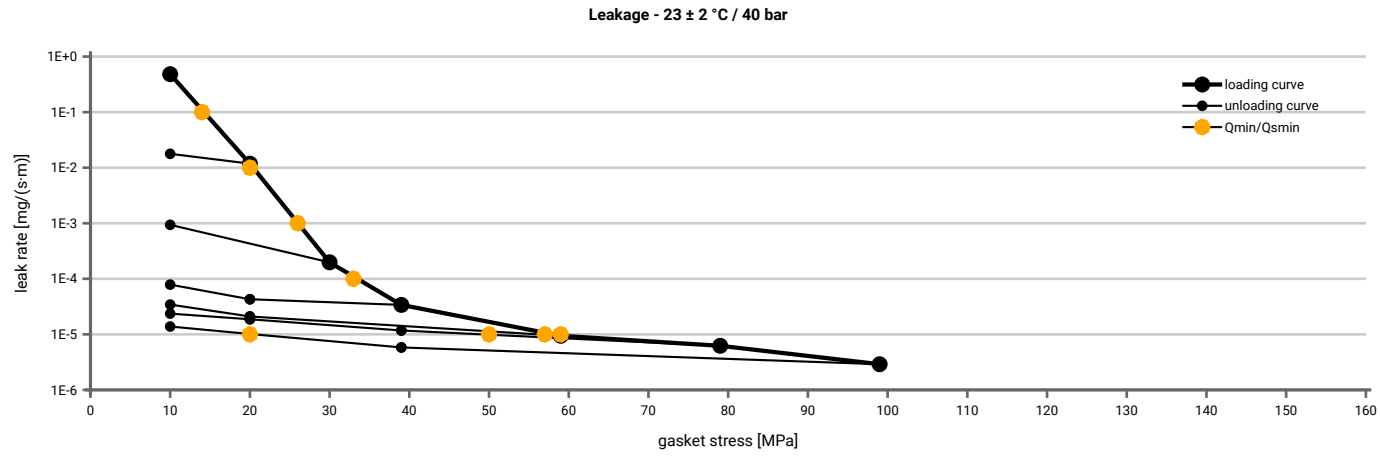
Manufacturer address	Eynard Robin, Groupe EFIRE, BP. 80045, 69191 ST-FONS Cedex, FR	According to **DIN EN 13555 2014-7**
Product name	KLINGER® top-chem3210	
Product dimensions	92 x 49 x 2 mm (DIN EN 1514-1 1997-8)	

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

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]
1E-0	10		10	10	10	10	10	10
1E-1	14		10	10	10	10	10	10
1E-2	20			10	10	10	10	10
1E-3	26			10	10	10	10	10
1E-4	34				10	10	10	10
1E-5	59					57	50	21
1E-6								
1E-7								
1E-8								

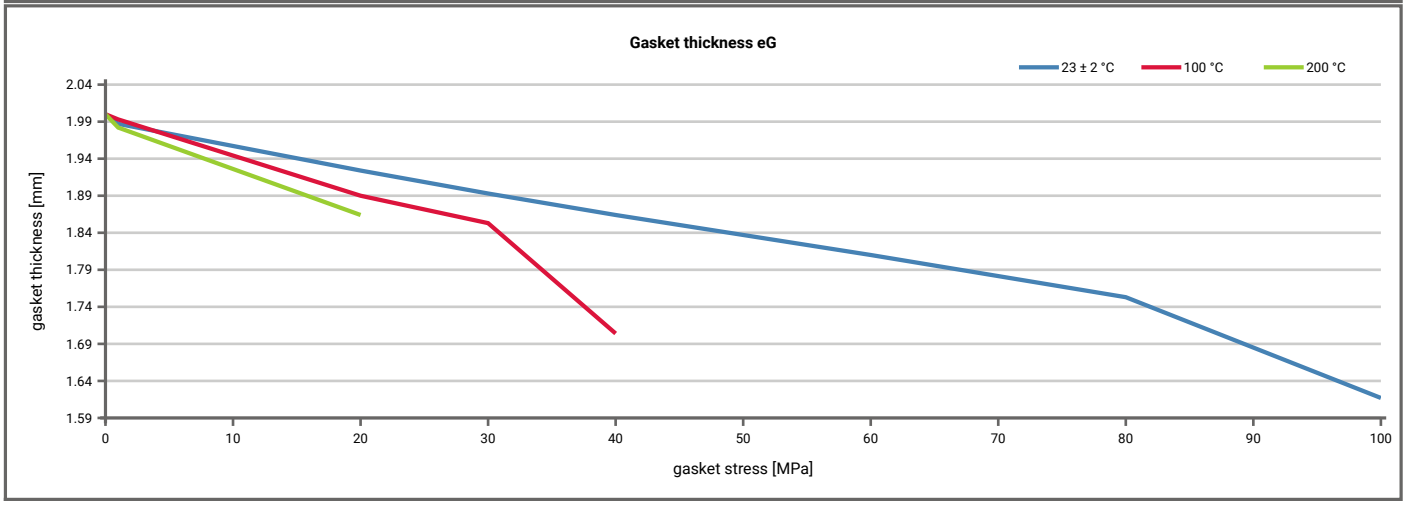


Note: the content of darkened cells was not determined respectively is unnecessary	Rev.-No.: **2**	Creation date of this sheet: **2015-05-27**

Manufacturer address	Eynard Robin, Groupe EFIRE, BP. 80045, 69191 ST-FONS Cedex, FR	According to **DIN EN 13555 2014-7**
Product name	KLINGER® top-chem3210	
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 [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 [10 MPa]	0.97	3	0.89	9	0.92	7				
Stress level 2 [20 MPa]	0.95	8	0.87	23	0.85	25				
P_{QR} and Δe_{Gc} at maximum gasket stress to be applied Q_{smax}										
P_{QR} at Q_{smax}	0.80	168	0.84	55	0.85	25				
Q_{smax}	100 MPa		40 MPa		20 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 [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				
1	0	1.987	0	1.993	0	1.982				
20	3065	1.924	3372	1.890	2464	1.864				
30	3474	1.893	3739	1.853						
40	4182	1.864	4017	1.704						
50	4804	1.837								
60	5410	1.810								
80	6504	1.753								
100	35875	1.617								



Note: the content of darkened cells was not determined respectively is unnecessary	Rev.-No.: **2**	Creation date of this sheet: **2015-05-27**