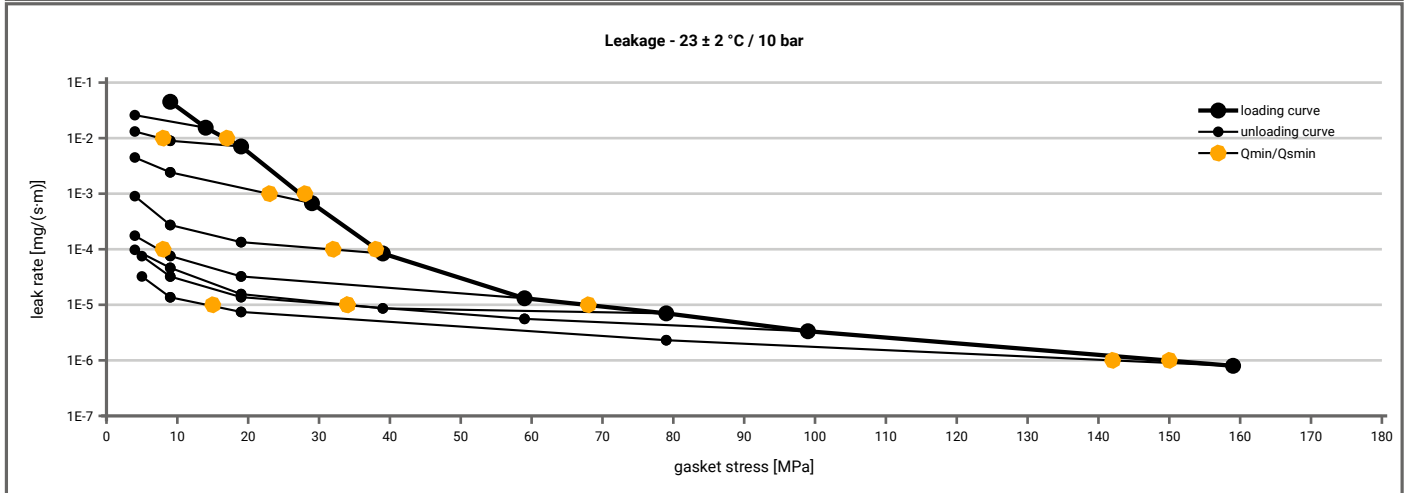
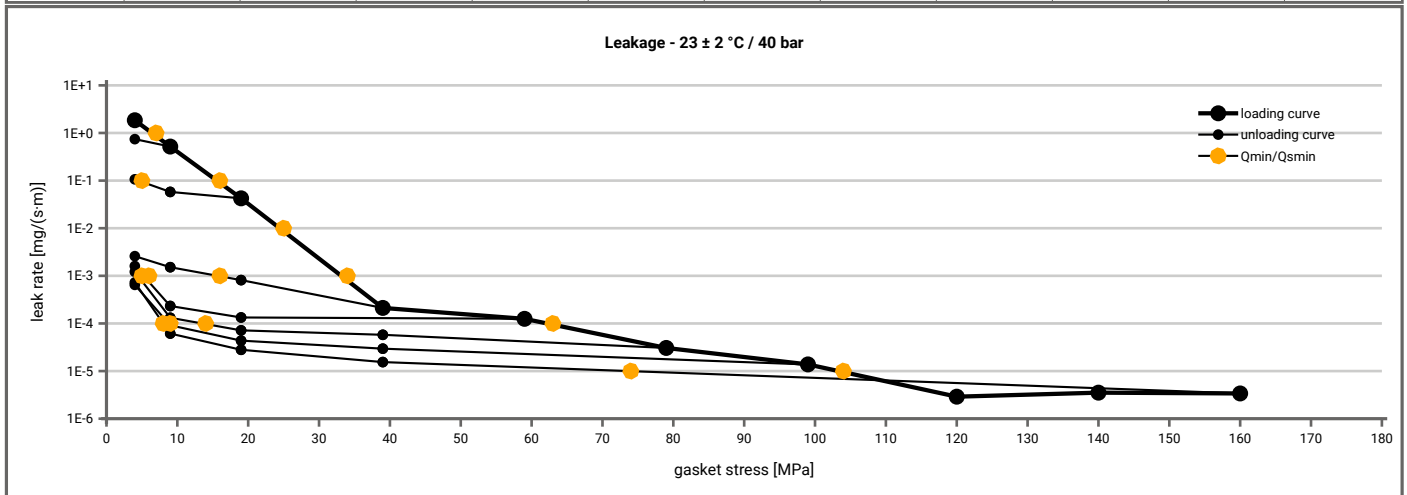


Manufacturer address	TEADIT International Produktions GmbH, Schanzenstr. 35, 51063 Köln, DE	According to DIN EN 13555 2005-2
Product name	TF 1590	
Product dimensions	92 x 49 x 3 mm (DIN EN 1514-1 1997-8)	

Minimum stress to seal $Q_{min(L)}$ (at assembly), $Q_{smin(L)}$ (after off-loading) for $p = 10$ bar ($T = 23 \pm 2$ °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	5
1E-1	10		5	5	5	5	5	5	5	5	5
1E-2	18			9	5	5	5	5	5	5	5
1E-3	28				24	5	5	5	5	5	5
1E-4	39					32	8	5	5	5	5
1E-5	68							35	34	15	
1E-6	150										143
1E-7											
1E-8											



Minimum stress to seal $Q_{min(L)}$ (at assembly), $Q_{smin(L)}$ (after off-loading) for $p = 40$ bar ($T = 23 \pm 2$ °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]	$Q_A = 40$ [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+1	5		5	5	5	5	5	5			5
1E-0	7		5	5	5	5	5	5			5
1E-1	16			5	5	5	5	5			5
1E-2	25				5	5	5	5			5
1E-3	34				17	6	5	5			5
1E-4	63						14	10			9
1E-5	104										74
1E-6											
1E-7											
1E-8											



Note: the content of darkened cells was not determined respectively is unnecessary Rev.-No.: 2 Creation date of this sheet: 2012-04-27

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 3 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]	0.90	25	0.63	93	0.29	180				
Stress level 2 [100 MPa]					0.35	550				
Stress level 3 [140 MPa]	0.85	182	0.64	429	0.47	623				
P _{QR} and Δe _{Gc} at maximum gasket stress to be applied Q _{smax}										
P_{QR} at Q_{smax}	0.93	145	0.72	550	0.47	623				
Q_{smax}	230 MPa		230 MPa		140 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	3.195	0	3.150	0	3.250				
1	0	3.195	0	3.150	0	3.250				
20	1690	3.069	1306	2.879	638	2.284				
30	1762	2.990	1411	2.618	842	1.958				
40	2678	2.904	1902	2.359	1179	1.731				
50	3629	2.802	2296	2.157	1423	1.569				
60	4442	2.661	2658	1.993	1573	1.442				
80	5742	2.413	3227	1.749	2195	1.278				
100	7213	2.232	4048	1.586	2125	1.136				
120	7836	2.087	3930	1.466	3045	1.020				
140	8303	1.970	5026	1.374	5587	0.880				
160	10514	1.868	6385	1.295						
180	7157	1.780	6620	1.232						
200	6487	1.704	4984	1.167						
220	6940	1.641	5634	1.115						
230	7200	1.588	5218	1.068						

