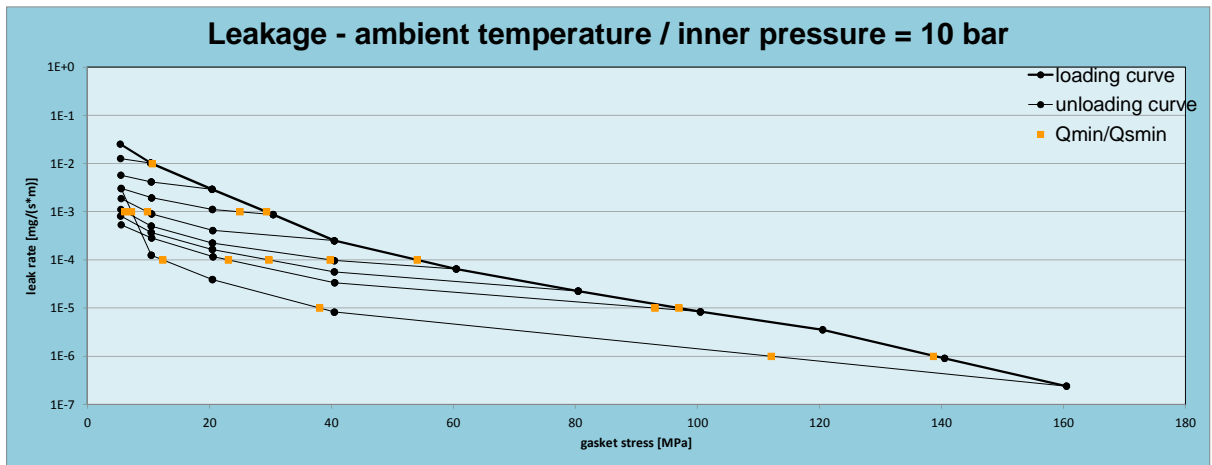
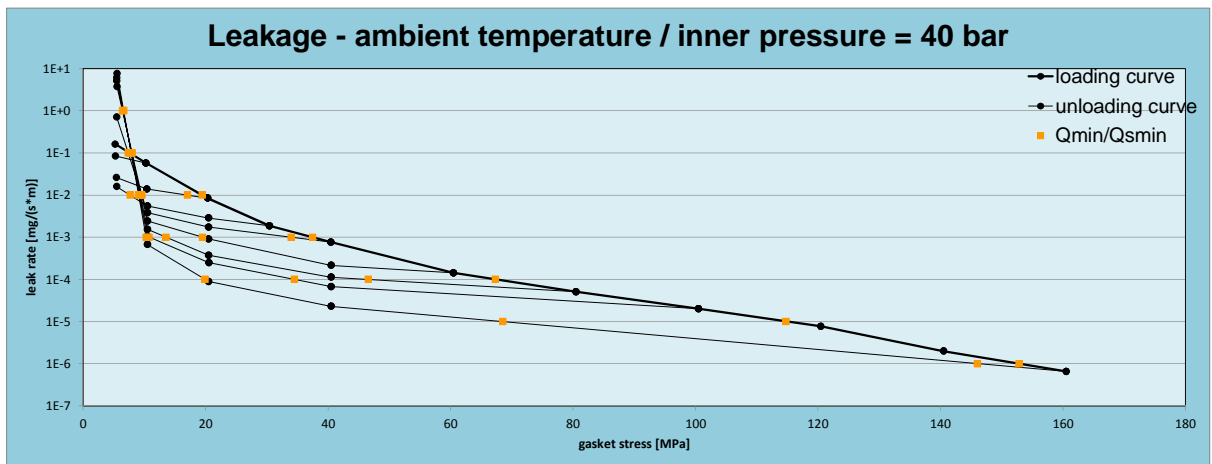


Company Address	IDT Industrie- und Dichtungstechnik GmbH Werk Kupferring, Gewerbering 6, 09456 Annaberg-Buchholz, Germany	According to DIN EN 13555 2014-07
Gasket Type	IDT – Kammprofilichtung ; WS 1.4571/Graphit; IDT-Profil KD01, KD10, KD20 und KD30; LE	
Sealing element dimensions [mm]	53x69x5.0	

		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	$Q_A=30$ 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}	5	5	5	5	5	5	5	5	5		5
10^{-1}	5	5	5	5	5	5	5	5	5		5
10^{-2}	11		5	5	5	5	5	5			5
10^{-3}	29			25	10	6	5	5			7
10^{-4}	54					40	30	23			12
10^{-5}	97							93			38
10^{-6}	139										112
10^{-7}											
10^{-8}											



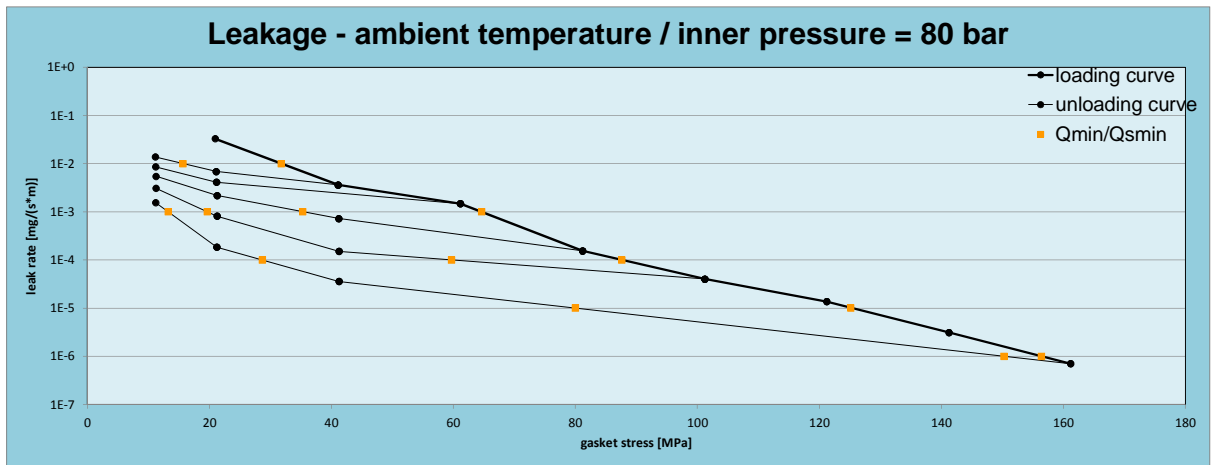
		Minimum stress to seal $Q_{min/L}$ (at assembly), $Q_{Smin/L}$ (after off-loading) for $p = 40$ bar									
L [mg/(s*m)]	$Q_{min/L}$ [MPa]	$Q_{Smin/L}$ [MPa]									
		$Q_A=10$ MPa	$Q_A=20$ MPa	$Q_A=30$ MPa	$Q_A=40$ MPa	$Q_A=60$ MPa	$Q_A=80$ MPa	$Q_A=100$ MPa	$Q_A=120$ MPa	$Q_A=140$ MPa	$Q_A=160$ MPa
10^{-0}	5	5	5	5	5	6	7	7			7
10^{-1}	8		5	5	7	8	8	8			8
10^{-2}	19		17	8	10	10	9	9			9
10^{-3}	37				34	19	14	11			10
10^{-4}	67						47	35			20
10^{-5}	115										69
10^{-6}	153										146
10^{-7}											
10^{-8}											



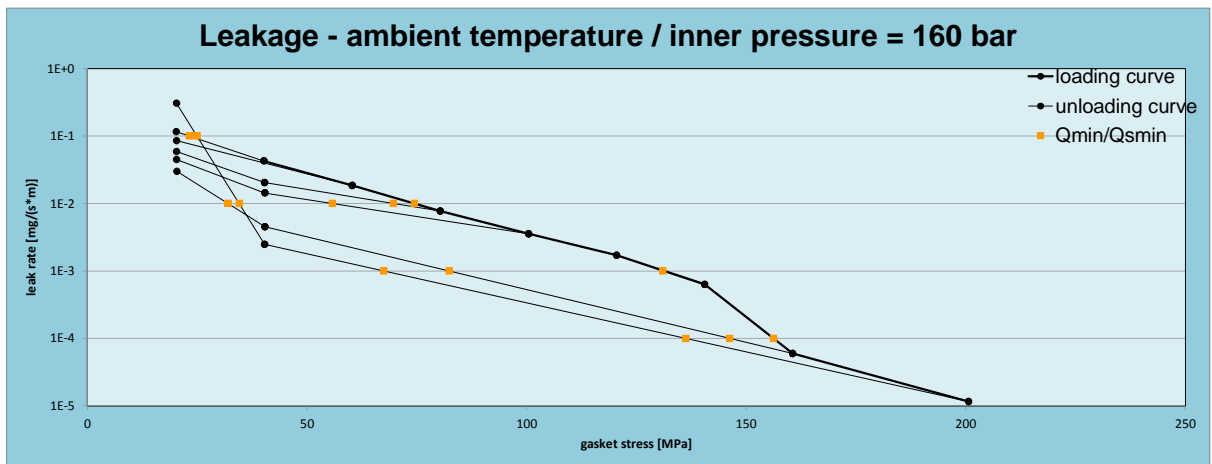
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Company Address	IDT Industrie- und Dichtungstechnik GmbH Werk Kupferring, Gewerbering 6, 09456 Annaberg-Buchholz, Germany	According to DIN EN 13555 2014-07
Gasket Type	IDT – Kammprofilichtung ; WS 1.4571/Graphit; IDT-Profil KD01, KD10, KD20 und KD30; LE	
Sealing element dimensions [mm]	53x69x5.0	

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 = 80 bar								
		Q _{Smin/L} [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	10	10		10	10			10		
10 ⁻¹	10	10		10	10			10		
10 ⁻²	32	16		10	10			10		
10 ⁻³	65			35	20			13		
10 ⁻⁴	88				60			29		
10 ⁻⁵	125							80		
10 ⁻⁶	156							150		
10 ⁻⁷										
10 ⁻⁸										



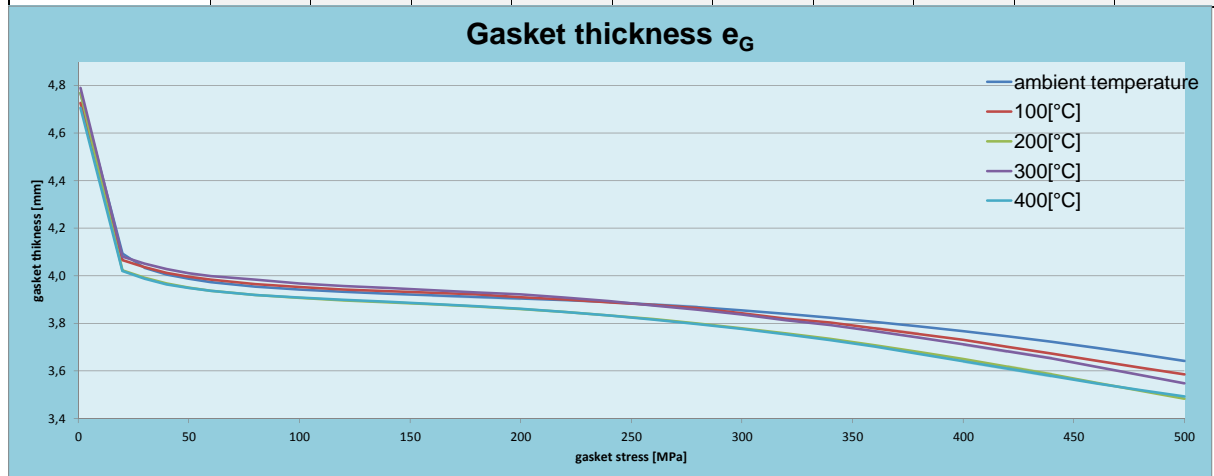
L [mg/(s*m)]	Q _{min/L} [MPa]	Minimum stress to seal Q _{min/L} (at assembly), Q _{Smin/L} (after off-loading) for p = 160 bar								
		Q _{Smin/L} [MPa]								
		Q _A = 60 MPa	Q _A = 80 MPa	Q _A = 100 MPa	Q _A = 120 MPa	Q _A = 140 MPa	Q _A = 160 MPa	Q _A = 200 MPa		
10 ⁻⁰			40	40			40	40		
10 ⁻¹	23		40	40			40	25		
10 ⁻²	74		70	56			32	35		
10 ⁻³	131						82	67		
10 ⁻⁴	156						146	136		
10 ⁻⁵										
10 ⁻⁶										
10 ⁻⁷										
10 ⁻⁸										



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 – Kammprofilichtung ; WS 1.4571/Graphit; IDT-Profil KD01, KD10, KD20 und KD30; LE	
Sealing element dimensions [mm]	53x69x5.0	

Relaxation ratio P_{QR} for stiffness $C = 500$ kN/mm										
Gasket stress	ambient temperature		temperature 1 [100 °C]		temperature 2 [200 °C]		temperature 3 [300 °C]		temperature 4 [400 °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 [30 MPa]	0.94	0.006	0.78	0.019	0.72	0.021	0.59	0.033	0.53	0.041
Stress level 2 [50 MPa]	0.97	0.004	0.89	0.094	0.83	0.022	0.76	0.037	0.63	0.050
Stress level 3 [90 MPa]	0.99	0.002	0.95	0.013	0.90	0.022	0.88	0.031	0.81	0.052
Stress level 4 [150 MPa]	1.00	0.002	0.97	0.013	0.94	0.024	0.93	0.026	0.91	0.043
P_{QR} and Δe_{Gc} at maximal applicable gasket stress Q_{Smax}										
P_{QR} at Q_{Smax}	0.99	0.012	0.97	0.050	0.95	0.075	0.94	0.091	0.92	0.124
Q_{Smax}	500 MPa		500 MPa		500 MPa		500 MPa		500 MPa	

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 [200 °C]		temperature 3 [300 °C]		temperature 4 [400 °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		5.000		5.000		5.000		5.000		5.000
1		4.768		4.727		4.769		4.790		4.706
20	4494	4.094	3559	4.066	5687	4.023	7006	4.081	4299	4.019
30	6916	4.034	11626	4.037	7936	3.992	10767	4.051	8492	3.988
40	8876	4.006	9555	4.012	9869	3.967	16497	4.028	12672	3.964
50	11385	3.987	12696	3.997	12323	3.950	12943	4.011	16992	3.948
60	13577	3.974	12577	3.984	13963	3.937	14409	3.999	19830	3.937
80	19663	3.955	16591	3.965	19060	3.919	21265	3.984	24121	3.920
100	25757	3.942	22078	3.952	23042	3.907	18324	3.967	28102	3.909
120	31137	3.932	25042	3.943	27303	3.897	28208	3.958	30848	3.899
140	37500	3.925	29931	3.935	30329	3.888	29690	3.949	33722	3.891
160	42401	3.918	37383	3.928	33792	3.880	31346	3.940	35826	3.882
180	47361	3.911	47783	3.922	37799	3.871	37251	3.930	40067	3.872
200	52278	3.905	40633	3.910	42176	3.860	48551	3.922	40339	3.861
220	58273	3.897	39822	3.900	45527	3.848	50347	3.909	45151	3.848
240	63132	3.889	38162	3.888	48298	3.833	47231	3.894	50080	3.833
260	67523	3.879	48610	3.877	52295	3.818	51827	3.875	50437	3.816
280	71796	3.868	84247	3.864	53907	3.799	51385	3.857	53066	3.797
300	76652	3.855	45951	3.842	56597	3.779	62938	3.837	55918	3.776
320	83994	3.840	34665	3.820	59883	3.758	54931	3.813	58205	3.754
340	92166	3.824	54663	3.803	64167	3.734	71544	3.793	60935	3.729
360	100337	3.806	67690	3.779	67217	3.708	81341	3.767	64998	3.702
380	110857	3.788	64936	3.756	71530	3.680	68148	3.740	66096	3.672
400	121720	3.768	97986	3.731	74611	3.650	91889	3.712	68617	3.641
420	131017	3.746	73660	3.702	77018	3.618	116026	3.682	72585	3.610
440	138134	3.723	73249	3.673	82567	3.585	123237	3.653	74744	3.579
460	142610	3.697	94386	3.644	88163	3.551	109961	3.617	76093	3.548
480	153472	3.670	90514	3.614	91090	3.517	119086	3.583	80997	3.520
500	165037	3.642	167190	3.586	98757	3.483	119268	3.548	84064	3.493
940										



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