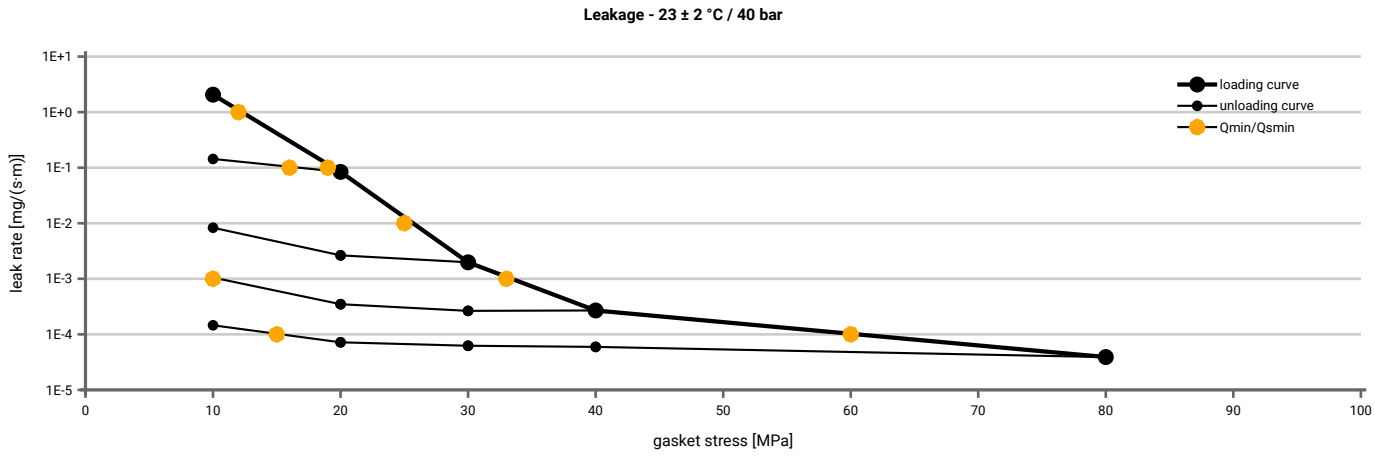
Manufacturer address	Flexitallic Ltd., Cleckheaton, BD19 4LN West Yorkshire, GB	According to **DIN EN 13555 2014-7**
Product name	Sigma 511 (Biaxally Orientated PTFE with Silica filler)	
Product dimensions	92 x 49 x 3 mm (DIN EN 1514-1 1997-8)	

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+1	10		10	10	10	10
1E-0	12		10	10	10	10
1E-1	19		17	10	10	10
1E-2	26			10	10	10
1E-3	33				11	10
1E-4	61					15
1E-5						
1E-6						
1E-7						

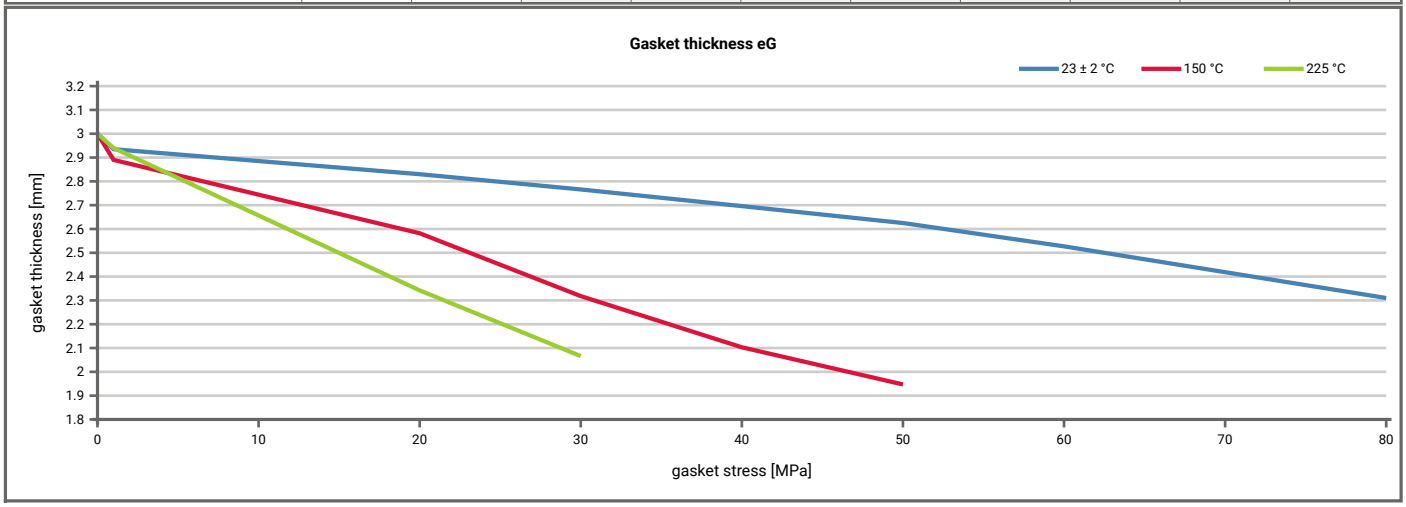


Note: the content of darkened cells was not determined respectively is unnecessary	Rev.-No.: **2**	Creation date of this sheet: **2024-02-28**

Manufacturer address	Flexitallic Ltd., Cleckheaton, BD19 4LN West Yorkshire, GB	According to **DIN EN 13555 2014-7**
Product name	Sigma 511 (Biaxally Orientated PTFE with Silica filler)	
Product dimensions	92 x 49 x 3 mm (DIN EN 1514-1 1997-8)	

Relaxation ratio P_{QR} for stiffness C = 500 [kN/mm]										
Gasket stress	**23 ± 2 °C**		**Temperature 1 [150 °C]**		**Temperature 2 [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]	0.94	15	0.59	103	0.41	149				
Stress level 2 [50 MPa]	0.89	46	0.50	210						
P_{QR} and Δe_{Gc} at maximum gasket stress to be applied (Q_{smax})										
P_{QR} at Q_{smax}	0.87	91	0.50	210	0.41	149				
Q_{smax}	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 [150 °C]**		**Temperature 2 [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	3.000	0	3.000	0	3.000				
1	0	2.935	0	2.890	0	2.940				
20	2857	2.830	1959	2.582	940	2.342				
30	2480	2.766	2160	2.318	1363	2.066				
40	3037	2.696	2118	2.103						
50	3397	2.625	2913	1.947						
60	3981	2.527								
80	4697	2.310								



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