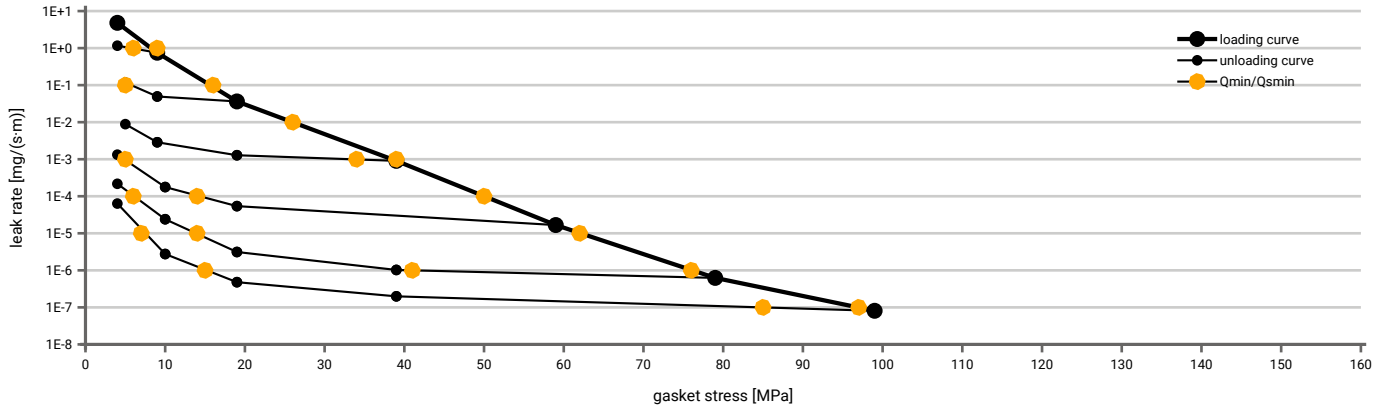
Manufacturer address	KLINGER GmbH, Richard Klinger Str. 37, 65510 Idstein, DE	According to DIN EN 13555 2005-2
Product name	KLINGERSIL® C 8200	
Product dimensions	92 x 49 x 2 mm (DIN EN 1514-1 1997-8)	

Minimum stress to seal $Q_{min(L)}$ (at assembly), $Q_{smin(L)}$ (after off-loading) for p = 10 bar (T = 23 ± 2 °C)

L [mg/(s·m)]	$Q_{min(L)}$ [MPa]	$Q_{smin(L)}$ [MPa]						
		Q_A = 5 [MPa]	Q_A = 10 [MPa]	Q_A = 20 [MPa]	Q_A = 40 [MPa]	Q_A = 60 [MPa]	Q_A = 80 [MPa]	Q_A = 100 [MPa]
1E+1	5		5	5	5	5	5	5
1E-0	9		7	5	5	5	5	5
1E-1	17			6	5	5	5	5
1E-2	27				5	5	5	5
1E-3	39				34	6	5	5
1E-4	51					15	7	5
1E-5	63						14	8
1E-6	77						42	16
1E-7	98							86
1E-8								

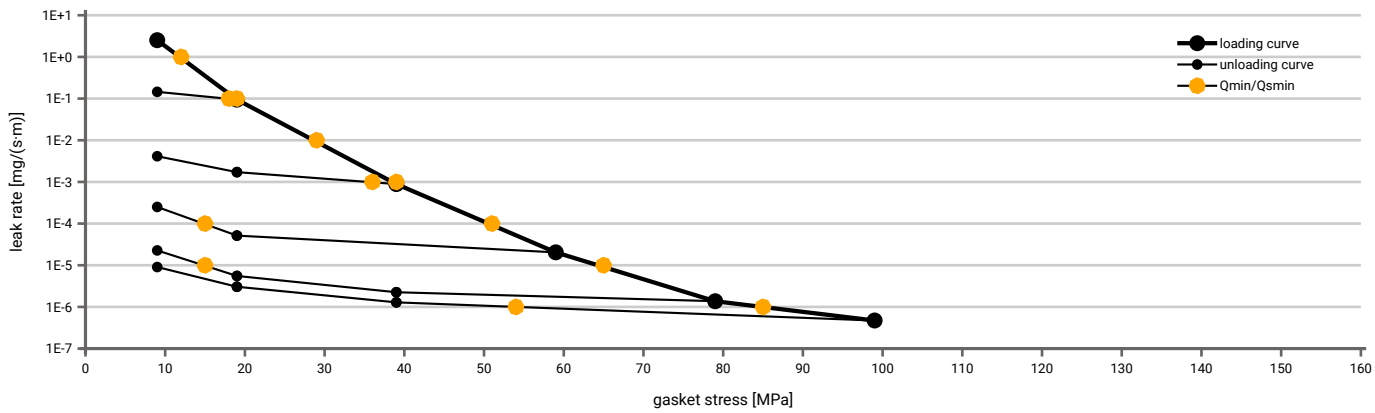
Leakage - 23 ± 2 °C / 10 bar



Minimum stress to seal $Q_{min(L)}$ (at assembly), $Q_{smin(L)}$ (after off-loading) for p = 40 bar (T = 23 ± 2 °C)

L [mg/(s·m)]	$Q_{min(L)}$ [MPa]	$Q_{smin(L)}$ [MPa]					
		Q_A = 9.8 [MPa]	Q_A = 20 [MPa]	Q_A = 40 [MPa]	Q_A = 60 [MPa]	Q_A = 80 [MPa]	Q_A = 100 [MPa]
1E+1	10		10	10	10	10	10
1E-0	13		10	10	10	10	10
1E-1	20		18	10	10	10	10
1E-2	29			10	10	10	10
1E-3	39			36	10	10	10
1E-4	51				16	10	10
1E-5	65					16	10
1E-6	86						55
1E-7							
1E-8							

Leakage - 23 ± 2 °C / 40 bar

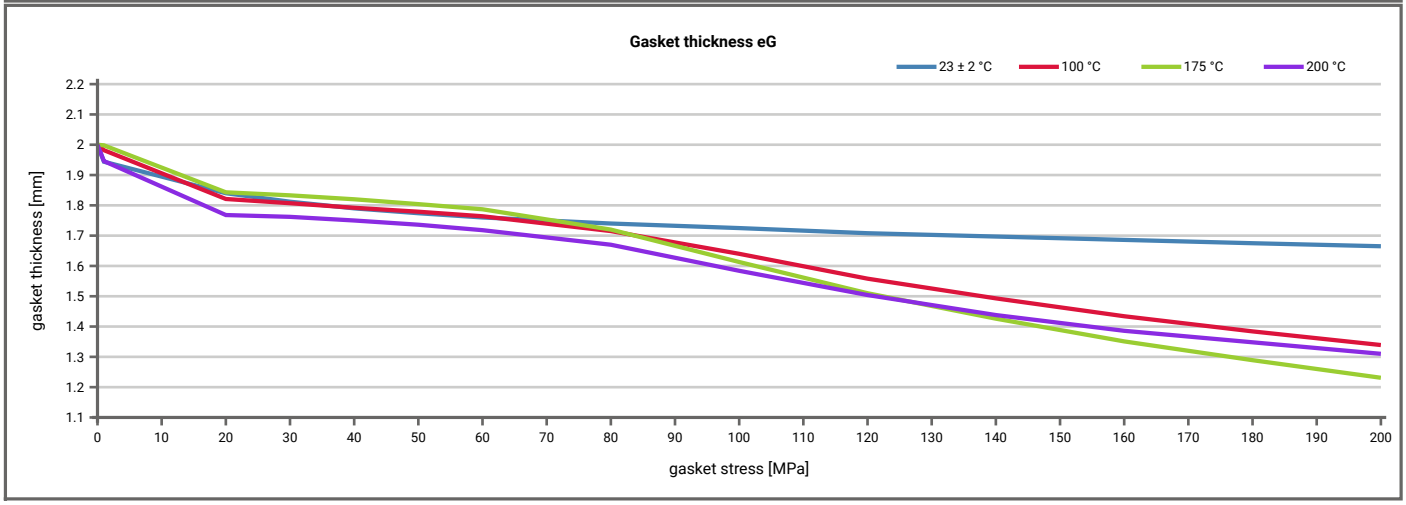


Note: the content of darkened cells was not determined respectively is unnecessary	Rev.-No.: **1**	Creation date of this sheet: **2012-07-03**

Manufacturer address	KLINGER GmbH, Richard Klinger Str. 37, 65510 Idstein, DE	According to **DIN EN 13555 2005-2**
Product name	KLINGERSIL® C 8200	
Product dimensions	92 x 49 x 2 mm (DIN EN 1514-1 1997-8)	

Relaxation ratio P_{QR} for stiffness C = 500 [kN/mm]										
Gasket stress	**23 ± 2 °C**		**Temperature 1 [100 °C]**		**Temperature 2 [175 °C]**		**Temperature 3 [200 °C]**			
	P_{QR}	**Δe_{Gc} [µm]**	**P_{QR}**	**Δe_{Gc} [µm]**	**P_{QR}**	**Δe_{Gc} [µm]**	**P_{QR}**	**Δe_{Gc} [µm]**	**P_{QR}**	**Δe_{Gc} [µm]**
Stress level 1 [25 MPa]	0.90	21	0.70	63	0.73	58	0.75	52		
Stress level 2 [40 MPa]	0.94	20	0.84	54	0.80	67	0.78	76		
P_{QR} and Δe_{Gc} at maximum gasket stress to be applied Q_{smax}										
P_{QR} at Q_{smax}	0.98	34	0.69	520	0.61	663	0.56	738		
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]	**23 ± 2 °C**		**Temperature 1 [100 °C]**		**Temperature 2 [175 °C]**		**Temperature 3 [200 °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	0	2.000	0	2.000	0	2.000	0	2.000		
1	0	1.944	0	1.982	0	1.998	0	1.946		
20	1922	1.840	2704	1.821	3888	1.843	2170	1.768		
30	2655	1.812	4009	1.807	3039	1.833	3287	1.762		
40	3741	1.790	5456	1.792	3136	1.820	3621	1.750		
50	6099	1.774	10265	1.779	3719	1.804	6110	1.736		
60	7703	1.760	7629	1.764	6442	1.787	5036	1.718		
80	11782	1.740	11675	1.715	9134	1.720	5802	1.670		
100	24228	1.725	8546	1.640	7950	1.613	5415	1.584		
120	10414	1.708	8046	1.558	8182	1.510	6116	1.504		
140	13794	1.697	11788	1.493	9693	1.426	5539	1.438		
160	20272	1.686	11680	1.434	6878	1.351	6050	1.386		
180	16058	1.675	10027	1.384	8049	1.289	8182	1.348		
200	13984	1.665	10893	1.339	8464	1.231	5584	1.310		



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