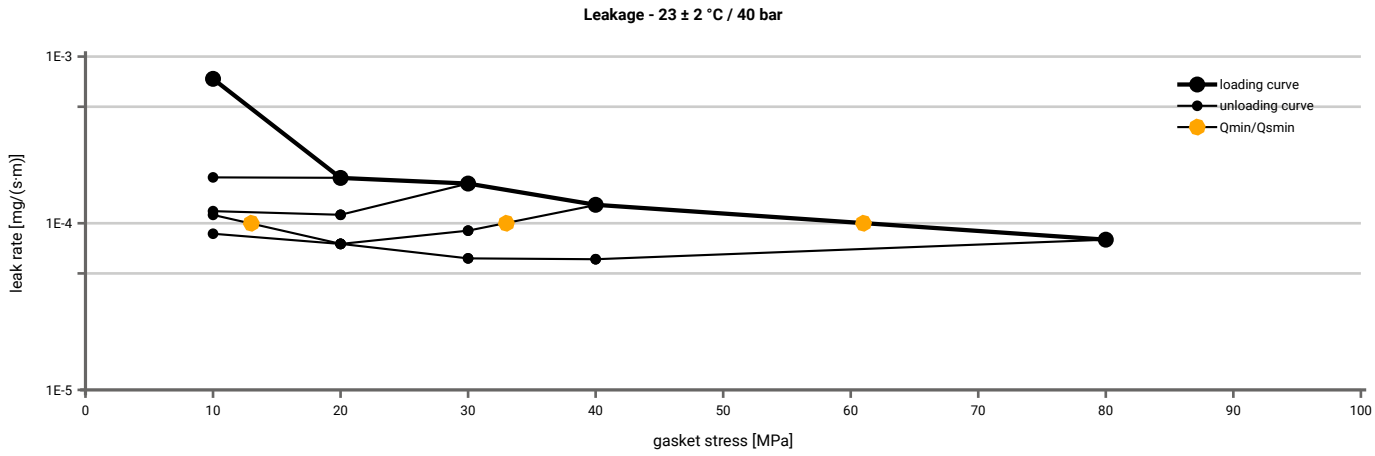
Manufacturer address	Flexitallic Ltd., Cleckheaton, BD19 4LN West Yorkshire, GB	According to **DIN EN 13555 2014-7**
Product name	Sigma 500 (PTFE with Glass Microsphere filler)	
Product dimensions	92 x 49 x 2 mm (DIN EN 1514-1 1997-8)	

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 = 80 [MPa]
1E-0	10		10	10	10	10
1E-1	10		10	10	10	10
1E-2	10		10	10	10	10
1E-3	10		10	10	10	10
1E-4	61				33	13
1E-5						
1E-6						
1E-7						
1E-8						

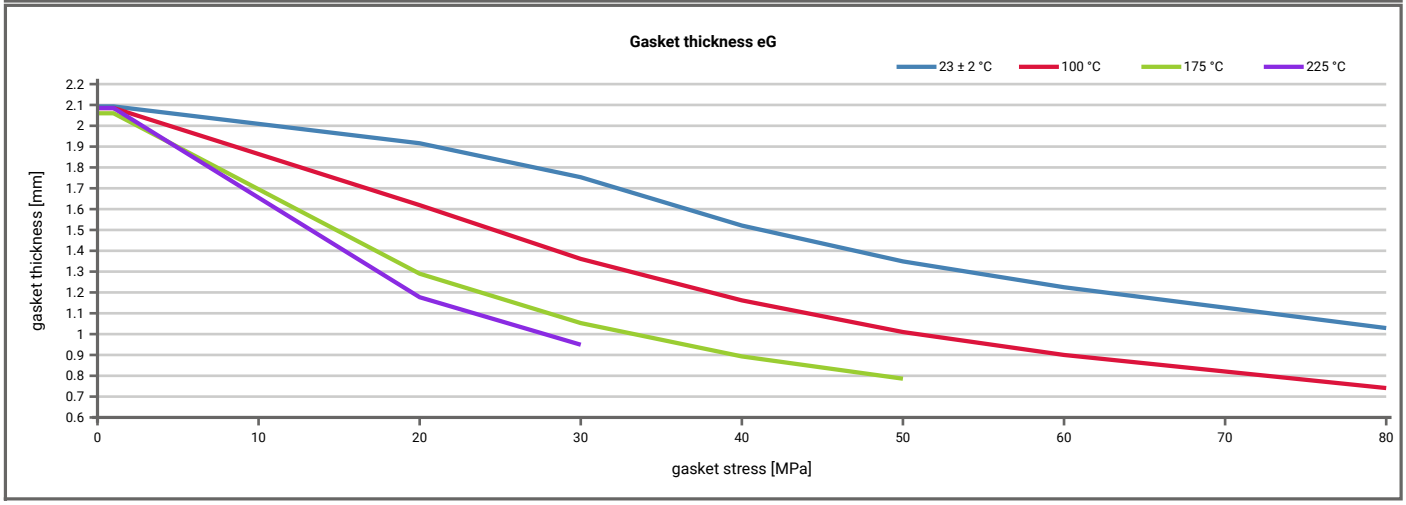


Note: the content of darkened cells was not determined respectively is unnecessary	Rev.-No.: **1**	Creation date of this sheet: **2018-09-26**

Manufacturer address	Flexitallic Ltd., Cleckheaton, BD19 4LN West Yorkshire, GB	According to **DIN EN 13555 2014-7**
Product name	Sigma 500 (PTFE with Glass Microsphere filler)	
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 [225 °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]	0.86	35	0.60	102	0.41	149	0.35	165		
Stress level 2 [50 MPa]	0.90	44	0.66	143	0.52	201				
P_{QR} and Δe_{Gc} at maximum gasket stress to be applied Q_{smax}										
P_{QR} at Q_{smax}	0.92	57	0.76	164	0.52	201	0.35	165		
Q_{smax}	80 MPa		80 MPa		50 MPa		30 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 [225 °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	2.093	0	2.085	0	2.060	0	2.085		
1	0	2.093	0	2.085	0	2.060	0	2.085		
20	958	1.916	512	1.619	469	1.290	489	1.177		
30	917	1.753	882	1.361	841	1.053	704	0.949		
40	1321	1.521	1339	1.162	1030	0.893				
50	1514	1.349	1550	1.010	1243	0.786				
60	2068	1.225	1655	0.900						
80	3216	1.029	2157	0.741						



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