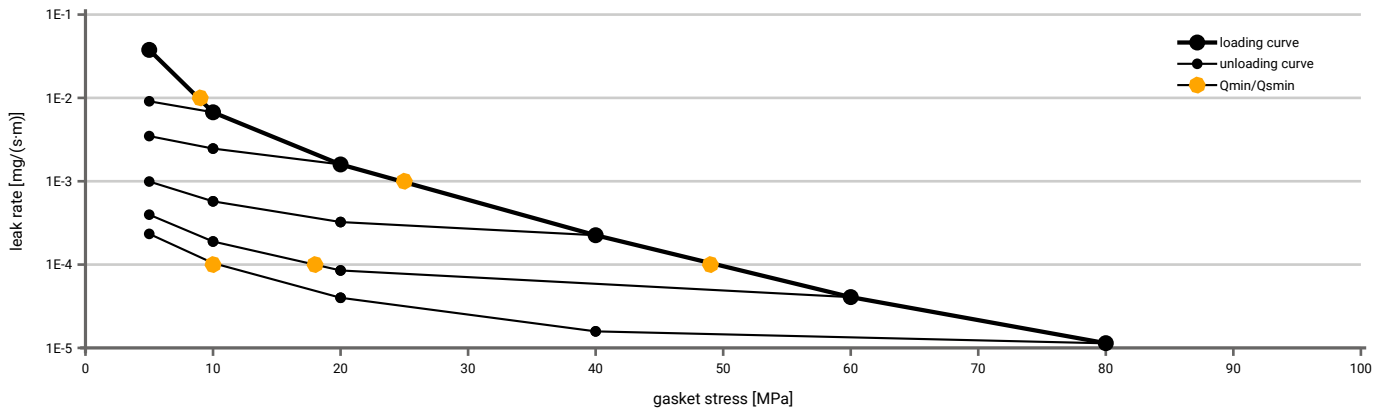
Manufacturer address	Frenzelit GmbH, Frankenhammer, 95460 Bad Berneck, DE	According to **DIN EN 13555 2005-2**
Product name	novaphit SSTC TA-L / novaphit SSTC TA-L with XP-Technology	
Product dimensions	92 x 49 x 2 mm (DIN EN 1514-1 1997-8)	

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 = 5.3 [MPa]	Q_A = 10 [MPa]	Q_A = 20 [MPa]	Q_A = 40 [MPa]	Q_A = 60 [MPa]	Q_A = 80 [MPa]
1E-0	5		5	5	5	5	5
1E-1	5		5	5	5	5	5
1E-2	9		5	5	5	5	5
1E-3	25				5	5	5
1E-4	50					18	11
1E-5							
1E-6							
1E-7							
1E-8							

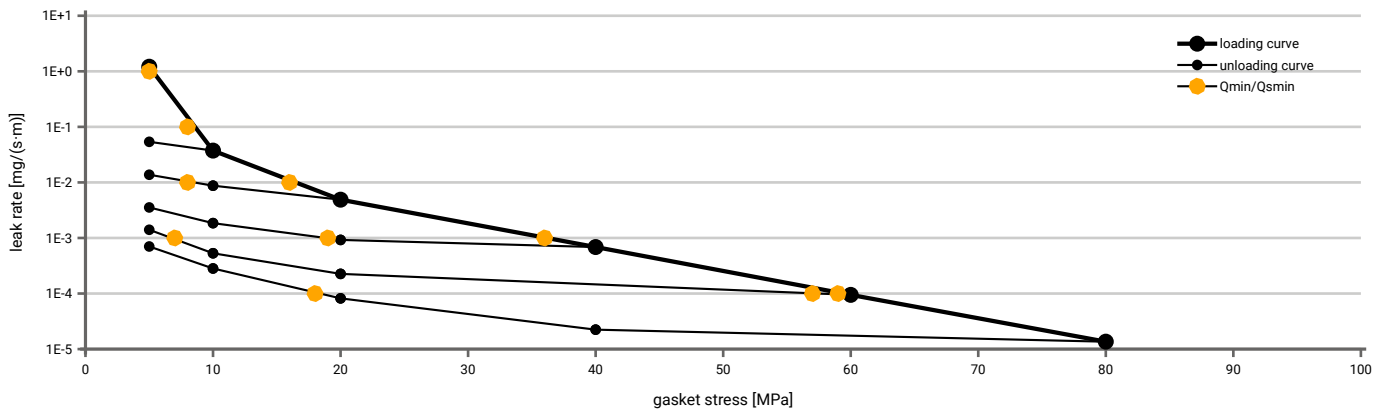
Leakage - 23 ± 2 °C / 10 bar



Minimum stress to seal $Q_{min(L)}$ (at assembly), $Q_{smin(L)}$ (after off-loading) for p = 25 bar (T = 23 ± 2 °C)

L [mg/(s·m)]	$Q_{min(L)}$ [MPa]	$Q_{smin(L)}$ [MPa]					
		Q_A = 5.4 [MPa]	Q_A = 10 [MPa]	Q_A = 20 [MPa]	Q_A = 40 [MPa]	Q_A = 60 [MPa]	Q_A = 80 [MPa]
1E+1	5		5	5	5	5	5
1E-0	6		5	5	5	5	5
1E-1	9		5	5	5	5	5
1E-2	17			9	5	5	5
1E-3	36				19	7	5
1E-4	60					58	19
1E-5							
1E-6							
1E-7							
1E-8							

Leakage - 23 ± 2 °C / 25 bar

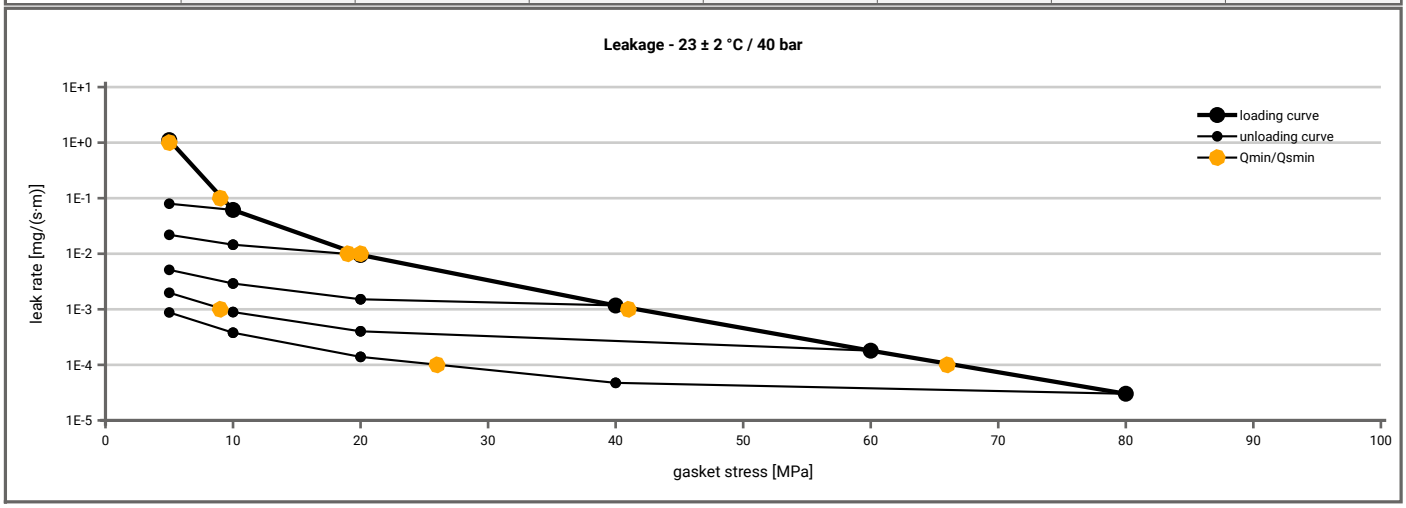


Note: the content of darkened cells was not determined respectively is unnecessary	Rev.-No.: **2**	Creation date of this sheet: **2013-01-14**

Manufacturer address	Frenzelit GmbH, Frankenhammer, 95460 Bad Berneck, DE	According to DIN EN 13555 2005-2
Product name	novaphit SSTC TA-L / novaphit SSTC TA-L with XP-Technology	
Product dimensions	92 x 49 x 2 mm (DIN EN 1514-1 1997-8)	

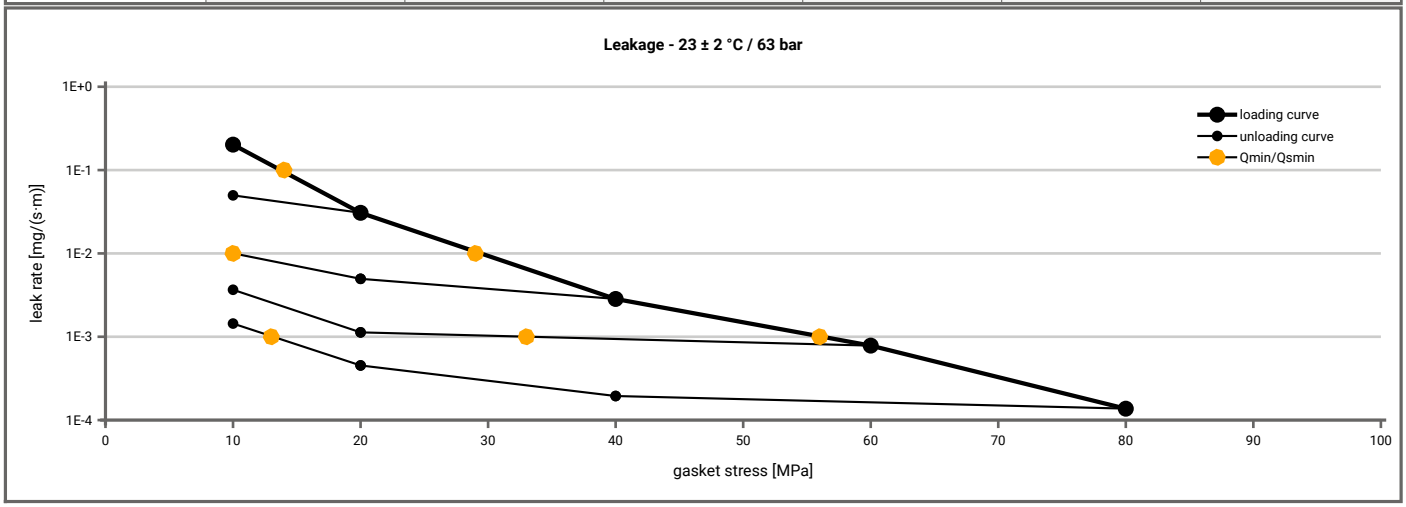
Minimum stress to seal $Q_{min(L)}$ (at assembly), $Q_{smin(L)}$ (after off-loading) for p = 40 bar (T = 23 ± 2 °C)

L [mg/(s·m)]	$Q_{min(L)}$ [MPa]	$Q_{smin(L)}$ [MPa]					
		Q_A = 5.4 [MPa]	Q_A = 10 [MPa]	Q_A = 20 [MPa]	Q_A = 40 [MPa]	Q_A = 60 [MPa]	Q_A = 80 [MPa]
1E+1	5		5	5	5	5	5
1E-0	6		5	5	5	5	5
1E-1	10		5	5	5	5	5
1E-2	20			19	5	5	5
1E-3	42					10	5
1E-4	67						26
1E-5							
1E-6							
1E-7							
1E-8							



Minimum stress to seal $Q_{min(L)}$ (at assembly), $Q_{smin(L)}$ (after off-loading) for p = 63 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]
1E-0	10		10	10	10	10
1E-1	14		10	10	10	10
1E-2	30			10	10	10
1E-3	56				34	14
1E-4						
1E-5						
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: **2013-01-14**

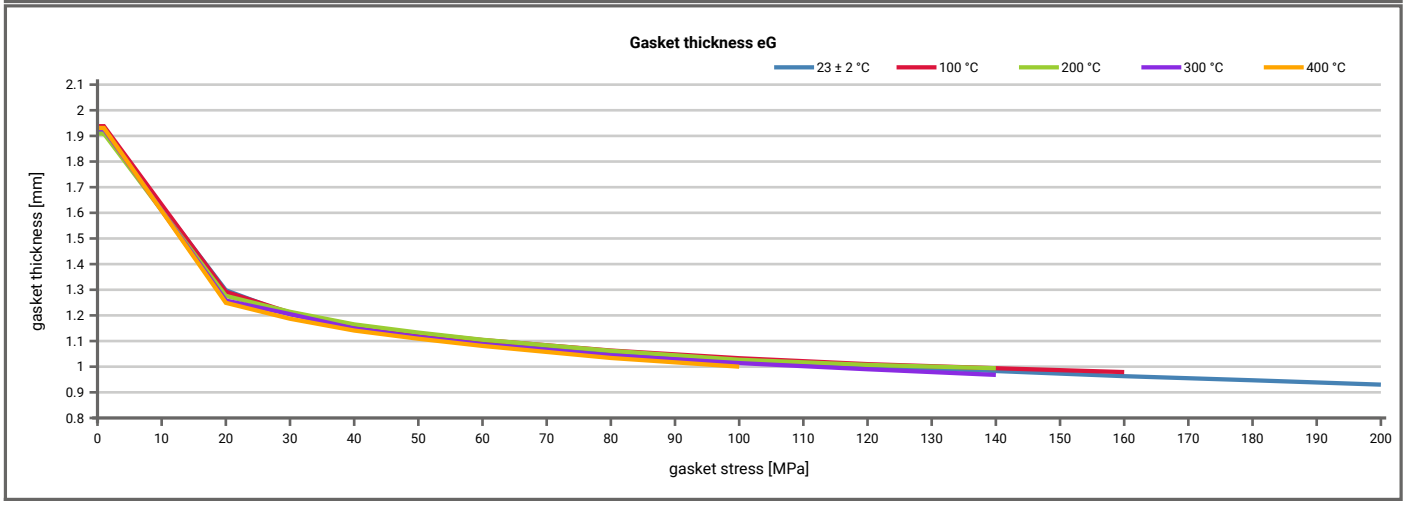
Manufacturer address	Frenzelit GmbH, Frankenhammer, 95460 Bad Berneck, DE	According to **DIN EN 13555 2005-2**
Product name	novaphit SSTC TA-L / novaphit SSTC TA-L with XP-Technology	
Product dimensions	92 x 49 x 2 mm (DIN EN 1514-1 1997-8)	

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

Gasket stress	23 ± 2 °C		Temperature 1 [100 °C]		Temperature 2 [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 [30 MPa]	0.99	4	0.94	15	0.93	18	0.93	19	0.93	19
P_{QR} and Δe_{Gc} at maximum gasket stress to be applied Q_{smax}										
P_{QR} at Q_{smax}	1.00	0	0.99	20	0.97	35	0.96	53	0.93	65
Q_{smax}	200 MPa		160 MPa		140 MPa		140 MPa		110 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	1.921	0	1.938	0	1.909	0	1.926	0	1.931
1	0	1.921	0	1.938	0	1.909	0	1.926	0	1.931
20	473	1.298	513	1.292	564	1.276	624	1.258	540	1.249
30	815	1.205	761	1.211	812	1.214	848	1.205	808	1.187
40	1050	1.151	1223	1.162	1459	1.165	1104	1.149	1346	1.141
50	1565	1.116	1725	1.129	1840	1.133	1781	1.116	1801	1.109
60	1808	1.089	2157	1.104	1906	1.105	1934	1.087	1856	1.081
80	2683	1.048	2628	1.063	2569	1.062	2876	1.044	2310	1.034
100	4051	1.022	3198	1.033	3116	1.027	3400	1.014	3029	1.000
120	4458	1.002	4355	1.010	4622	1.007	4271	0.990		
140	5071	0.983	6866	0.994	6451	0.994	4535	0.968		
160	5535	0.963	8418	0.979						
180	6759	0.947								
200	7815	0.930								



Note: the content of darkened cells was not determined respectively is unnecessary	Rev.-No.: **2**	Creation date of this sheet: **2013-01-14**