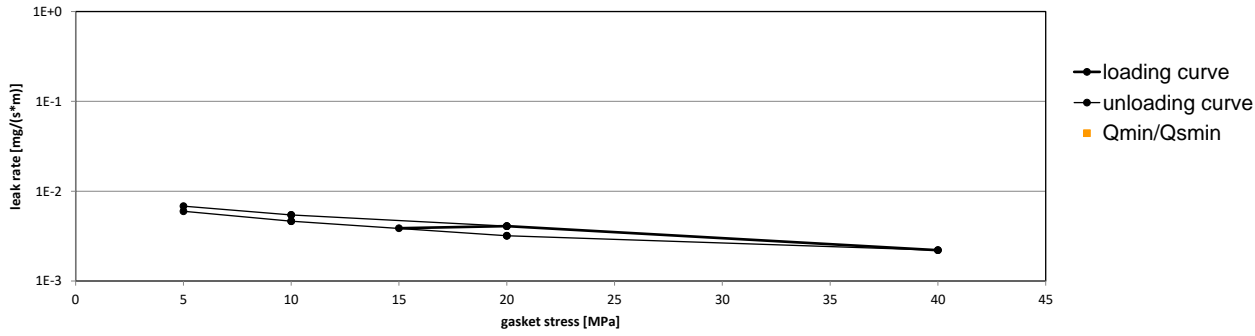


Company Address	Frenzellit GmbH; Frankenhammer 7; 95460 Bad Berneck
Gasket Type	novamica® THERMEX
Sealing element dimensions [mm]	92 x 49 x 2 mm

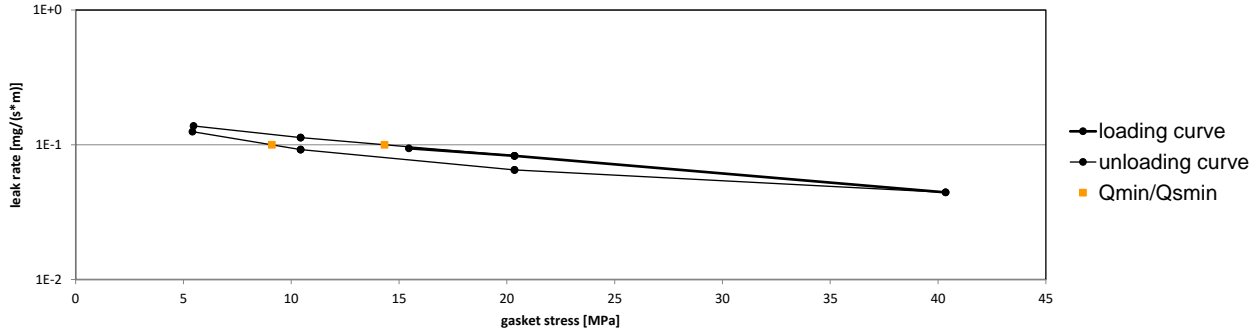
L [mg/(s*m)]	Q _{min/L} [MPa]	Minimum stress to seal Q _{min/L} (at assembly), Q _{Smin/L} (after off-loading) for p = 5 bar									
		Q _A = 20 MPa		Q _A = 40 MPa		Q _{Smin/L} [MPa]		Q _{Smin/L} [MPa]		Q _{Smin/L} [MPa]	
10 ⁰	15	5	5								
10 ⁻¹	15	5	5								
10 ⁻²	15	5	5								
10 ⁻³											
10 ⁻⁴											
10 ⁻⁸											

Leakage - 400°C / inner pressure = 5 bar He



L [mg/(s*m)]	Q _{min/L} [MPa]	Minimum stress to seal Q _{min/L} (at assembly), Q _{Smin/L} (after off-loading) for p = 20 bar									
		Q _A = 20 MPa		Q _A = 40 MPa		Q _{Smin/L} [MPa]		Q _{Smin/L} [MPa]		Q _{Smin/L} [MPa]	
10 ⁰	15	5	5								
10 ⁻¹	15	14	9								
10 ⁻²											
10 ⁻³											
10 ⁻⁴											
10 ⁻⁸											

Leakage - 400°C / inner pressure = 20 bar He



Company Address	Frenzelit GmbH; Frankenhammer 7; 95460 Bad Berneck
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Sealing element dimensions [mm]	92 x 49 x 2 mm

Relaxation ratio P_{QR} for stiffness $C = 500$ kN/mm				
Gasket stress [MPa]	ambient temperature	temperature 1 [200 °C]	temperature 2 [400 °C]	
Stress level 1 [15 MPa]	0,69	0,40	0,37	
Stress level 2 [30 MPa]	0,87	0,50	0,41	
PQR at Q_{Smax}	0,98 at 220 MPa	0,77 at 120 MPa	0,72 at 120 MPa	

Maximal applicable gasket stress Q_{Smax}				
Q_{Smax} [MPa] ambient temperature	Q_{Smax} [MPa] – temperature 1 [200 °C]	Q_{Smax} [MPa] – temperature 2 [400 °C]	Q_{Smax} [MPa] – temperature 3	Q_{Smax} [MPa] – temperature 4
220	120	120		

Sekant unloading modulus of the gasket E_G [MPa] and gasket thickness e_G [mm]										
Gasket stress [MPa]	ambient temperature		temperature 1 [200 °C]		temperature 2 [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		2,038		2,040		2,006				
1		1,732		1,733		1,728				
20	989	1,422	1791	1,278	3633	1,265				
30	1582	1,386	3039	1,272	4154	1,263				
40	2912	1,370	3664	1,264	5428	1,259				
50	2642	1,356	3643	1,257	5743	1,255				
60	3269	1,348	3989	1,250	7626	1,253				
80	8311	1,340	4331	1,240	6592	1,245				
100	8645	1,333	5550	1,232	5075	1,236				
120	7198	1,322	9459	1,219	5380	1,230				
140	7016	1,315								
160	8523	1,308								
180	10632	1,302								
200	11060	1,294								
220	14099	1,291								
240										
260										
280										
300										
320										
940										

