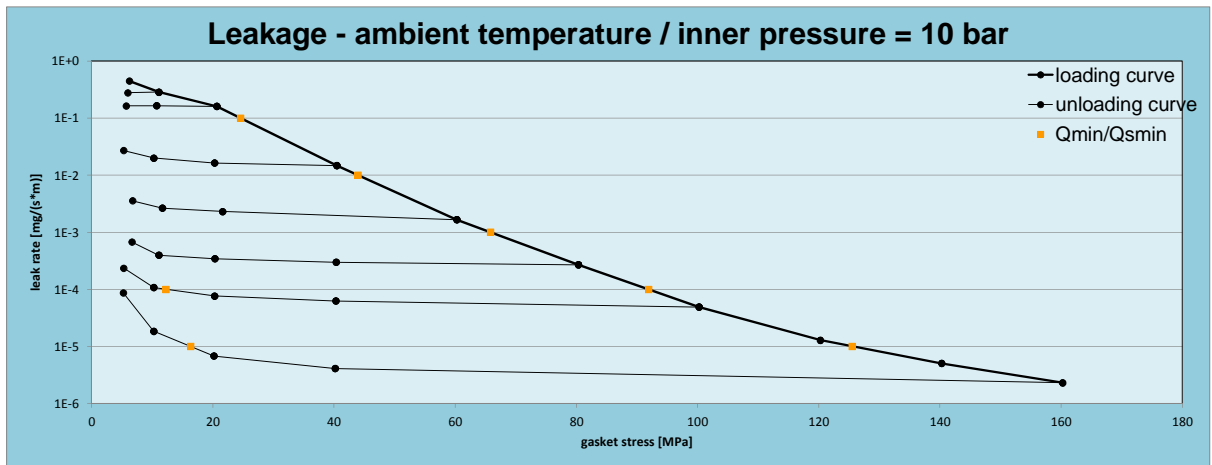
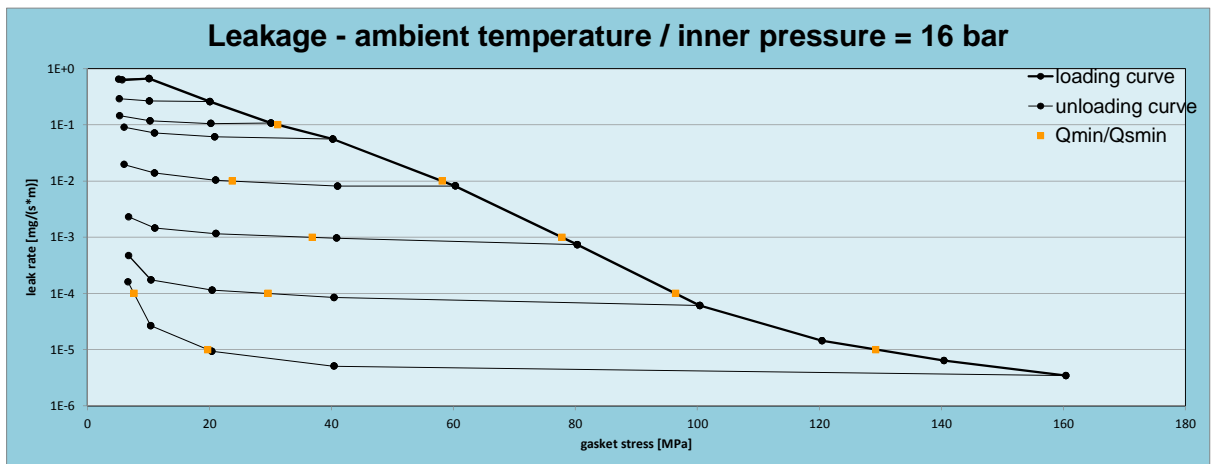


Company Address	IDT Industrie- und Dichtungstechnik GmbH Werk Kupferring, Gewerbering 6, 09456 Annaberg-Buchholz, Germany	According to DIN EN 13555 2014-07
Gasket Type	IDT/S-Spiraldichtung WS 1.4828 / Glimmer /1.4828	
Sealing element dimensions [mm]	50x56x68x92x5.2	

		Minimum stress to seal $Q_{min/L}$ (at assembly), $Q_{Smin/L}$ (after off-loading) for $p = 10$ bar									
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	
10^{-0}		6	6	6	6	6	6	6		6	
10^{-1}	25			6	6	6	6			6	
10^{-2}	44				6	6	6			6	
10^{-3}	66							6		6	
10^{-4}	92							12		6	
10^{-5}	126									16	
10^{-6}											
10^{-7}											
10^{-8}											



		Minimum stress to seal $Q_{min/L}$ (at assembly), $Q_{Smin/L}$ (after off-loading) for $p = 16$ bar										
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	$Q_A = 60$ MPa	$Q_A = 80$ MPa	$Q_A = 100$ MPa	$Q_A = 120$ MPa	$Q_A = 140$ MPa	$Q_A = 160$ MPa	
10^{-0}		6	6	6	6	6	6	6	6		6	
10^{-1}	31			6	6	6	6	6	6		6	
10^{-2}	58				6	6	6	6	6		6	
10^{-3}	78					24	6	6	6		6	
10^{-4}	96						37	6	30		8	
10^{-5}	129										20	
10^{-6}												
10^{-7}												
10^{-8}												

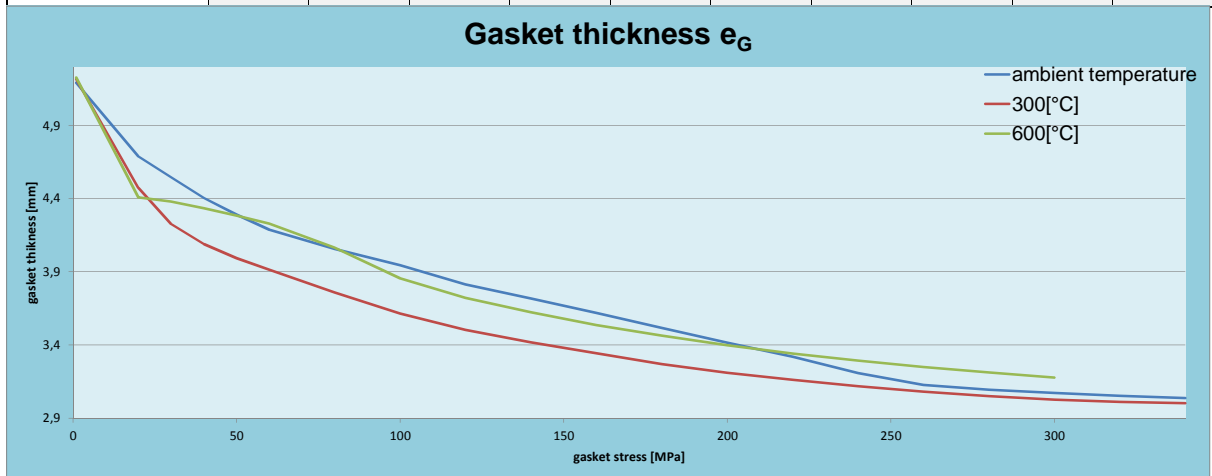


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Company Address	IDT Industrie- und Dichtungstechnik GmbH Werk Kupferring, Gewerbering 6, 09456 Annaberg-Buchholz, Germany	According to DIN EN 13555 2014-07
Gasket Type	IDT/S-Spiraldichtung WS 1.4828 / Glimmer /1.4828	
Sealing element dimensions [mm]	50x56x68x92x5.2	

Relaxation ratio P_{QR} for stiffness $C = 500$ kN/mm										
Gasket stress	ambient temperature		temperature 1 [300 °C]		temperature 2 [600 °C]		P_{QR}	Δe_{Gc} [mm]	P_{QR}	Δe_{Gc} [mm]
	P_{QR}	Δe_{Gc} [mm]	P_{QR}	Δe_{Gc} [mm]	P_{QR}	Δe_{Gc} [mm]				
Stress level 1 [20 MPa]	0.81	0.009	0.55	0.022	0.31	0.032				
Stress level 2 [40 MPa]	0.86	0.015	0.44	0.054	0.26	0.071				
P_{QR} and Δe_{Gc} at maximal applicable gasket stress Q_{Smax}										
P_{QR} at Q_{Smax}	0.89	0.021	0.36	0.121	0.29	0.134				
Q_{Smax}	80 MPa		80 MPa		80 MPa					

Sekant unloading modulus of the gasket E_G [MPa] and gasket thickness e_G [mm]										
Gasket stress [MPa]	ambient temperature		temperature 1 [300 °C]		temperature 2 [600 °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		5.300		5.250		5.255				
1		5.190		5.215		5.225				
20	1805	4.688	1828	4.473	8070	4.407				
30	2214	4.544	2238	4.227	5884	4.380				
40	2664	4.403	3129	4.089	6324	4.333				
50	3063	4.289	3508	3.992	6681	4.283				
60	3406	4.186	3775	3.913	6797	4.228				
80	4345	4.056	4704	3.759	7281	4.064				
100	4722	3.943	5787	3.614	8903	3.854				
120	5245	3.813	7032	3.503	10516	3.721				
140	6057	3.717	8193	3.418	11479	3.622				
160	6887	3.620	9762	3.343	12322	3.537				
180	7677	3.517	11173	3.269	13277	3.465				
200	8432	3.415	12717	3.211	14264	3.399				
220	9221	3.319	14028	3.163	14869	3.342				
240	9871	3.209	15327	3.119	15946	3.293				
260	10788	3.128	16812	3.081	16439	3.250				
280	12285	3.096	18504	3.050	17357	3.212				
300	13825	3.073	20090	3.026	18091	3.178				
320	15393	3.053	22350	3.012						
340	16978	3.037	25046	3.002						
360										
380										
400										
420										
440										
460										
480										
500										
940										



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