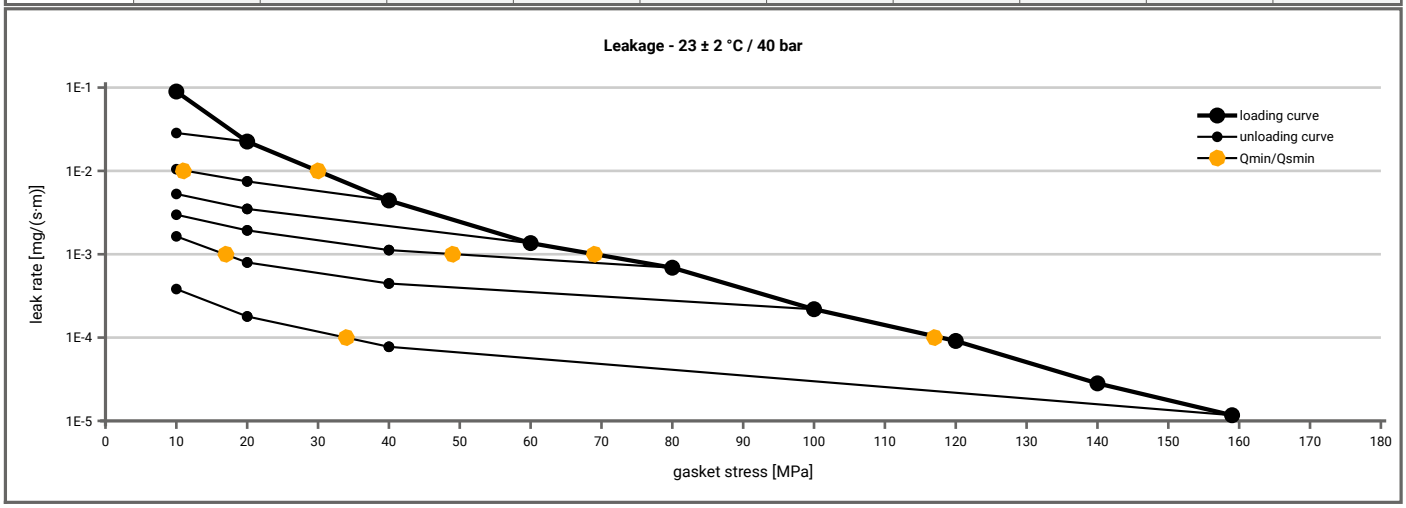
Manufacturer address	Kempchen Dichtungstechnik GmbH, Im Waldteich 21, 46147 Oberhausen, DE	According to **DIN EN 13555 2005-2**
Product name	A1 RHD2S305-I (316L / Graphit 99%)	
Product dimensions	92 x 49 x 2 mm (DIN EN 1514-1 1997-8)	

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 = 40 [MPa]	Q_A = 60 [MPa]	Q_A = 80 [MPa]	Q_A = 100 [MPa]	Q_A = 120 [MPa]	Q_A = 140 [MPa]	Q_A = 160 [MPa]
1E-0	10		10	10	10	10	10			10
1E-1	10		10	10	10	10	10			10
1E-2	30			12	10	10	10			10
1E-3	69					50	17			10
1E-4	118									34
1E-5										
1E-6										
1E-7										
1E-8										

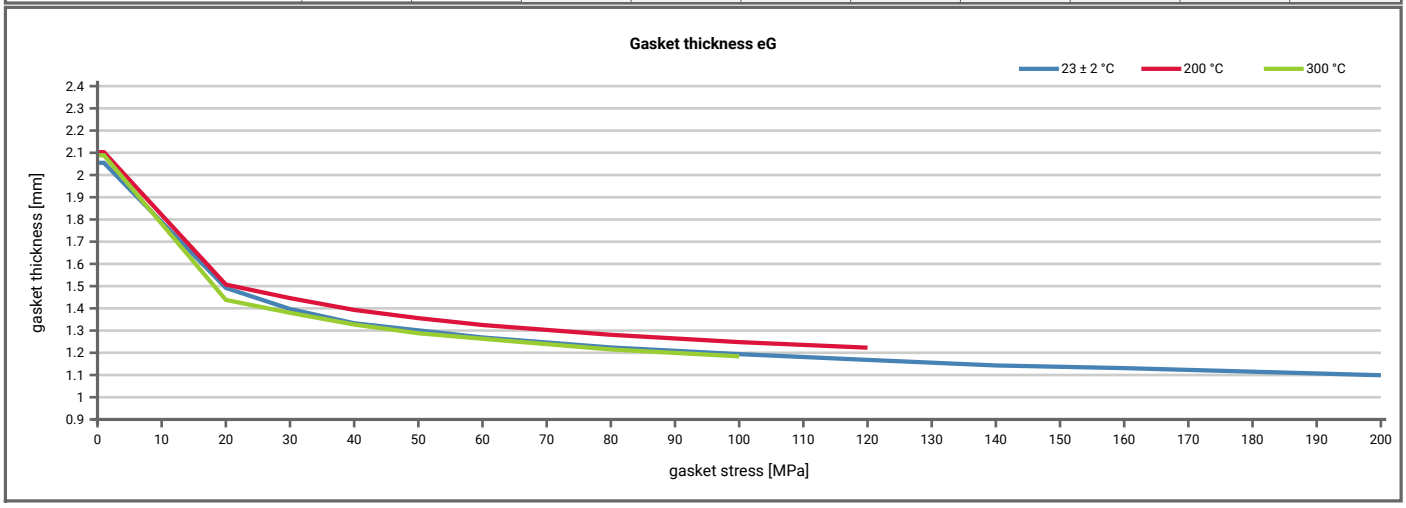


Note: the content of darkened cells was not determined respectively is unnecessary	Rev.-No.: **1**	Creation date of this sheet: **2014-01-08**

Manufacturer address	Kempchen Dichtungstechnik GmbH, Im Waldteich 21, 46147 Oberhausen, DE	According to **DIN EN 13555 2005-2**
Product name	A1 RHD2S305-I (316L / Graphit 99%)	
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 [200 °C]**		**Temperature 2 [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]**
Stress level 1 [30 MPa]	0.94	15	0.95	13	0.96	11				
Stress level 2 [50 MPa]	0.99	6	0.90	42	0.87	57				
P_{QR} and Δe_{Gc} at maximum gasket stress to be applied Q_{smax}										
P_{QR} at Q_{smax}	1.00	9	0.96	40	0.94	55				
Q_{smax}	210 MPa		120 MPa		100 MPa					

Sekant unloading modulus of the gasket E_G [MPa] and gasket thickness e_G [mm]										
Gasket stress [MPa]	**23 ± 2 °C**		**Temperature 1 [200 °C]**		**Temperature 2 [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]**
0	0	2.055	0	2.103	0	2.089				
1	0	2.055	0	2.103	0	2.089				
20	419	1.492	469	1.507	495	1.438				
30	672	1.397	734	1.446	672	1.380				
40	793	1.333	1068	1.393	867	1.327				
50	1440	1.301	1186	1.356	1178	1.288				
60	1422	1.269	1654	1.325	1636	1.263				
80	2122	1.224	2169	1.281	1748	1.215				
100	2768	1.194	2525	1.248	2545	1.184				
120	2960	1.168	3097	1.223						
140	2836	1.143								
160	3974	1.131								
180	4561	1.115								
200	4066	1.099								



Note: the content of darkened cells was not determined respectively is unnecessary	Rev.-No.: **1**	Creation date of this sheet: **2014-01-08**