954	1,743	8048	1,718
120	13711	1,783	8055	1,737	7576	1,732	6045	1,690	9743	1,695	8915	1,705
140	16267	1,770	8859	1,711	8784	1,678	7023	1,639	8311	1,628	8369	1,691
160	13677	1,757	7920	1,680	8230	1,619	6166	1,574			9562	1,682
180	14160	1,747	9672	1,652	8431	1,563						
200	14210	1,737	9939	1,623	8230	1,491						



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