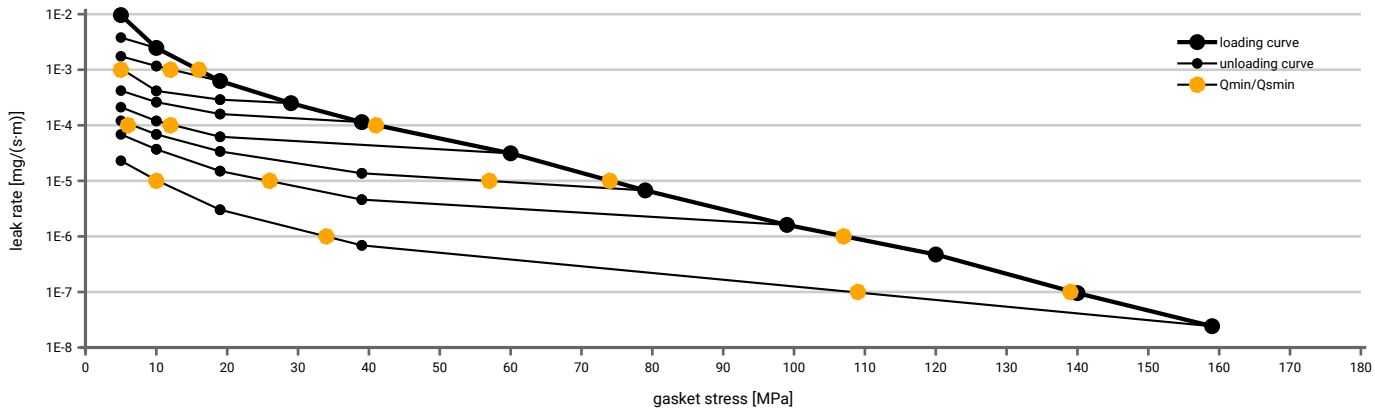
Manufacturer address	IDT Industrie- und Dichtungstechnik GmbH, Adlerstraße 18, 45307 Essen, DE	According to **DIN EN 13555 2005-2**
Product name	IDT-SIGRAFLEX-Universal Pro Flachdichtung WS 3865	
Product dimensions	92 x 49 x 2 mm (DIN EN 1514-1 1997-8)	

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	17			12	5	5	5	5	5			5
1E-4	42						13	7	5			5
1E-5	75							58	27			10
1E-6	108											35
1E-7	139											109
1E-8												

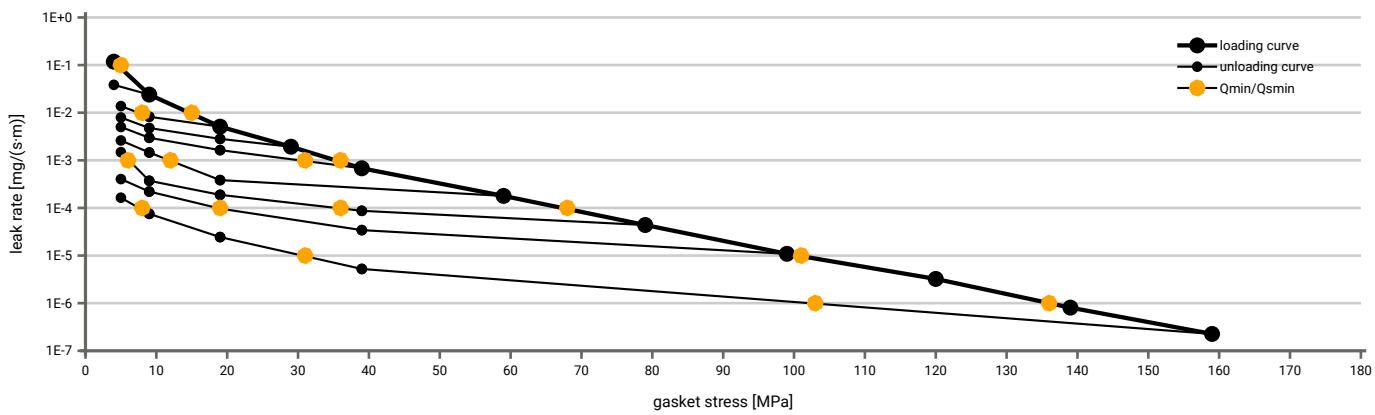
Leakage - 23 ± 2 °C / 10 bar



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	5		5	5	5	5	5	5	5			5
1E-2	16			8	5	5	5	5	5			5
1E-3	36					31	13	6	5			5
1E-4	68							36	20			8
1E-5	101											31
1E-6	137											103
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: **2011-11-02**

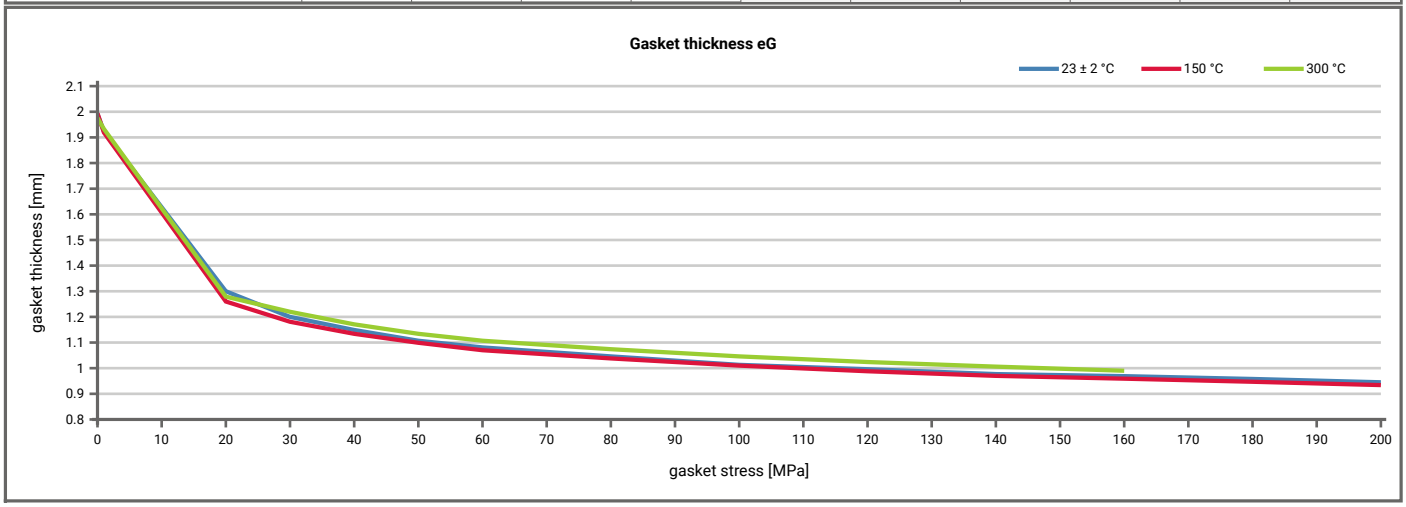
Manufacturer address	IDT Industrie- und Dichtungstechnik GmbH, Adlerstraße 18, 45307 Essen, DE	According to **DIN EN 13555 2005-2**
Product name	IDT-SIGRAFLEX-Universal Pro Flachdichtung WS 3865	
Product dimensions	92 x 49 x 2 mm (DIN EN 1514-1 1997-8)	

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

Gasket stress	23 ± 2 °C		Temperature 1 [150 °C]		Temperature 2 [300 °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 [30 MPa]	0.97	8	0.94	16	0.89	29				
Stress level 2 [50 MPa]	0.99	4	0.97	15	0.95	21				
P_{QR} and Δe_{Gc} at maximum gasket stress to be applied Q_{smax}										
P_{QR} at Q_{smax}	1.00	0	0.99	17	0.99	13				
Q_{smax}	200 MPa		200 MPa		160 MPa					

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

Gasket stress [MPa]	23 ± 2 °C		Temperature 1 [150 °C]		Temperature 2 [300 °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	1.991	0	1.994	0	1.976				
1	0	1.923	0	1.919	0	1.933				
20	434	1.300	569	1.260	547	1.279				
30	815	1.200	1031	1.181	1033	1.220				
40	1067	1.149	1086	1.134	1170	1.171				
50	1077	1.107	1289	1.099	1339	1.134				
60	1645	1.081	1367	1.070	1550	1.107				
80	2628	1.046	3210	1.038	3184	1.074				
100	2376	1.013	2859	1.010	2985	1.046				
120	4666	0.996	3119	0.988	3266	1.024				
140	4920	0.977	4768	0.970	4307	1.006				
160	7545	0.969	6044	0.959	5494	0.990				
180	11340	0.958	8753	0.947						
200	9902	0.945	7804	0.934						



Note: the content of darkened cells was not determined respectively is unnecessary	Rev.-No.: **1**	Creation date of this sheet: **2011-11-02**