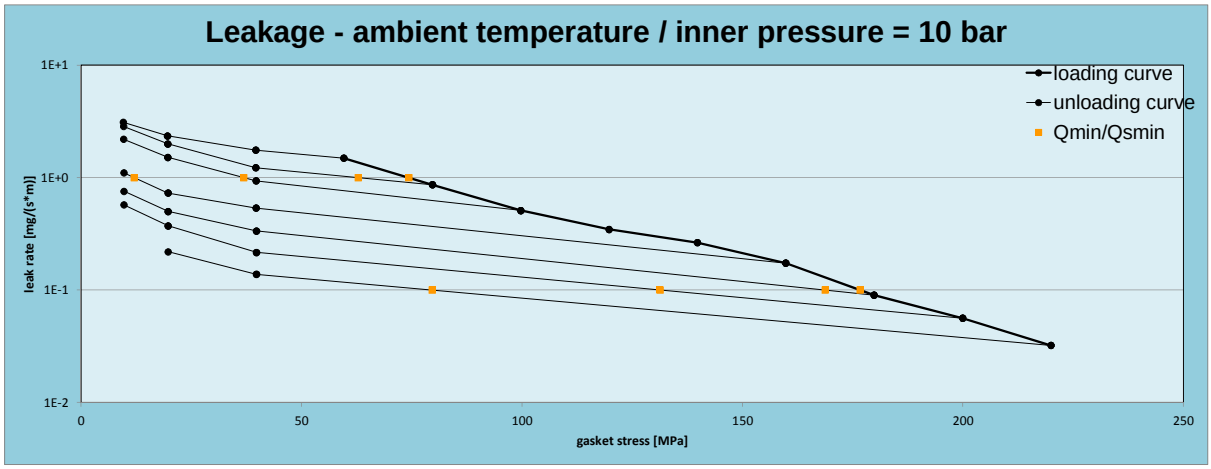
Company Address	*IDT Industrie- und Dichtungstechnik GmbH Werk Kupferring, Gewerbering 6, 09456 Annaberg-Buchholz, Germany*	According to **DIN EN 13555 2014-07**
Gasket Type	***IDT-KD10-20-30 WS 1.4541/Glimmer (China)***	
Sealing element dimensions [mm]	***53x69x5.2***	

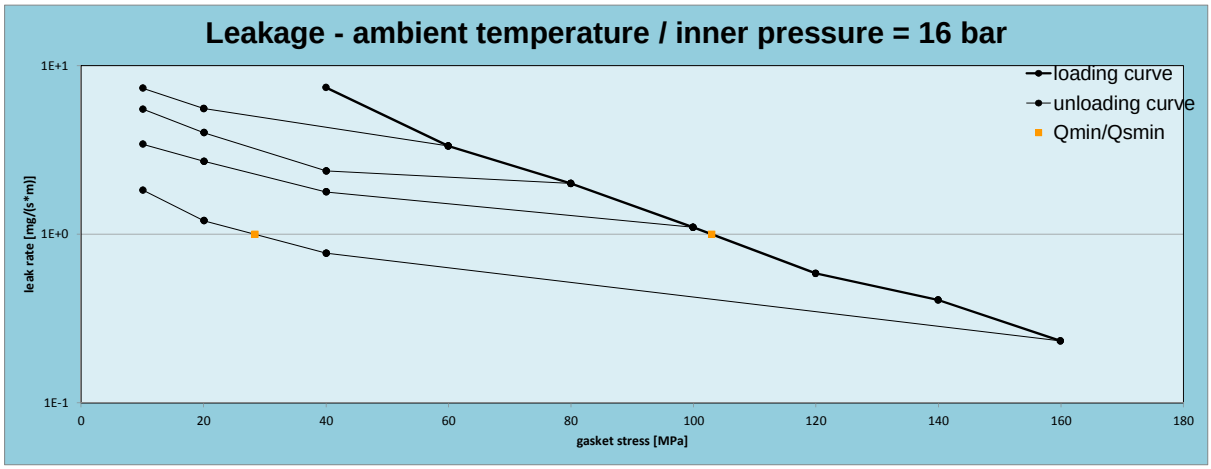
Minimum stress to seal $\mathbf{Q_{min/L}}$ (at assembly), $\mathbf{Q_{Smin/L}}$ (after off-loading) for p = 10 bar

L [mg/(s*m)]	$Q_{min/L}$ [MPa]	$Q_{Smin/L}$ [MPa]									
		Q_A= 80 MPa	Q_A= 100 MPa	Q_A= 120 MPa	Q_A= 140 MPa	Q_A= 160 MPa	Q_A= 180 MPa	Q_A= 200 MPa	Q_A= 220 MPa		
10^{-0}	74	63	37			12	60	60	60		
10^{-1}	177						169	131	80		
10^{-2}											
10^{-3}											
10^{-4}											
10^{-5}											
10^{-6}											
10^{-7}											
10^{-8}											



Minimum stress to seal $\mathbf{Q_{min/L}}$ (at assembly), $\mathbf{Q_{Smin/L}}$ (after off-loading) for p = 16 bar

L [mg/(s*m)]	$Q_{min/L}$ [MPa]	$Q_{Smin/L}$ [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				
10^{-0}	103						28				
10^{-1}											
10^{-2}											
10^{-3}											
10^{-4}											
10^{-5}											
10^{-6}											
10^{-7}											
10^{-8}											



Note: the content of darkened cells was not determined respectively is unnecessary	Rev - No: **1**	Creation date of this sheet:	**2015-10-13**

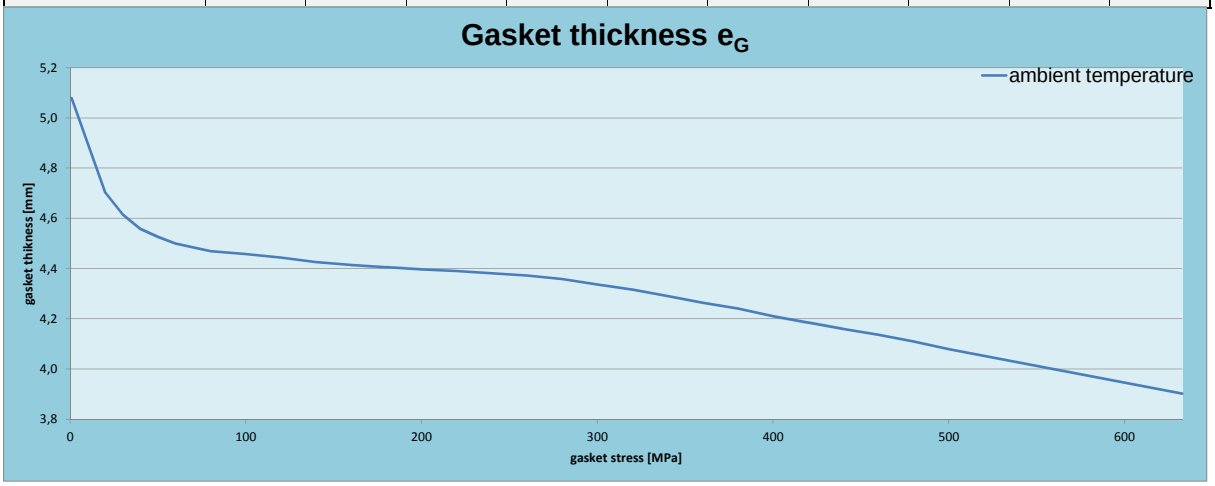
Company Address	*IDT Industrie- und Dichtungstechnik GmbH Werk Kupferring, Gewerbering 6, 09456 Annaberg-Buchholz, Germany*	According to **DIN EN 13555 2014-07**
Gasket Type	***IDT-KD10-20-30 WS 1.4541/Glimmer (China)***	
Sealing element dimensions [mm]	***53x69x5.2***	

Relaxation ratio P_{QR} for stiffness **C** = 500 kN/mm

Gasket stress	ambient temperature		temperature 1 [200 °C]		temperature 2 [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 [60 MPa]	0.82	0.034	0.47	0.098	0.53	0.086				
Stress level 2 [150 MPa]	0.96	0.021	0.79	0.099	0.77	0.106				
P_{QR} and Δe_{Gc} at maximal applicable gasket stress Q_{smax}										
P_{QR} at Q_{Smax}	0.99	0.019	0.92	0.155	0.88	0.233				
Q_{Smax}	633 MPa		633 MPa		633 MPa					

Sekant unloading modulus of the gasket E_G [MPa] and gasket thickness e_G [mm]

Gasket stress [MPa]	ambient temperature									
	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		5.190		5.125		5.190				
1		5.078		4.991		5.100				
20	3940	4.703	9670	4.452	17076	4.608				
30	8046	4.616	41617	4.426	27474	4.592				
40	8136	4.559	20164	4.405	30490	4.561				
50	18060	4.527	20512	4.391	25848	4.534				
60	11961	4.500	15868	4.378	21934	4.516				
80	20995	4.470	30858	4.367	32815	4.493				
100	40388	4.457	59207	4.361	49563	4.483				
120	30995	4.443	70307	4.354	48505	4.473				
140	23111	4.426	46504	4.345	47689	4.463				
160	26635	4.415	43132	4.336	56026	4.453				
180	33495	4.405	43459	4.324	49551	4.438				
200	44278	4.397	83065	4.310	45501	4.415				
220	54679	4.390	52689	4.286	37467	4.384				
240	79759	4.381	59117	4.247	53309	4.349				
260	202093	4.372	95684	4.206	43279	4.314				
280	146841	4.358	60827	4.170	*44329*	4.280				
300	82022	4.336	70413	4.136	56571	4.249				
320	69012	4.316	78076	4.102	48251	4.213				
340	113138	4.291	109110	4.069	70450	4.184				
360	121474	4.264	125570	4.036	65223	4.149				
380	272164	4.241	108401	3.999	64509	4.120				
400	128926	4.211	121873	3.961	72964	4.085				
420	112448	4.185	114559	3.925	81618	4.055				
440	245973	4.159		3.893	83899	4.023				
460		4.136	252940	3.857	107886	3.988				
480		4.110	258386	3.820	95715	3.954				
500	226505	4.079		3.784	126983	3.920				



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