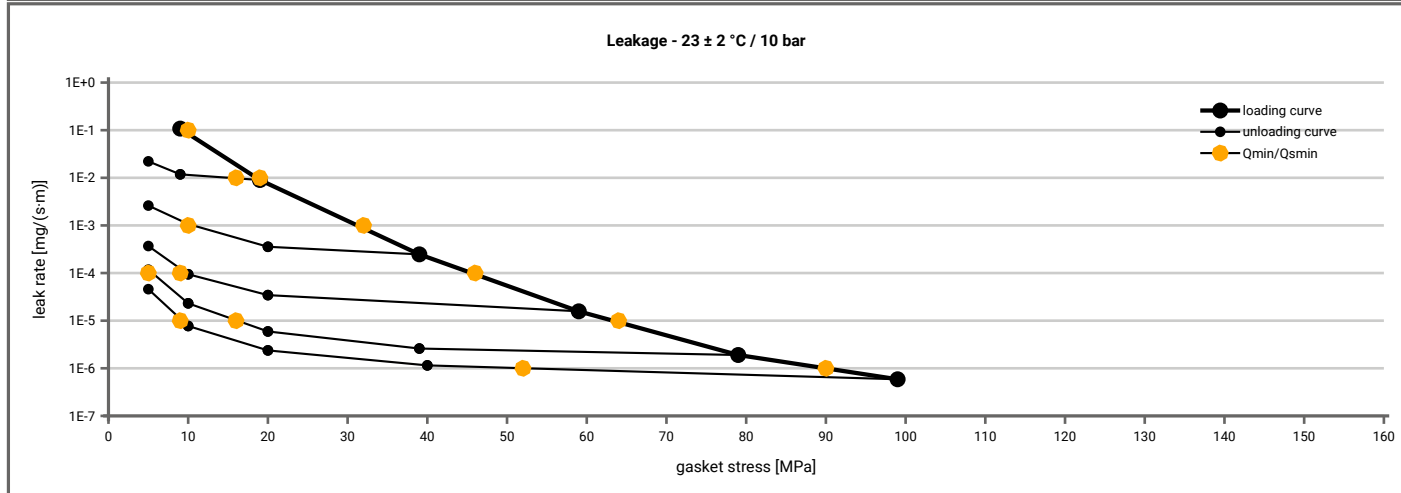
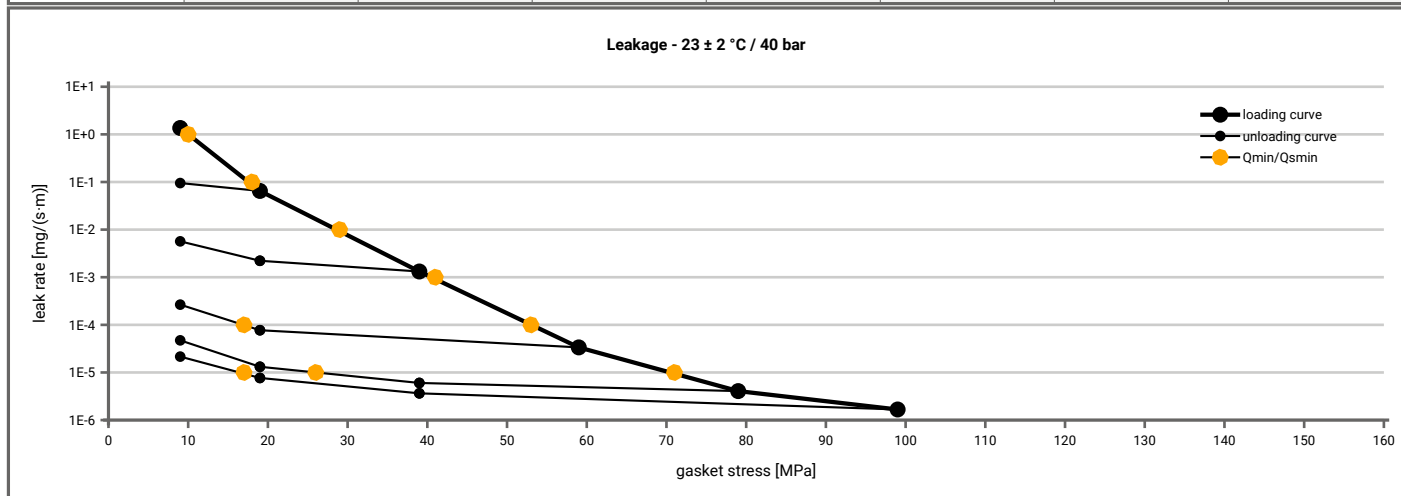


Manufacturer address	KLINGER GmbH, Richard Klinger Str. 37, 65510 Idstein, DE	According to DIN EN 13555 2005-2
Product name	KLINGERSIL® C 4430	
Product dimensions	92 x 49 x 2 mm (DIN EN 1514-1 1997-8)	

Minimum stress to seal $Q_{min(L)}$ (at assembly), $Q_{smin(L)}$ (after off-loading) for $p = 10$ bar ($T = 23 \pm 2$ °C)							
L [mg/(s·m)]	$Q_{min(L)}$ [MPa]	$Q_{smin(L)}$ [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-0	10		5	5	5	5	5
1E-1	10		5	5	5	5	5
1E-2	19		16	5	5	5	5
1E-3	32			11	5	5	5
1E-4	46				10	6	5
1E-5	64					16	9
1E-6	91						52
1E-7							
1E-8							



Minimum stress to seal $Q_{min(L)}$ (at assembly), $Q_{smin(L)}$ (after off-loading) for $p = 40$ bar ($T = 23 \pm 2$ °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	11		10	10	10	10	10
1E-1	18		10	10	10	10	10
1E-2	29			10	10	10	10
1E-3	41				10	10	10
1E-4	54				18	10	10
1E-5	71					27	17
1E-6							
1E-7							
1E-8							

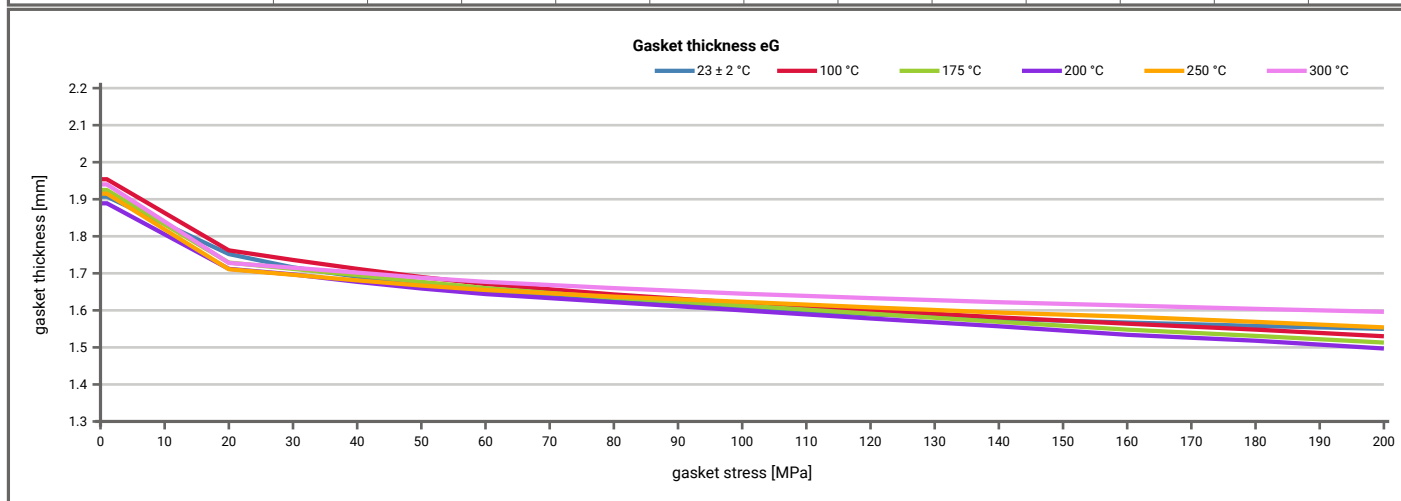


Note: the content of darkened cells was not determined respectively is unnecessary	Rev.-No.: 1	Creation date of this sheet: 2012-07-03
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Manufacturer address	KLINGER GmbH, Richard Klinger Str. 37, 65510 Idstein, DE	According to DIN EN 13555 2005-2
Product name	KLINGERSIL® C 4430	
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]		Temperature 4 [250 °C]		Temperature 5 [300 °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]	P _{QR}	Δe _{Gc} [μm]
Stress level 1 [30 MPa]	0.96	10	0.89	28	0.85	38	0.82	45	0.79	53	0.66	87
Stress level 2 [50 MPa]	0.96	17	0.93	29	0.92	36	0.91	40	0.86	59	0.79	90
P _{QR} and Δe _{Gc} at maximum gasket stress to be applied Q _{smax}												
P _{QR} at Q _{smax}	0.99	17	0.94	101	0.91	159	0.90	168	0.88	201	0.86	243
Q _{smax}	200 MPa		200 MPa		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]		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	0	1.907	0	1.954	0	1.925	0	1.889	0	1.915	0	1.940
1	0	1.907	0	1.954	0	1.925	0	1.889	0	1.915	0	1.940
20	1210	1.752	1436	1.762	1983	1.729	1990	1.712	2273	1.711	6810	1.728
30	1768	1.716	1790	1.736	2258	1.712	3683	1.697	3298	1.696	5337	1.715
40	3015	1.691	2725	1.712	3498	1.695	2746	1.677	5241	1.681	5347	1.702
50	4169	1.671	3265	1.690	3724	1.677	3906	1.659	4057	1.667	4934	1.688
60	4668	1.651	3989	1.671	3836	1.660	5729	1.644	7982	1.655	7452	1.677
80	11940	1.625	4984	1.643	4546	1.634	7336	1.622	7706	1.637	6117	1.660
100	13194	1.605	5644	1.620	5288	1.613	9280	1.600	12757	1.623	6078	1.645
120	10754	1.589	6691	1.601	6042	1.591	7341	1.578	11642	1.608	7072	1.633
140	14967	1.577	6635	1.581	5920	1.569	8404	1.557	10228	1.594	8684	1.622
160	14964	1.567	7027	1.564	6502	1.548	7975	1.534	14201	1.583	9643	1.613
180	14280	1.558	9764	1.548	7772	1.531	10433	1.518	10645	1.569	9271	1.604
200	14791	1.550	9764	1.530	9440	1.513	9703	1.497	9275	1.554	9831	1.596



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