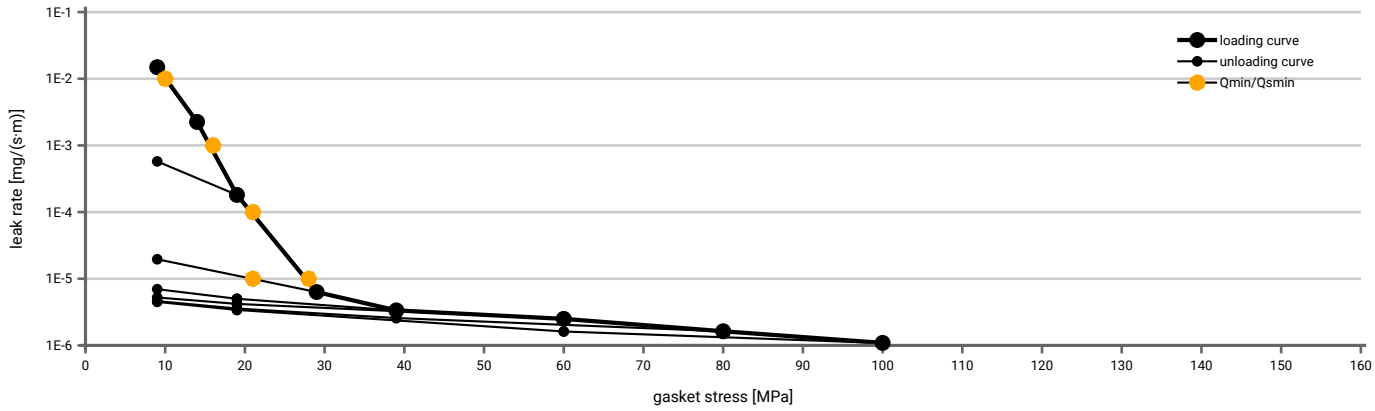
Manufacturer address	TEADIT International Produktions GmbH, Europastraße 12, 6322 Kirchbichl, AT	According to
Product name	TF 1590	**EN 13555**
Product dimensions	92 x 49 x 2 mm	**2021-4**

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]
1E-0	10			10	10	10	10	10	10
1E-1	10			10	10	10	10	10	10
1E-2	11			10	10	10	10	10	10
1E-3	16			10	10	10	10	10	10
1E-4	22				10	10	10	10	10
1E-5	29				22	10	10	10	10
1E-6									
1E-7									

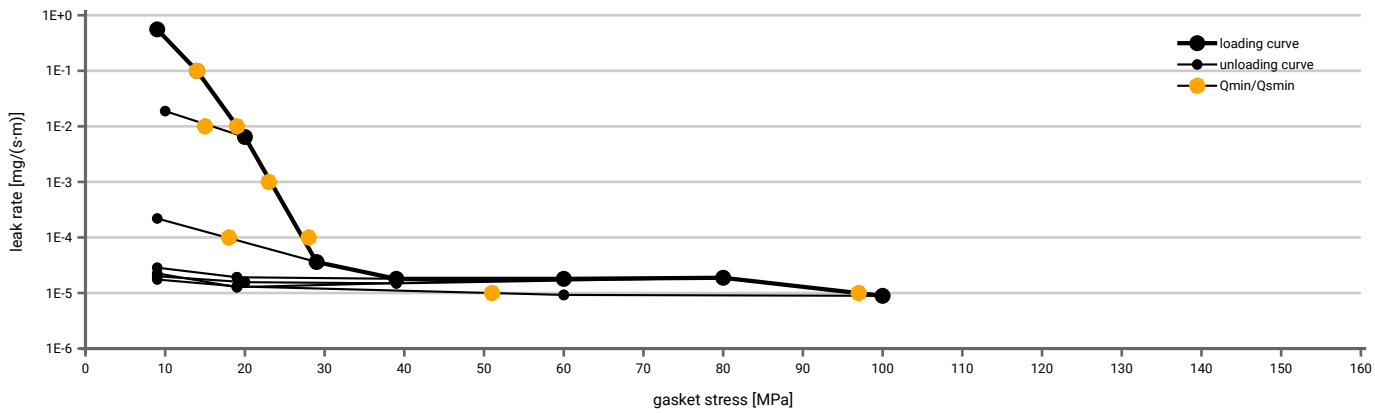
Leakage - 23 ± 2 °C / 10 bar



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 = 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]
1E-0	10			10	10	10	10	10	10
1E-1	15			10	10	10	10	10	10
1E-2	19			16	10	10	10	10	10
1E-3	24				10	10	10	10	10
1E-4	28				19	10	10	10	10
1E-5	97								51
1E-6									
1E-7									

Leakage - 23 ± 2 °C / 40 bar

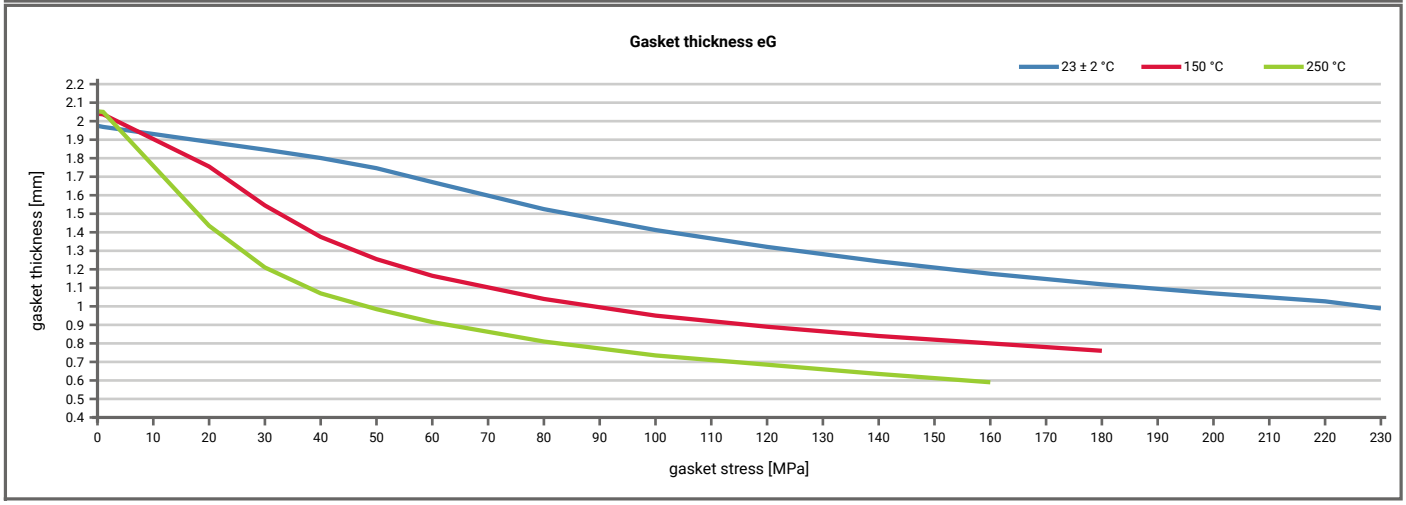


Note: the content of darkened cells was not determined respectively is unnecessary	Rev.-No.: **4**	Creation date of this sheet: **2024-02-25**

Manufacturer address	TEADIT International Produktions GmbH, Europastraße 12, 6322 Kirchbichl, AT	According to
Product name	TF 1590	EN 13555
Product dimensions	92 x 49 x 2 mm	2021-4

Relaxation ratio P_{QR} for stiffness C = 500 [kN/mm]										
Gasket stress	23 ± 2 °C		Temperature 1 [150 °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 [10 MPa]	0.96	3	0.94	5	0.68	27				
Stress level 2 [30 MPa]	0.95	13	0.59	104	0.38	156				
P_{QR} and Δe_{Gc} at maximum gasket stress to be applied (Q_{smax})										
P_{QR} at Q_{smax}	0.93	135	0.76	370	0.65	477				
Q_{smax}	230 MPa		180 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 [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	2.040	0	2.053				
1	0	1.969	0	2.037	0	2.050				
20	2938	1.888	1370	1.755	739	1.435				
30	2770	1.846	2081	1.545	986	1.210				
40	3116	1.801	2275	1.375	1045	1.070				
50	3596	1.746	2301	1.255	1114	0.985				
60	4365	1.671	2535	1.165	1315	0.915				
80	6365	1.525	2904	1.040	1614	0.810				
100	7098	1.412	2964	0.950	1833	0.735				
120	7353	1.321	3223	0.890	2403	0.685				
140	7473	1.243	3246	0.840	2683	0.635				
160	7226	1.176	3445	0.800	2868	0.590				
180	6952	1.119	3597	0.760						
200	6675	1.070								
220	6516	1.027								
230	5830	0.989								



Fields marked: Intrusion into bore was detected. Determined after the corresponding P_{QR}-Test.

Note: the content of darkened cells was not determined respectively is unnecessary	Rev.-No.: **4**	Creation date of this sheet: **2024-02-25**