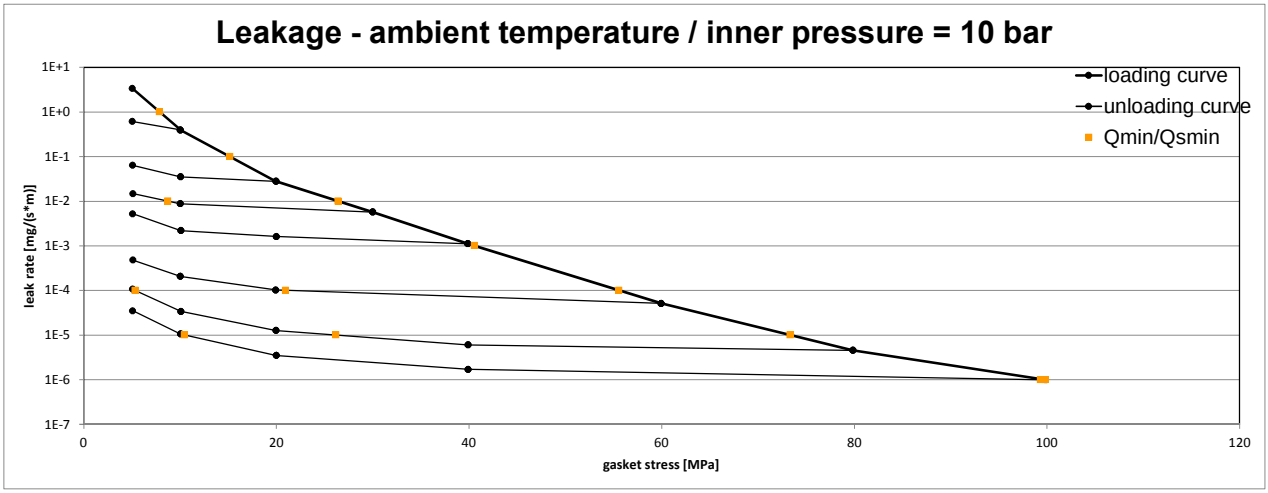
Company Address	KLINGER® GmbH & Co. KG, Richard-Klinger-Straße 37, 65510 Idstein, Germany	According to **DIN EN 13555 2014-07**
Gasket Type	*KLINGERSIL® C4430*	
Sealing element dimensions [mm]	*92*49*3*	

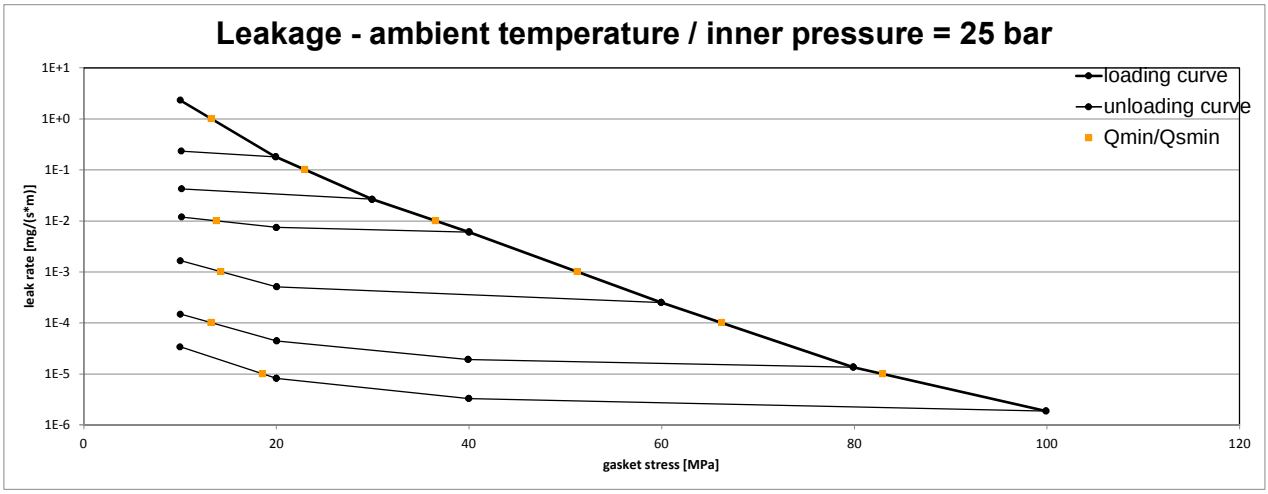
Minimum stress to seal $Q_{min/L}$ (at assembly), $Q_{Smin/L}$ (after off-loading) for p = 10 bar

L [mg/(s*m)]	$Q_{min/L}$ [MPa]	$Q_{Smin/L}$ [MPa]									
		Q_A= 10 MPa	Q_A= 20 MPa	Q_A= 30 MPa	Q_A= 40 MPa	Q_A= 60 MPa	Q_A= 80 MPa	Q_A= 100 MPa			
10^{-0}	8	5	5	5	5	5	5	5			
10^{-1}	15		5	5	5	5	5	5			
10^{-2}	26			9	5	5	5	5			
10^{-3}	41					5	5	5			
10^{-4}	56					21	5	5			
10^{-5}	73						26	10			
10^{-6}	100							99			



Minimum stress to seal $Q_{min/L}$ (at assembly), $Q_{Smin/L}$ (after off-loading) for p = 25 bar

L [mg/(s*m)]	$Q_{min/L}$ [MPa]	$Q_{Smin/L}$ [MPa]									
		Q_A= 20 MPa	Q_A= 30 MPa	Q_A= 40 MPa	Q_A= 60 MPa	Q_A= 80 MPa	Q_A= 100 MPa				
10^{-0}	13	10	10	10	10	10	10				
10^{-1}	23		10	10	10	10	10				
10^{-2}	37			14	10	10	10				
10^{-3}	51				14	10	10				
10^{-4}	66					13	10				
10^{-5}	83						19				

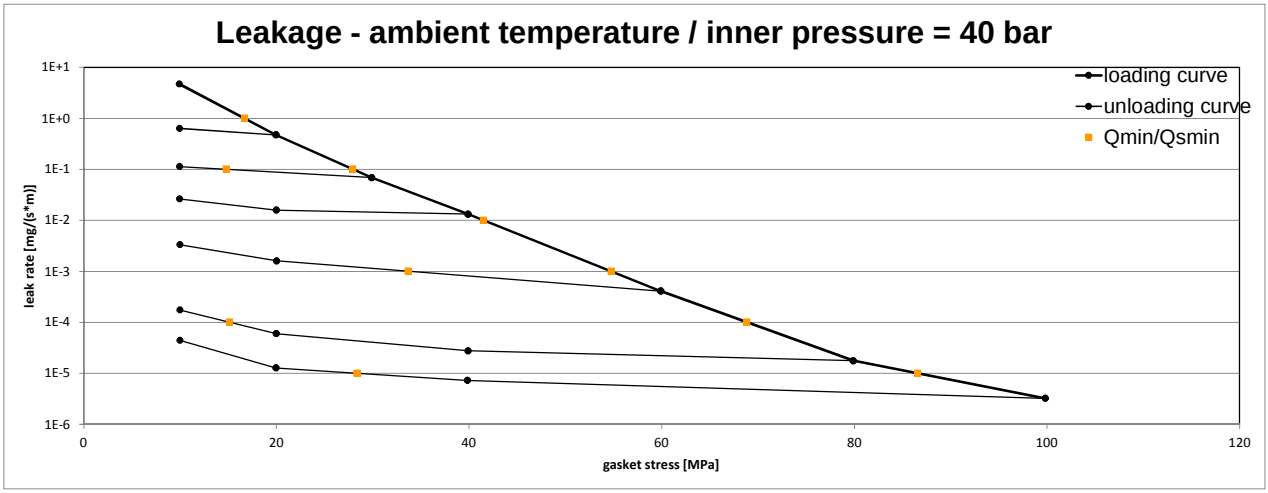


Note: the content of darkened cells was not determined respectively is unnecessary	Rev - No: **1**	Creation date of this sheet:	**2016-01-14**

Company Address	KLINGER® GmbH & Co. KG, Richard-Klinger-Straße 37, 65510 Idstein, Germany	According to **DIN EN 13555 2014-07**
Gasket Type	*KLINGERSIL® C4430*	
Sealing element dimensions [mm]	*92*49*3*	

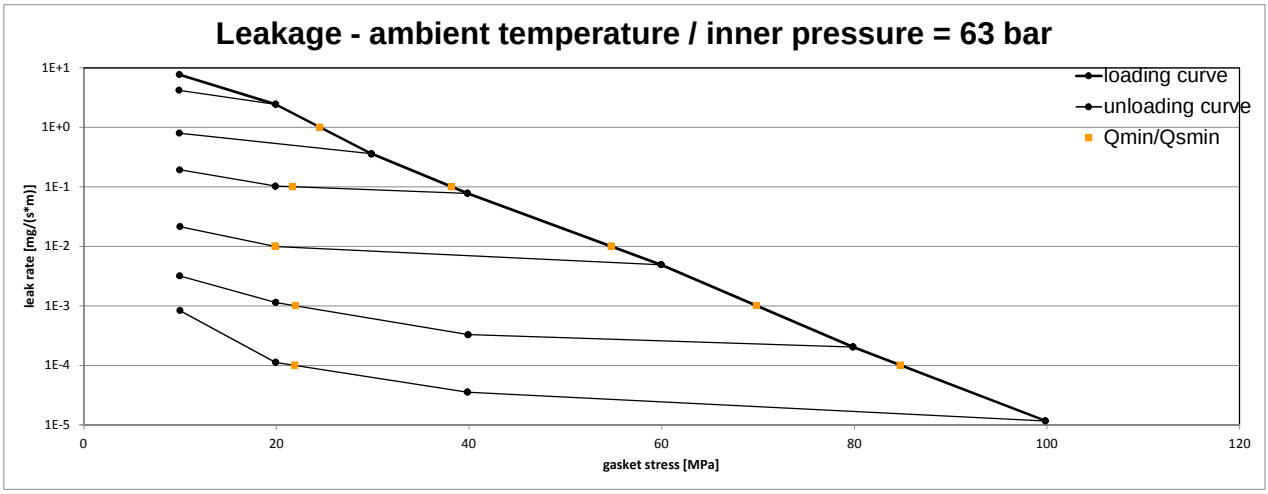
Minimum stress to seal $\mathbf{Q_{min/L}}$ (at assembly), $\mathbf{Q_{Smin/L}}$ (after off-loading) for p = 40 bar

L [mg/(s*m)]	$Q_{min/L}$ [MPa]	$Q_{Smin/L}$ [MPa]									
		Q_A= 20 MPa	Q_A= 30 MPa	Q_A= 40 MPa	Q_A= 60 MPa	Q_A= 80 MPa	Q_A= 100 MPa				
10^{-0}	17	10	10	10	10	10	10				
10^{-1}	28		15	10	10	10	10				
10^{-2}	42				10	10	10				
10^{-3}	55				34	10	10				
10^{-4}	69					15	10				
10^{-5}	87						28				



Minimum stress to seal $\mathbf{Q_{min/L}}$ (at assembly), $\mathbf{Q_{Smin/L}}$ (after off-loading) for p = 63 bar

L [mg/(s*m)]	$Q_{min/L}$ [MPa]	$Q_{Smin/L}$ [MPa]									
		Q_A= 20 MPa	Q_A= 30 MPa	Q_A= 40 MPa	Q_A= 60 MPa	Q_A= 80 MPa	Q_A= 100 MPa				
10^{-0}	25		10	10	10	10	10				
10^{-1}	38			22	10	10	10				
10^{-2}	55				20	10	10				
10^{-3}	70					22	10				
10^{-4}	85						22				



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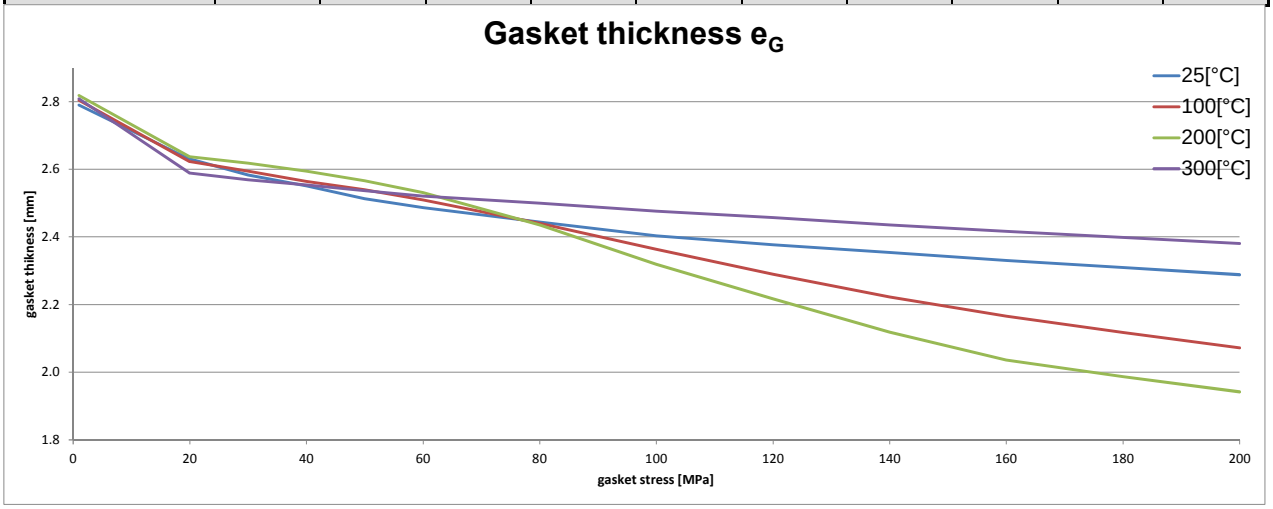
Company Address	KLINGER® GmbH & Co. KG, Richard-Klinger-Straße 37, 65510 Idstein, Germany	According to **DIN EN 13555 2014-07**
Gasket Type	KLINGERSIL® C4430	
Sealing element dimensions [mm]	92*49*3	

Relaxation ratio P_{QR} for stiffness **C** = 500 kN/mm										
Gasket stress	temperature 1 [25 °C]		temperature 2 [100 °C]		temperature 3 [200 °C]		temperature 4 [300 °C]			
	P_{QR}	Δe_{Gc} [mm]	P_{QR}	Δe_{Gc} [mm]	P_{QR}	Δe_{Gc} [mm]	P_{QR}	Δe_{Gc} [mm]		
Stress level 1 [30 MPa]	0.95	0.014	0.89	0.029	0.85	0.038	0.55	0.115		
Stress level 2 [50 MPa]	0.95	0.021	0.89	0.046	0.82	0.076	0.63	0.155		
P_{QR} and Δe_{Gc} at maximal applicable gasket stress Q_{smax}										
P_{QR} at Q_{Smax}	0.98	0.034	0.87	0.218	0.77	0.394	0.69	0.529		
Q_{Smax}	200 MPa		200 MPa		200 MPa		200 MPa			

Sekant unloading modulus of the gasket E_G [MPa] and gasket thickness e_G [mm]										
Gasket stress [MPa]	temperature 1 [25 °C]		temperature 2 [100 °C]		temperature 3 [200 °C]		temperature 4 [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]		
0		3.000		3.000		3.000		3.000		
1		2.790		2.804		2.818		2.809		
20	1473	2.631	2129	2.622	5406	2.637	10519	2.589		
30	1606	2.582	2605	2.594	3717	2.618	9718	2.569		
40	2726	2.551	2897	2.564	3598	2.594	8225	2.553		
50	2428	2.513	3860	2.539	3908	2.566	6997	2.536		
60	3514	2.487	3876	2.509	4451	2.531	6557	2.521		
80	4635	2.444	5009	2.440	4651	2.435	7291	2.499		
100	4634	2.403	4778	2.364	4844	2.319	6965	2.476		
120	6755	2.377	5613	2.290	4814	2.217	8330	2.457		
140	8367	2.354	5714	2.223	5206	2.118	7813	2.435		
160	7699	2.330	6272	2.165	5454	2.036	7711	2.416		
180	7971	2.309	6883	2.117	6162	1.986	8930	2.398		
200	8321	2.288	6596	2.072	5858	1.942	9486	2.381		



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