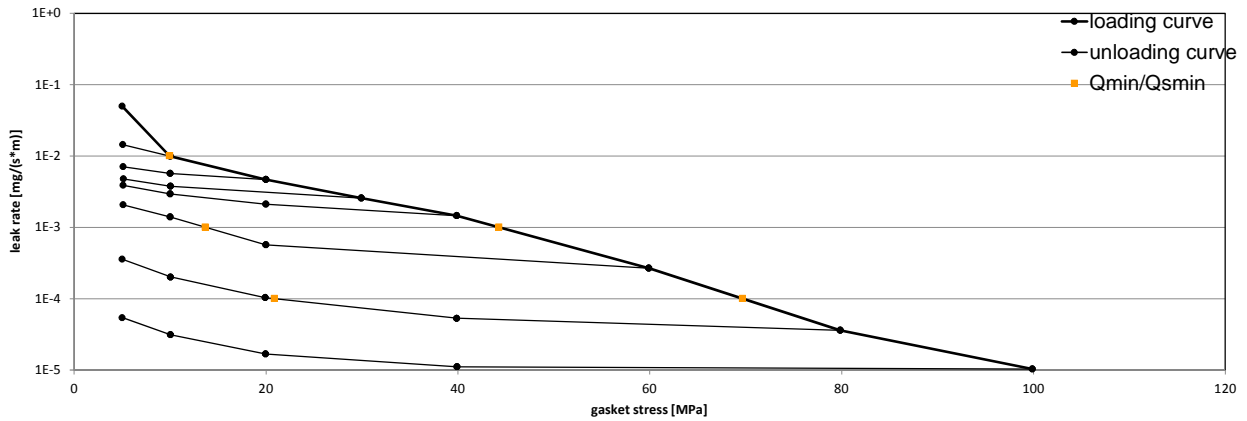


Company Address	KLINGER® GmbH & Co. KG, Richard-Klinger-Straße 37, 65510 Idstein, Germany	According to DIN EN 13555 2014-07
Gasket Type	KLINGER® top-chem2000	
Sealing element dimensions [mm]	92*49*3	

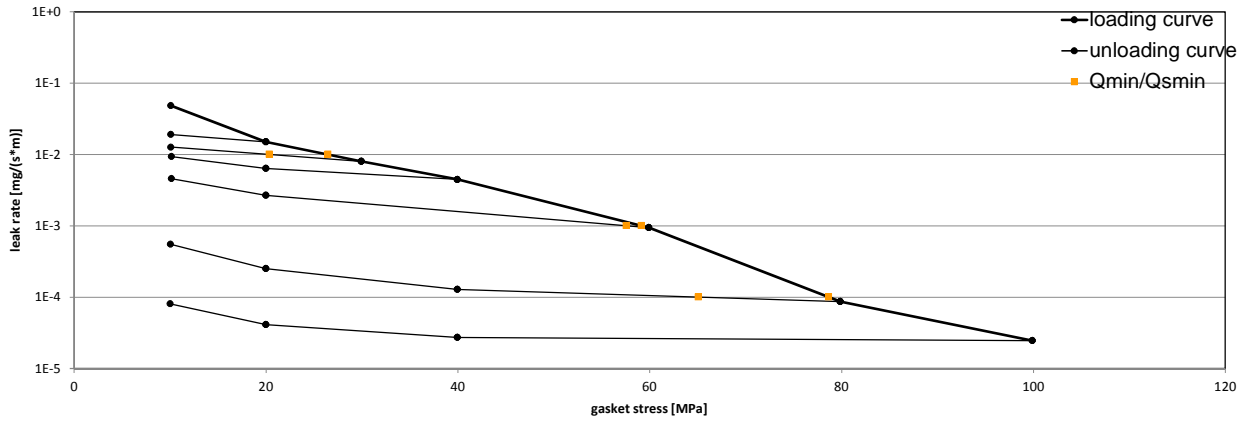
L [mg/(s*m)]	Q _{minL} [MPa]	Minimum stress to seal Q _{minL} (at assembly), Q _{SminL} (after off-loading) for p = 10 bar							
		Q _{SminL} [MPa]							
		Q _A = 10 MPa	Q _A = 20 MPa	Q _A = 30 MPa	Q _A = 40 MPa	Q _A = 60 MPa	Q _A = 80 MPa	Q _A = 100 MPa	
10 ⁰	5	5	5	5	5	5	5	5	
10 ⁻¹	5	5	5	5	5	5	5	5	
10 ⁻²	10	10	5	5	5	5	5	5	
10 ⁻³	44					14	5	5	
10 ⁻⁴	70						21	5	

Leakage - ambient temperature / inner pressure = 10 bar



L [mg/(s*m)]	Q _{minL} [MPa]	Minimum stress to seal Q _{minL} (at assembly), Q _{SminL} (after off-loading) for p = 25 bar					
		Q _{SminL} [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
10 ⁰	10	10	10	10	10	10	10
10 ⁻¹	10	10	10	10	10	10	10
10 ⁻²	26		20	10	10	10	10
10 ⁻³	59				58	10	10
10 ⁻⁴	79					65	10

Leakage - ambient temperature / inner pressure = 25 bar



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

Rev - No: 2

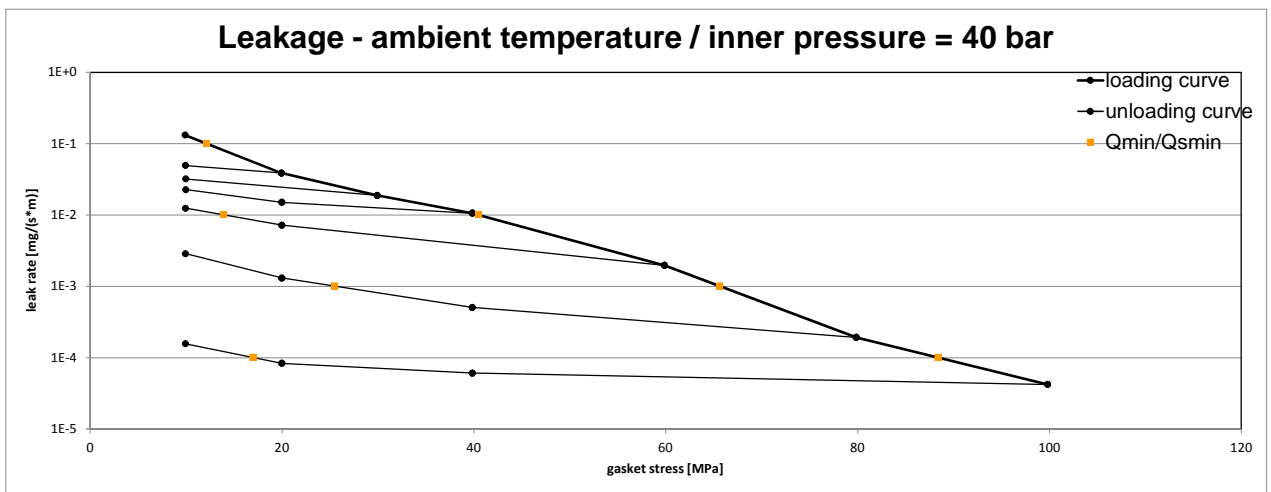
Creation date of this sheet:

2016-03-02

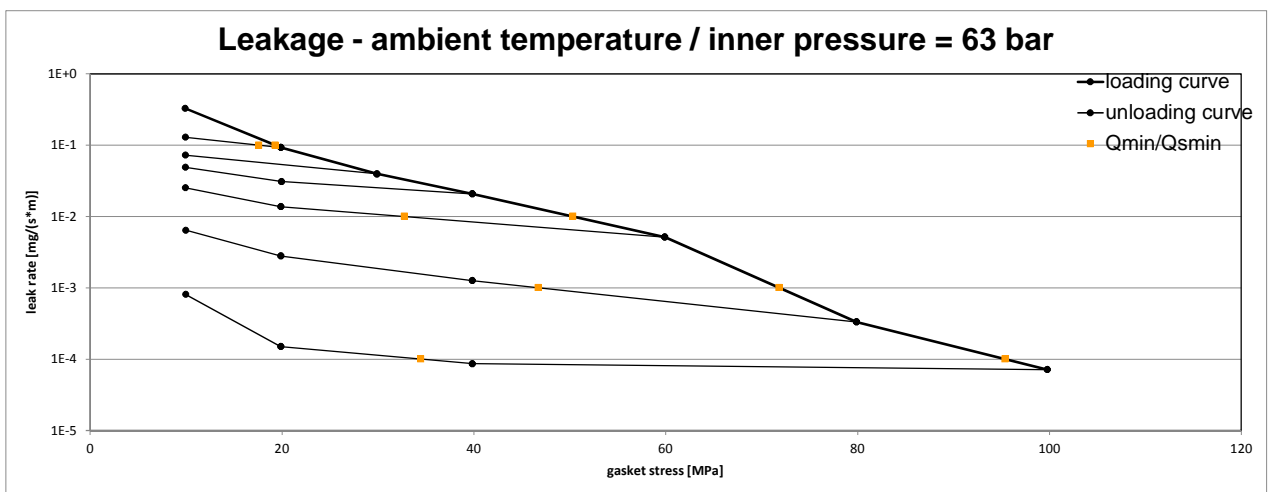


Company Address	KLINGER® GmbH & Co. KG, Richard-Klinger-Straße 37, 65510 Idstein, Germany	According to DIN EN 13555 2014-07
Gasket Type	KLINGER® top-chem2000	
Sealing element dimensions [mm]	92*49*3	

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 = 30 MPa	Q _A = 40 MPa	Q _A = 60 MPa	Q _A = 80 MPa	Q _A = 100 MPa		
10 ⁻⁰	10	10	10	10	10	10	10		
10 ⁻¹	12	10	10	10	10	10	10		
10 ⁻²	41				14	10	10		
10 ⁻³	66					26	10		
10 ⁻⁴	88						17		



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 = 63 bar							
		Q _{Smin/L} [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		
10 ⁻⁰	10	10	10	10	10	10	10		
10 ⁻¹	19	18	10	10	10	10	10		
10 ⁻²	50				33	10	10		
10 ⁻³	72					47	10		
10 ⁻⁴	95						34		



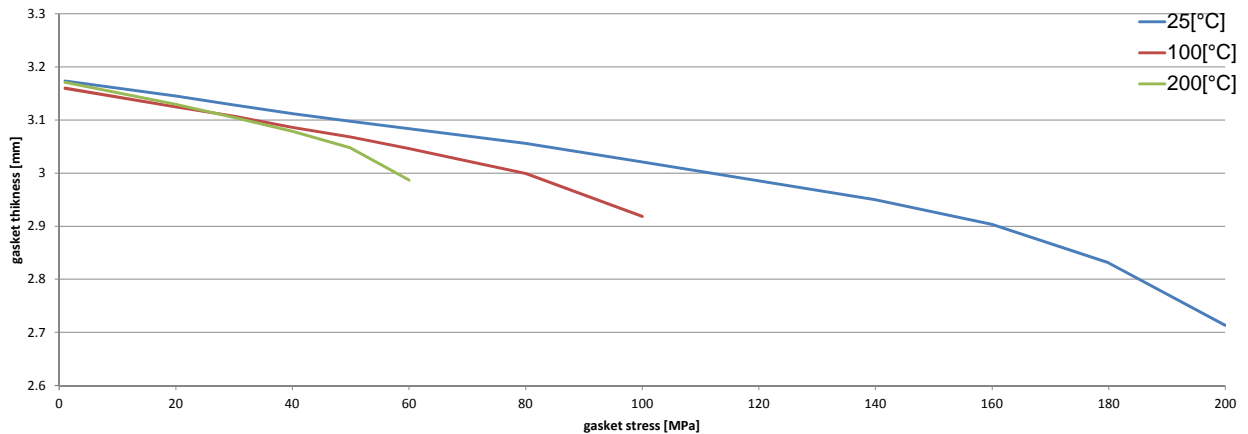
Note: the content of darkened cells was not determined respectively is unnecessary Rev - No: 2 Creation date of this sheet: 2016-03-02

Company Address	KLINGER® GmbH & Co. KG, Richard-Klinger-Straße 37, 65510 Idstein, Germany	According to DIN EN 13555 2014-07
Gasket Type	KLINGER® top-chem2000	
Sealing element dimensions [mm]	92*49*3	

Relaxation ratio P_{QR} for stiffness $C = 500$ kN/mm						
Gasket stress	temperature 1 [25 °C]		temperature 2 [100 °C]		temperature 3 [200 °C]	
	P_{QR}	Δe_{Gc} [mm]	P_{QR}	Δe_{Gc} [mm]	P_{QR}	Δe_{Gc} [mm]
Stress level 1 [20 MPa]	0.98	0.003	0.93	0.012	0.91	0.016
Stress level 2 [50 MPa]	0.98	0.008	0.94	0.027	0.88	0.050
P_{QR} and Δe_{Gc} at maximal applicable gasket stress Q_{Smax}						
P_{QR} at Q_{Smax}	0.90	0.176	0.89	0.097	0.84	0.081
Q_{Smax}	200 MPa		100 MPa		60 MPa	

Sekant unloading modulus of the gasket E_G [MPa] and gasket thickness e_G [mm]						
Gasket stress [MPa]	temperature 1 [25 °C]		temperature 2 [100 °C]		temperature 3 [200 °C]	
	E_G [MPa]	e_G [mm]	E_G [MPa]	e_G [mm]	E_G [MPa]	e_G [mm]
0		3.000		3.000		3.000
1		3.174		3.160		3.171
20	8284	3.145	3416	3.125	2994	3.129
30	5270	3.128	4362	3.107	3663	3.105
40	5101	3.112	4292	3.086	4275	3.079
50	5985	3.097	5005	3.068	4301	3.048
60	6610	3.084	5853	3.046	4448	2.987
80	8198	3.056	6254	2.999		
100	8124	3.021	7519	2.918		
120	9750	2.986				
140	10079	2.950				
160	10293	2.903				
180	14285	2.831				
200	17774	2.714				

Gasket thickness e_G



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Rev - No: 2

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