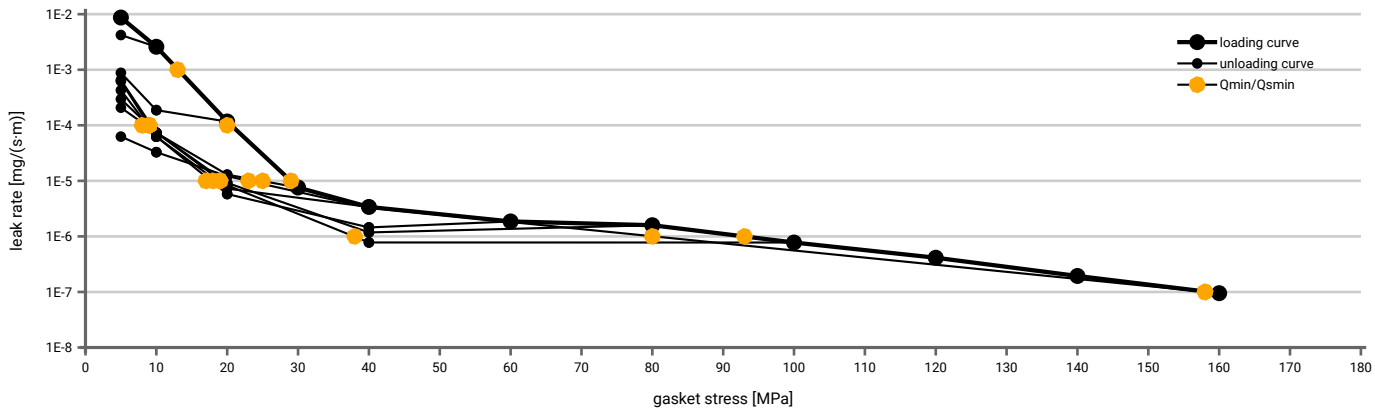
Manufacturer address	IDT Industrie- und Dichtungstechnik GmbH, Adlerstraße 18, 45307 Essen, DE	According to **DIN EN 13555 2005-2**
Product name	IDT - Corrugated gasket with graphite layers; WS 1.4571/3803; IDT style WD10; LE	
Product dimensions	92 x 49 x 3 mm (DIN EN 1514-4 1997-8)	

Minimum stress to seal $Q_{min(L)}$ (at assembly), $Q_{smin(L)}$ (after off-loading) for p = 10 bar (T = 23 ± 2 °C)

L [mg/(s·m)]	$Q_{min(L)}$ [MPa]	$Q_{smin(L)}$ [MPa]										
		Q_A = 5 [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]
1E-0	5		5	5	5	5	5	5	5			5
1E-1	5		5	5	5	5	5	5	5			5
1E-2	5		5	5	5	5	5	5	5			5
1E-3	13			5	5	5	5	5	5			5
1E-4	21				9	9	9	9	9			5
1E-5	29				25	19	18	20	19			23
1E-6	93								38			80
1E-7	159											159
1E-8												

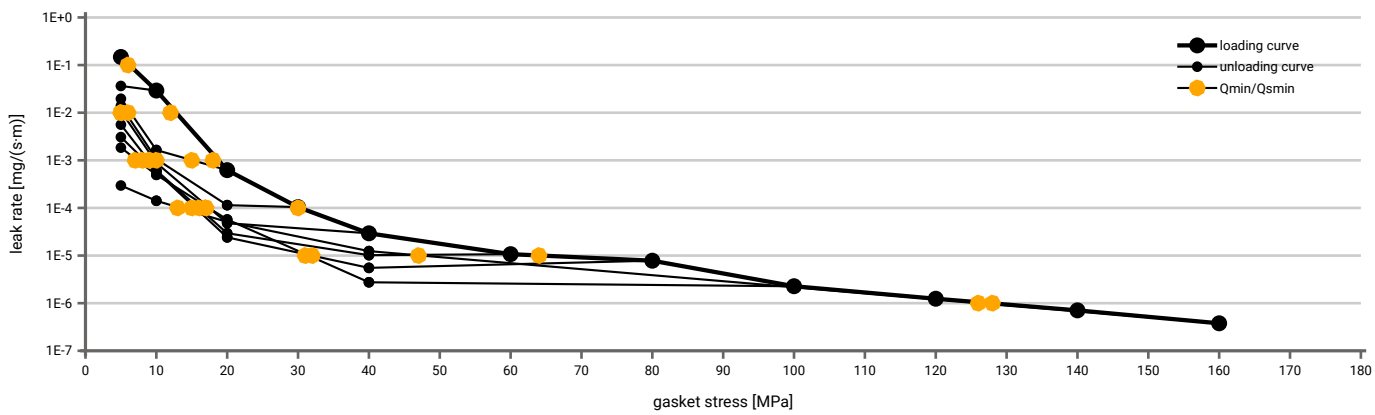
Leakage - 23 ± 2 °C / 10 bar



Minimum stress to seal $Q_{min(L)}$ (at assembly), $Q_{smin(L)}$ (after off-loading) for p = 40 bar (T = 23 ± 2 °C)

L [mg/(s·m)]	$Q_{min(L)}$ [MPa]	$Q_{smin(L)}$ [MPa]										
		Q_A = 5 [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]
1E-0	5		5	5	5	5	5	5	5			5
1E-1	6		5	5	5	5	5	5	5			5
1E-2	13			7	6	5	5	5	5			5
1E-3	19			15	10	10	9	9	8			5
1E-4	30					18	16	16	18			14
1E-5	64							32	32			48
1E-6	128											127
1E-7												
1E-8												

Leakage - 23 ± 2 °C / 40 bar

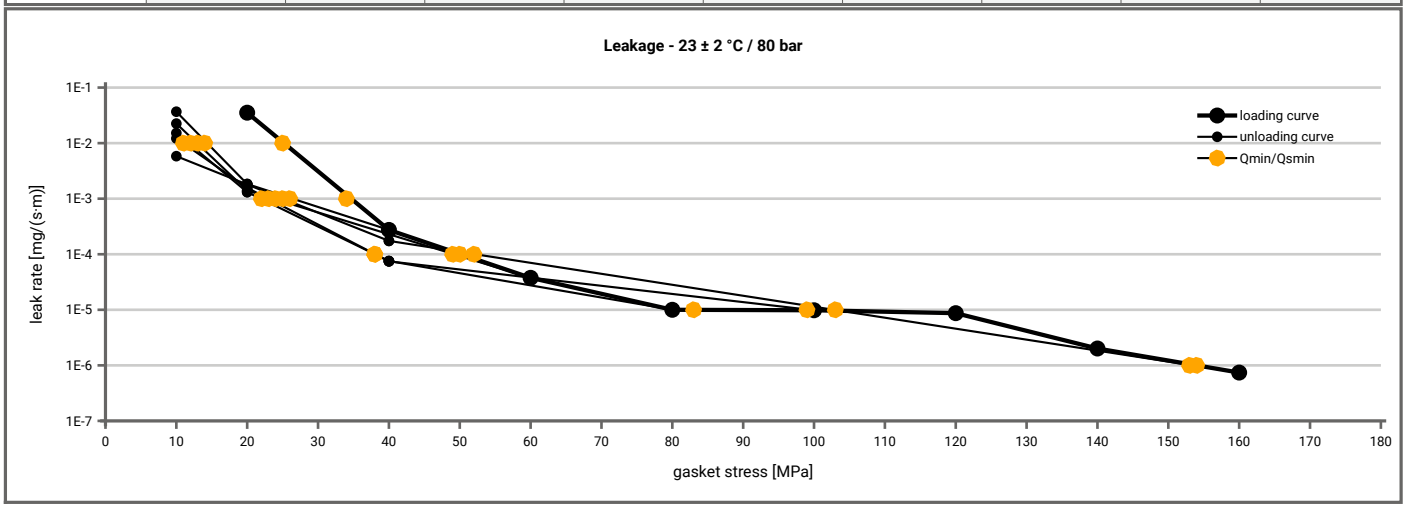


Note: the content of darkened cells was not determined respectively is unnecessary	Rev.-No.: **1**	Creation date of this sheet: **2012-06-18**

Manufacturer address	IDT Industrie- und Dichtungstechnik GmbH, Adlerstraße 18, 45307 Essen, DE	According to **DIN EN 13555 2005-2**
Product name	IDT - Corrugated gasket with graphite layers; WS 1.4571/3803; IDT style WD10; LE	
Product dimensions	92 x 49 x 3 mm (DIN EN 1514-4 1997-8)	

Minimum stress to seal $Q_{min(L)}$ (at assembly), $Q_{smin(L)}$ (after off-loading) for p = 80 bar (T = 23 ± 2 °C)

L [mg/(s·m)]	$Q_{min(L)}$ [MPa]	$Q_{smin(L)}$ [MPa]							
		Q_A = 20 [MPa]	Q_A = 40 [MPa]	Q_A = 60 [MPa]	Q_A = 80 [MPa]	Q_A = 100 [MPa]	Q_A = 121 [MPa]	Q_A = 140 [MPa]	Q_A = 161 [MPa]
1E-0	20		10	10	10	10			10
1E-1	20		10	10	10	10			10
1E-2	25		15	13	12	11			10
1E-3	35		27	24	22	23			25
1E-4	51			50	38	38			53
1E-5	83					100			103
1E-6	155								154
1E-7									
1E-8									



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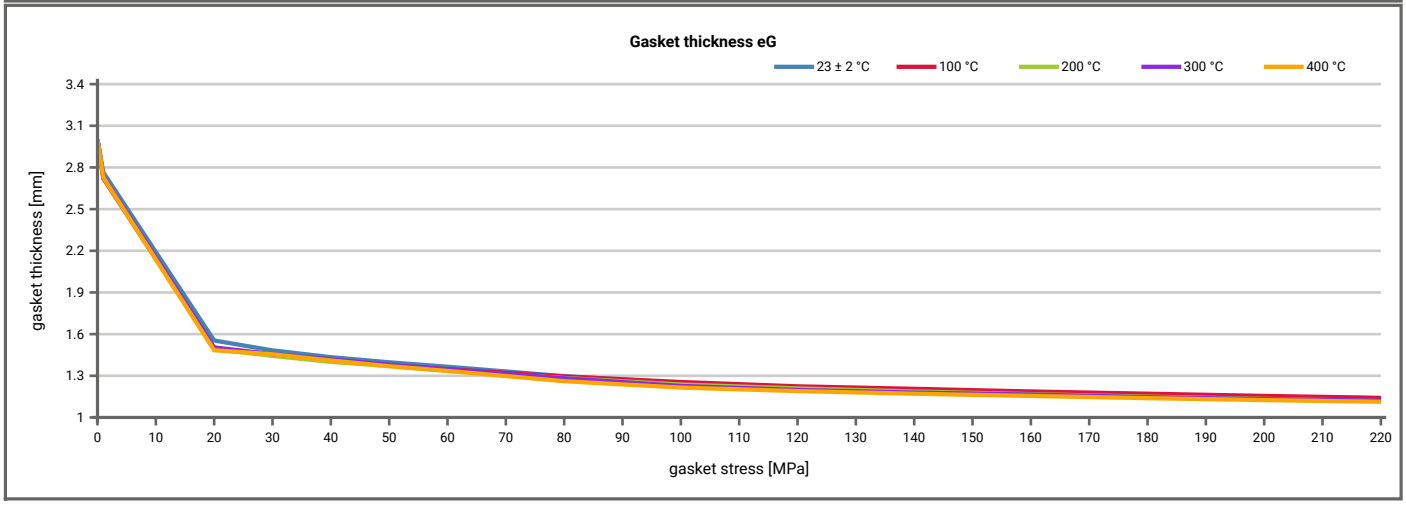
Product dimensions	92 x 49 x 3 mm (DIN EN 1514-4 1997-8)	

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

Gasket stress	23 ± 2 °C		Temperature 1 [100 °C]		Temperature 2 [200 °C]		Temperature 3 [300 °C]		Temperature 4 [400 °C]	
	P_{QR}	Δe_{Gc} [µm]	P_{QR}	Δe_{Gc} [µm]	P_{QR}	Δe_{Gc} [µm]	P_{QR}	Δe_{Gc} [µm]	P_{QR}	Δe_{Gc} [µm]
Stress level 1 [10 MPa]	0.96	4	0.82	15	0.69	26	0.69	26	0.71	24
Stress level 2 [20 MPa]	0.95	8	0.81	33	0.78	37	0.79	35	0.71	49
Stress level 3 [30 MPa]	0.97	9	0.85	39	0.84	42	0.82	47	0.80	52
Stress level 4 [40 MPa]	0.97	12	0.89	37	0.87	44	0.86	49	0.83	57
Stress level 5 [80 MPa]	0.99	7	0.95	34	0.93	47	0.94	40	0.92	57
P_{QR} and Δe_{Gc} at maximum gasket stress to be applied Q_{smax}										
P_{QR} at Q_{smax}	1.00	0	0.99	19	0.98	39	0.97	58	0.96	77
Q_{smax}	230 MPa		230 MPa		230 MPa		230 MPa		230 MPa	

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

Gasket stress [MPa]	23 ± 2 °C		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	0	3.000	0	3.000	0	3.000	0	3.000	0	3.000
1	0	2.764	0	2.721	0	2.735	0	2.735	0	2.727
20	1057	1.554	966	1.498	803	1.492	1193	1.504	1359	1.484
30	1818	1.483	1509	1.449	1541	1.443	1027	1.456	2227	1.455
40	1399	1.434	1698	1.409	1867	1.400	2515	1.418	2013	1.410
50	2962	1.397	2530	1.375	2689	1.370	1786	1.380	2489	1.369
60	2635	1.365	2488	1.347	2365	1.336	4069	1.346	3134	1.335
80	3311	1.297	3223	1.295	2988	1.284	3892	1.282	3250	1.261
100	4392	1.250	3782	1.255	3372	1.237	3244	1.227	3475	1.215
120	5554	1.218	5281	1.224	5548	1.209	5686	1.198	5505	1.190
140	6905	1.198	7985	1.206	5170	1.187	7355	1.179	6086	1.171
160	6574	1.178	6755	1.187	6458	1.168	6937	1.165	5833	1.155
180	6957	1.164	6344	1.171	6219	1.150	6132	1.146	5274	1.139
200	7070	1.150	6107	1.155	5543	1.134	5603	1.132	5692	1.125
220	7829	1.138	6190	1.141	5976	1.118	5826	1.121	5309	1.113



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