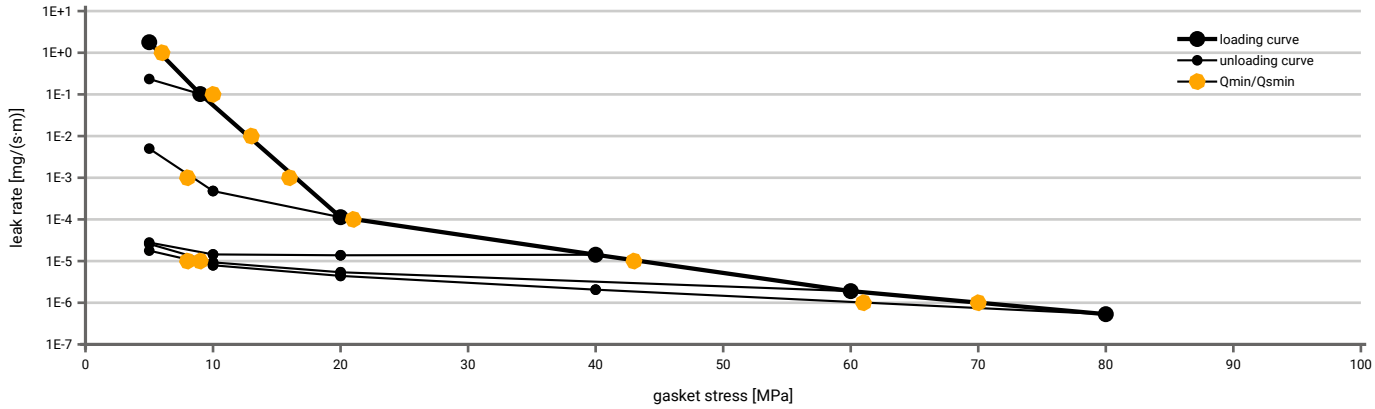
Manufacturer address	Frenzelit GmbH, Frankenhammer, 95460 Bad Berneck, DE	According to **EN 13555 2021-4**
Product name	novaflon 300	
Product dimensions	92 x 49 x 2 mm	

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 = 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
1E-2	13			5	5	5	5
1E-3	17			8	5	5	5
1E-4	21				5	5	5
1E-5	44					10	9
1E-6	70						61
1E-7							
1E-8							

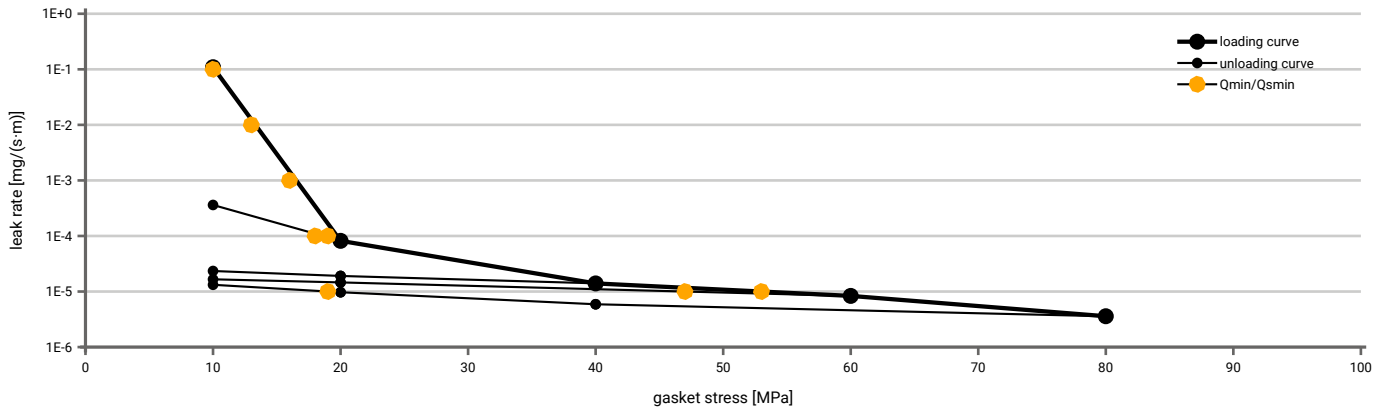
Leakage - 23 ± 2 °C / 10 bar



Minimum stress to seal $Q_{min(L)}$ (at assembly), $Q_{smin(L)}$ (after off-loading) for p = 20 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	10		10	10	10	10
1E-2	13		10	10	10	10
1E-3	16		10	10	10	10
1E-4	20		19	10	10	10
1E-5	53				47	19
1E-6						
1E-7						
1E-8						

Leakage - 23 ± 2 °C / 20 bar



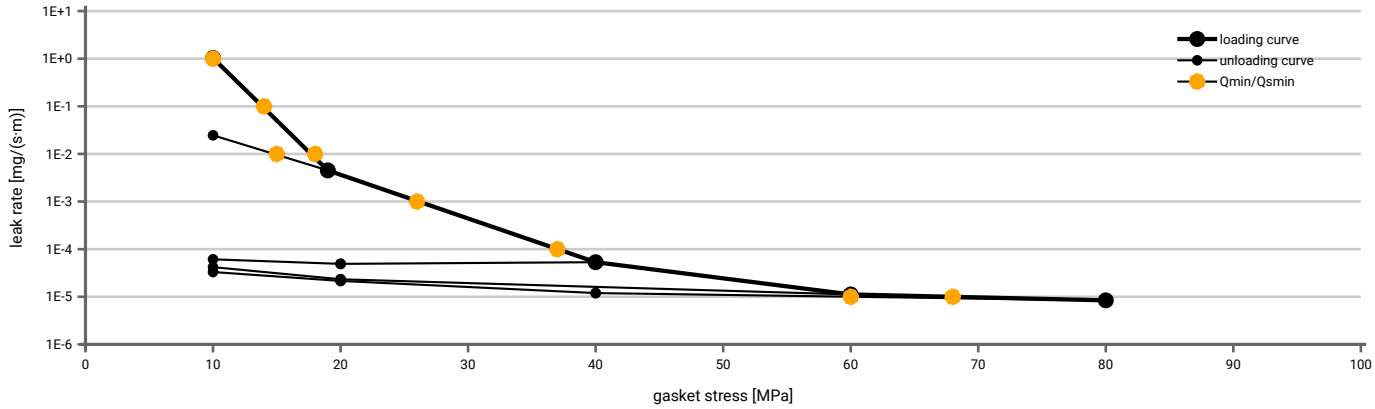
Note: the content of darkened cells was not determined respectively is unnecessary	Rev.-No.: **1**	Creation date of this sheet: **2022-01-11**

Manufacturer address	Frenzelit GmbH, Frankenhammer, 95460 Bad Berneck, DE	According to **EN 13555 2021-4**
Product name	novaflon 300	
Product dimensions	92 x 49 x 2 mm	

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]
1E+1	10		10	10	10	10
1E-0	10		10	10	10	10
1E-1	14		10	10	10	10
1E-2	18		15	10	10	10
1E-3	27			10	10	10
1E-4	37			10	10	10
1E-5	68					60
1E-6						
1E-7						
1E-8						

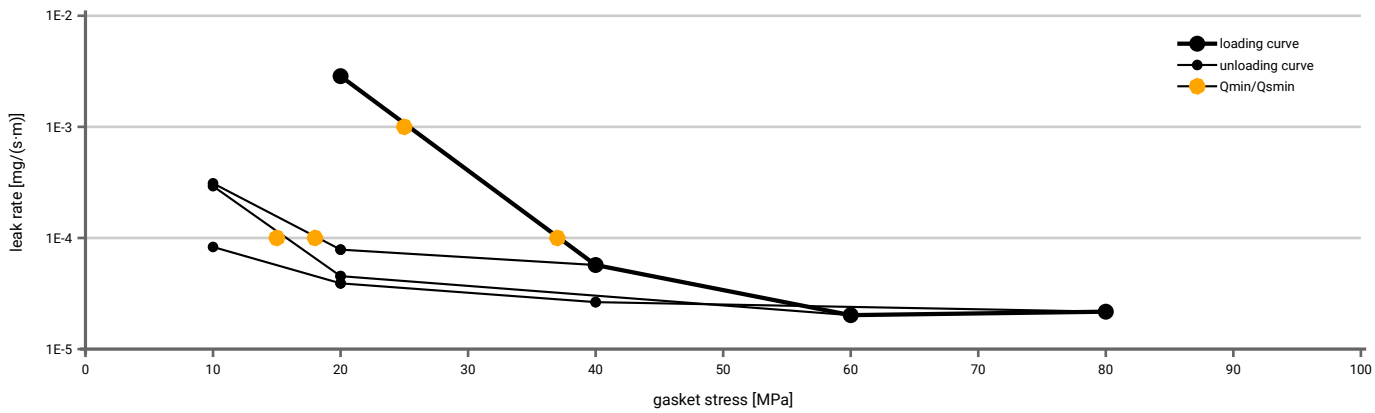
Leakage - 23 ± 2 °C / 40 bar



Minimum stress to seal $Q_{min(L)}$ (at assembly), $Q_{smin(L)}$ (after off-loading) for p = 80 bar (T = 23 ± 2 °C)

L [mg/(s·m)]	$Q_{min(L)}$ [MPa]	$Q_{smin(L)}$ [MPa]			
		Q_A = 20 [MPa]	Q_A = 40 [MPa]	Q_A = 60 [MPa]	Q_A = 80 [MPa]
1E-0	20		10	10	10
1E-1	20		10	10	10
1E-2	20		10	10	10
1E-3	25		10	10	10
1E-4	37		18	16	10
1E-5					
1E-6					
1E-7					
1E-8					

Leakage - 23 ± 2 °C / 80 bar

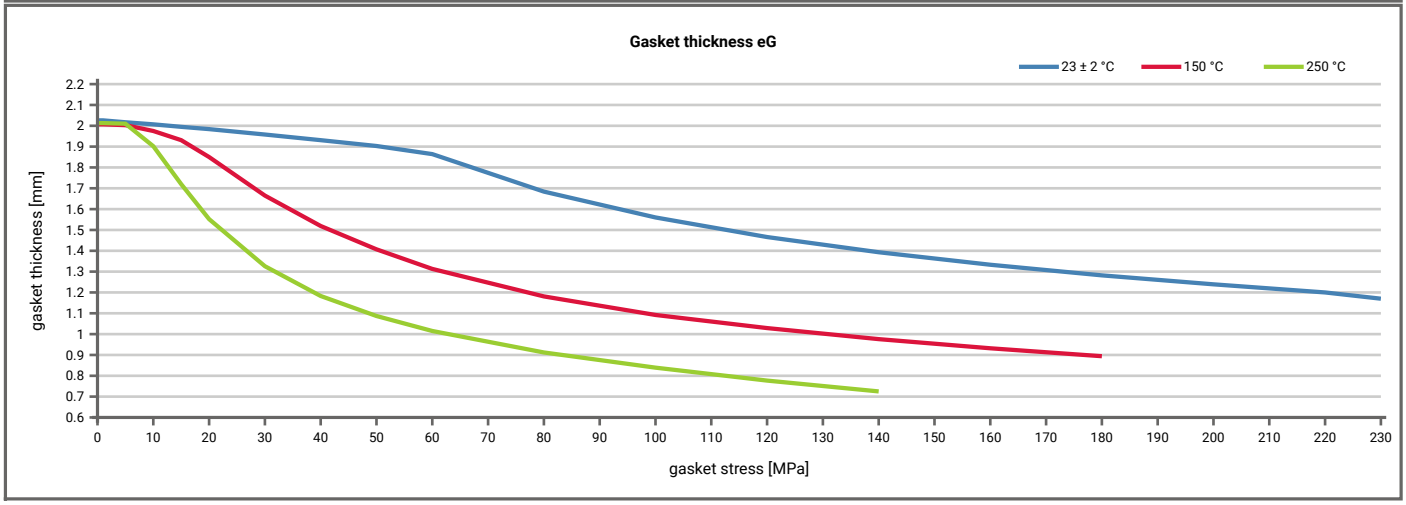


Note: the content of darkened cells was not determined respectively is unnecessary	Rev.-No.: **1**	Creation date of this sheet: **2022-01-11**

Manufacturer address	Frenzelit GmbH, Frankenhammer, 95460 Bad Berneck, DE	According to **EN 13555 2021-4**
Product name	novaflon 300	
Product dimensions	92 x 49 x 2 mm	

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	0.95	5	0.67	28				
Stress level 2 [30 MPa]	0.96	11	0.58	107	0.38	157				
Stress level 3 [50 MPa]					0.35	275				
Stress level 4 [60 MPa]			0.53	239						
Stress level 5 [100 MPa]	0.89	97								
P_{QR} and Δe_{Gc} at maximum gasket stress to be applied (Q_{smax})										
P_{QR} at Q_{smax}	0.93	145	0.74	400	0.66	400				
Q_{smax}	230 MPa		180 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 [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	2.026	0	2.007	0	2.013				
1	0	2.026	0	2.007	0	2.013				
5	4429	2.017	1306	2.003	638	2.010				
10	5062	2.007	1515	1.975	770	1.902				
15	2548	1.995	1152	1.931	723	1.720				
20	2615	1.984	1302	1.850	876	1.552				
30	2791	1.958	1725	1.665	1070	1.326				
40	3101	1.931	1882	1.519	1183	1.183				
50	3542	1.903	2222	1.407	1367	1.087				
60	3987	1.864	2301	1.313	1566	1.015				
80	5384	1.684	2644	1.181	1763	0.912				
100	5399	1.560	2811	1.092	1920	0.839				
120	5507	1.466	2970	1.029	2092	0.777				
140	5531	1.393	3166	0.976	2272	0.725				
160	5550	1.333	3292	0.932						
180	5588	1.282	3327	0.894						
200	5600	1.239								
220	5633	1.200								
230	5509	1.170								



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