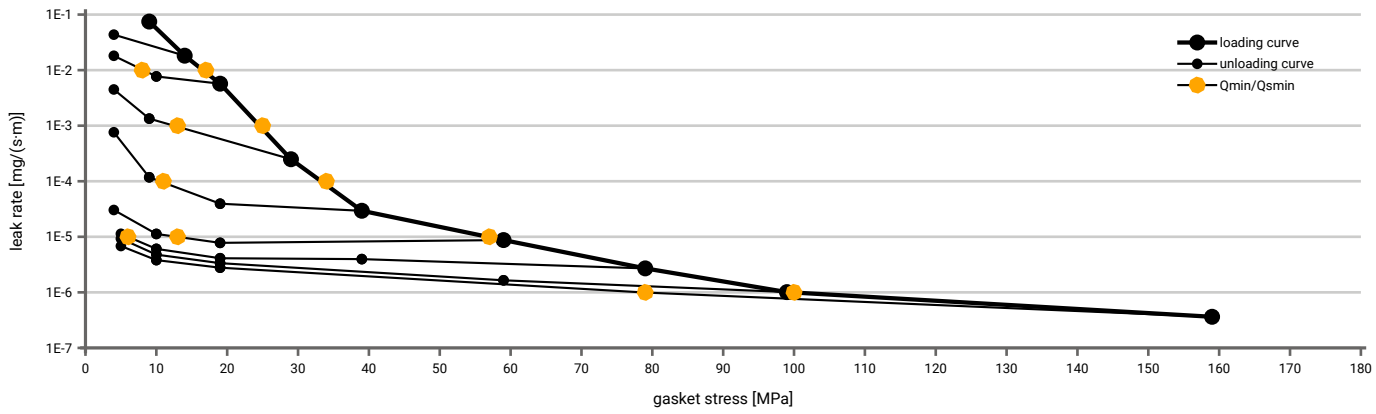
Manufacturer address	TEADIT International Produktions GmbH, Schanzenstr. 35, 51063 Köln, DE	According to **DIN EN 13555 2005-2**
Product name	TF 1590	
Product dimensions	92 x 49 x 2 mm (DIN EN 1514-1 1997-8)	

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 = 10 [MPa]	Q_A = 15 [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 = 160 [MPa]
1E-0	10		5	5	5	5	5	5	5	5
1E-1	10		5	5	5	5	5	5	5	5
1E-2	17			8	5	5	5	5	5	5
1E-3	25				13	5	5	5	5	5
1E-4	34					11	5	5	5	5
1E-5	58						13	6	5	5
1E-6	101									79
1E-7										
1E-8										

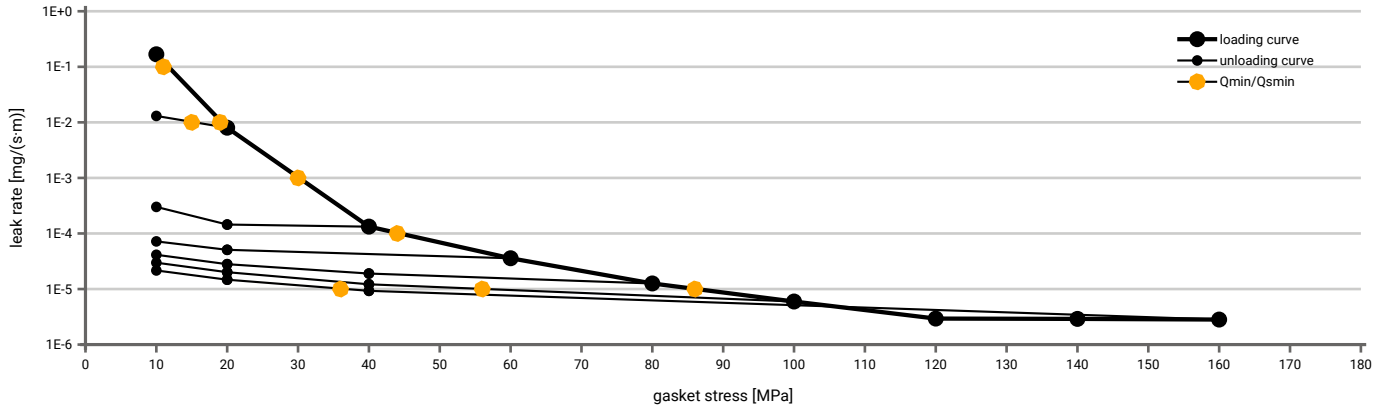
Leakage - 23 ± 2 °C / 10 bar



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 = 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]
1E-0	10		10	10	10	10	10			10
1E-1	12		10	10	10	10	10			10
1E-2	19		16	10	10	10	10			10
1E-3	30			10	10	10	10			10
1E-4	44				10	10	10			10
1E-5	86						57			37
1E-6										
1E-7										
1E-8										

Leakage - 23 ± 2 °C / 40 bar



Note: the content of darkened cells was not determined respectively is unnecessary	Rev.-No.: **3**	Creation date of this sheet: **2012-08-14**

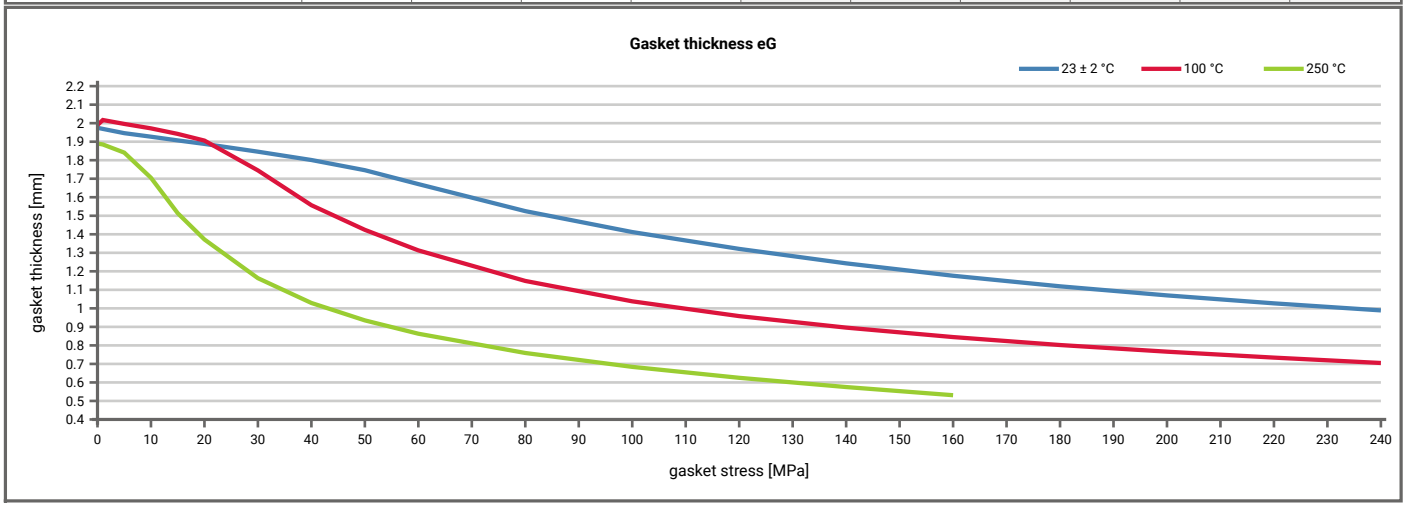
Manufacturer address	TEADIT International Produktions GmbH, Schanzenstr. 35, 51063 Köln, DE	According to **DIN EN 13555 2005-2**
Product name	TF 1590	
Product dimensions	92 x 49 x 2 mm (DIN EN 1514-1 1997-8)	

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

Gasket stress	23 ± 2 °C		Temperature 1 [100 °C]		Temperature 2 [250 °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]	0.95	13	0.75	63	0.38	156				
Stress level 2 [100 MPa]					0.41	495				
Stress level 3 [140 MPa]	0.88	141	0.69	364						
P_{QR} and Δe_{Gc} at maximum gasket stress to be applied Q_{smax}										
P_{QR} at Q_{smax}	0.95	97	0.77	444	0.61	524				
Q_{smax}	230 MPa		230 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 [100 °C]		Temperature 2 [250 °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	1.975	0	1.990	0	1.890				
1	0	1.969	0	2.017	0	1.885				
5	1521	1.946	975	1.996	365	1.841				
10	2484	1.927	1433	1.972	571	1.705				
15	2744	1.907	1604	1.942	779	1.514				
20	2938	1.888	1825	1.906	996	1.372				
30	2770	1.846	2208	1.745	1285	1.163				
40	3117	1.801	2669	1.557	1515	1.029				
50	3596	1.746	2860	1.424	1697	0.935				
60	4365	1.671	2980	1.313	1848	0.863				
80	6365	1.525	3383	1.148	2132	0.759				
100	7098	1.412	3691	1.038	2291	0.684				
120	7353	1.321	3783	0.958	2466	0.625				
140	7473	1.243	4006	0.896	2646	0.575				
160	7226	1.176	4011	0.845	2959	0.531				
180	6952	1.119	4077	0.802						
200	6675	1.070	4086	0.766						
220	6516	1.027	4267	0.734						
240	5830	0.989	3816	0.705						



Note: the content of darkened cells was not determined respectively is unnecessary	Rev.-No.: **3**	Creation date of this sheet: **2012-08-14**