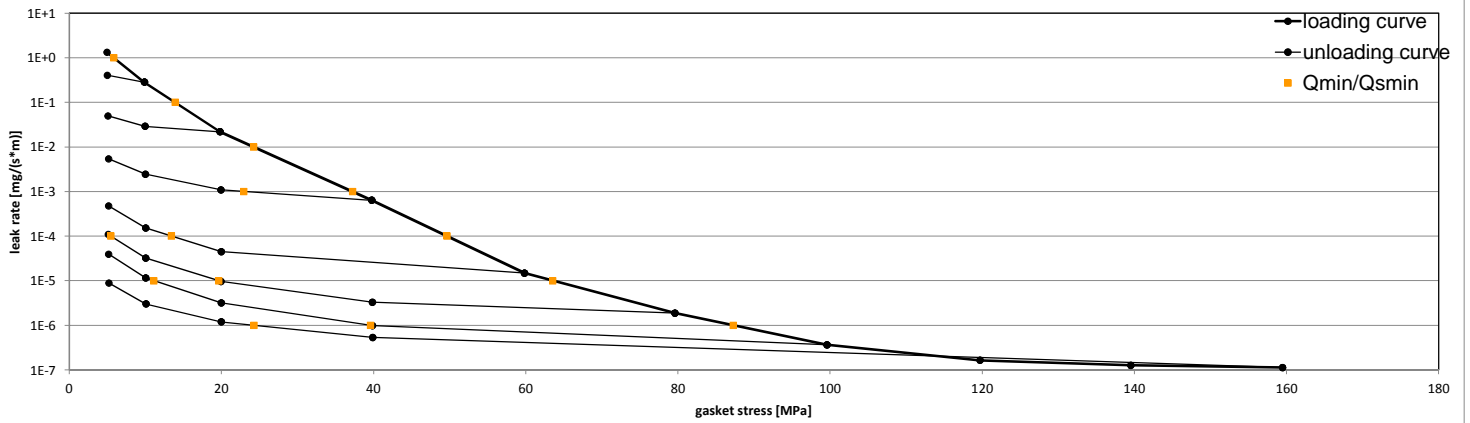


Company Address	James Walker & Co, Gote Brow, Cockermouth, Cumbria, CA13 0NH, UK
Gasket Type	SENTINEL
Sealing element dimensions [mm]	92 x 49 x 2

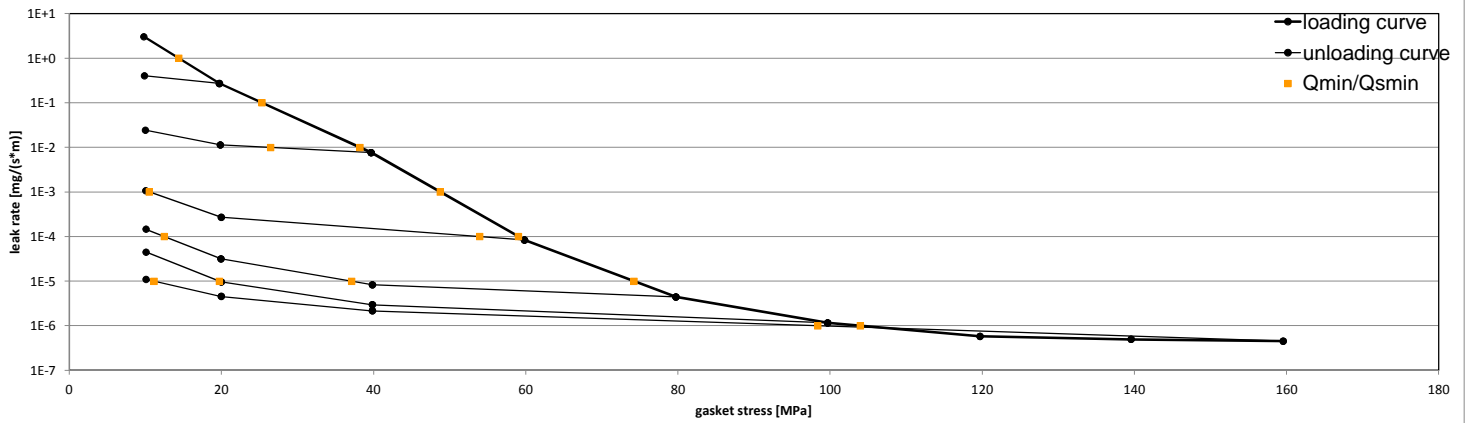
L [mg/(s*m)]	Q _{min/L} [MPa]	Minimum stress to seal Q _{min/L} (at assembly), Q _{Smin/L} (after off-loading) for p = 10 bar											
		Q _{Smin/L} [MPa]											
		Q _A = 10 MPa	Q _A = 20 MPa	Q _A = 40 MPa	Q _A = 60 MPa	Q _A = 80 MPa	Q _A = 100 MPa	Q _A = 120 MPa	Q _A = 140 MPa	Q _A = 160 MPa			
10 ⁻⁰	6	5	5	5	5	5	5			5			
10 ⁻¹	14		5	5	5	5	5			5			
10 ⁻²	24			5	5	5	5			5			
10 ⁻³	37			23	5	5	5			5			
10 ⁻⁴	50				13	5	5			5			
10 ⁻⁵	64					20	11			5			
10 ⁻⁶	87						40			24			

Leakage - ambient temperature / inner pressure = 10 bar



L [mg/(s*m)]	Q _{min/L} [MPa]	Minimum stress to seal Q _{min/L} (at assembly), Q _{Smin/L} (after off-loading) for p = 40 bar											
		Q _{Smin/L} [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				
10 ⁻⁰	14	10	10	10	10	10			10				
10 ⁻¹	25		10	10	10	10			10				
10 ⁻²	38		26	10	10	10			10				
10 ⁻³	49			11	10	10			10				
10 ⁻⁴	59			54	13	10			10				
10 ⁻⁵	74				37	20			11				
10 ⁻⁶	104								98				

Leakage - ambient temperature / inner pressure = 40 bar



Note: the content of darkened cells was not determined respectively is unnecessary

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Center of Sealing Technologies, Bürgerkamp 3, 48565 Steinfurt, Germany

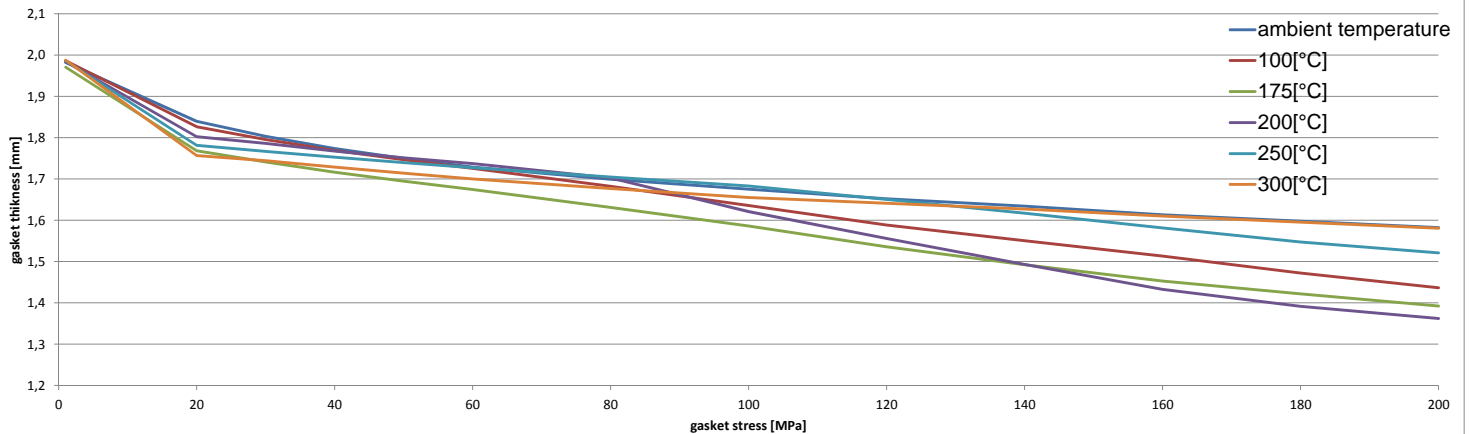
Company Address	James Walker & Co, Gote Brow, Cockermouth, Cumbria, CA13 0NH, UK
Gasket Type	SENTINEL
Sealing element dimensions [mm]	92 x 49 x 2

Relaxation ratio P_{QR} for stiffness $C = 500$ kN/mm						
Gasket stress [MPa]	ambient temperature	temperature 1 [100 °C]	temperature 2 [175 °C]	temperature 3 [200 °C]	temperature 4 [250 °C]	temperature 5 [300 °C]
Stress level 1 [30 MPa]	0,89	0,84	0,75	0,71	0,65	0,53
Stress level 2 [50 MPa]	0,93	0,88	0,83	0,82	0,76	0,70
PQR at Q_{Smax}	0,98 at 200 MPa	0,91 at 200 MPa	0,83 at 200 MPa	0,84 at 200 MPa	0,83 at 200 MPa	0,80 at 200 MPa

Maximal applicable gasket stress Q_{Smax}					
Q_{Smax} [MPa] ambient temperature	Q_{Smax} [MPa] – temperature 1 [100 °C]	Q_{Smax} [MPa] – temperature 2 [175 °C]	Q_{Smax} [MPa] – temperature 3 [200 °C]	Q_{Smax} [MPa] – temperature 4 [250 °C]	Q_{Smax} [MPa] – temperature 5 [300 °C]
200	200	200	200	200	200

Sekant unloading modulus of the gasket E_G [MPa] and gasket thickness e_G [mm]												
Gasket stress [MPa]	ambient temperature		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		2,100		2,100		2,000		2,100		2,100		2,050
1		1,983		1,987		1,971		1,984		1,986		1,988
20	788	1,840	885	1,827	1369	1,768	1428	1,803	2190	1,782	5739	1,757
30	1252	1,804	1358	1,796	1524	1,741	2086	1,786	2600	1,767	4999	1,744
40	2001	1,774	2173	1,769	2153	1,717	2287	1,768	2827	1,753	3821	1,729
50	2215	1,750	2397	1,747	2336	1,694	2713	1,752	2933	1,740	3536	1,714
60	2524	1,729	2523	1,726	2656	1,674	2916	1,737	3243	1,727	3630	1,701
80	3202	1,700	2692	1,682	3146	1,631	3210	1,703	3055	1,705	3418	1,677
100	3505	1,675	3085	1,636	3484	1,586	2892	1,622	3363	1,683	3709	1,655
120	3940	1,653	3307	1,589	3499	1,536	3620	1,556	3107	1,651	4589	1,641
140	4021	1,634	4004	1,551	4032	1,493	3838	1,494	3984	1,617	4845	1,627
160	4096	1,614	4324	1,514	3884	1,453	3749	1,433	4228	1,582	4521	1,610
180	4408	1,598	3749	1,473	4722	1,422	4180	1,392	3960	1,548	4440	1,596
200	4635	1,582	3959	1,437	4430	1,393	4793	1,362	4392	1,521	4252	1,581

Gasket thickness e_G



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