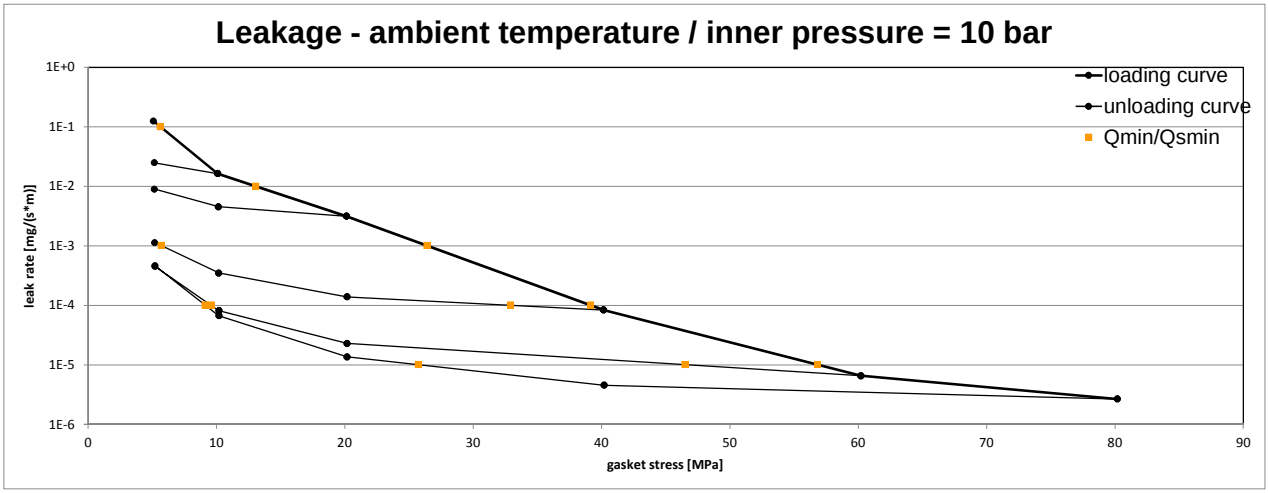
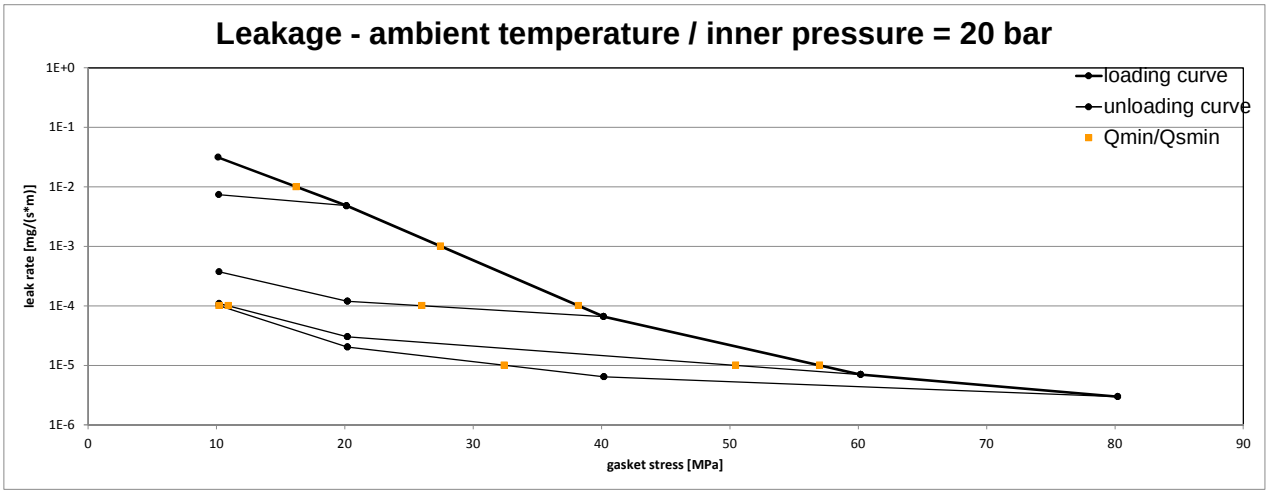
Company Address	Frenzelit-Werke, Frankenhammer 7, 95460 Bad Berneck, Germany	According to **DIN EN 13555 2014-07**
Gasket Type	*novapress® UNIVERSAL*	
Sealing element dimensions [mm]	*92 x 49 x 2*	

L [mg/(s*m)]	$Q_{min/L}$ [MPa]	Minimum stress to seal $\mathbf{Q_{min/L}}$ (at assembly), $\mathbf{Q_{Smin/L}}$ (after off-loading) for p = 10 bar $Q_{Smin/L}$ [MPa]									
		Q_A= 10 MPa	Q_A= 20 MPa	Q_A= 40 MPa	Q_A= 60 MPa	Q_A= 80 MPa					
10^{-0}	5	5	5	5	5	5					
10^{-1}	6	5	5	5	5	5					
10^{-2}	13		5	5	5	5					
10^{-3}	26			6	5	5					
10^{-4}	39			33	10	9					
10^{-5}	57				47	26					
10^{-6}											
10^{-7}											
10^{-8}											



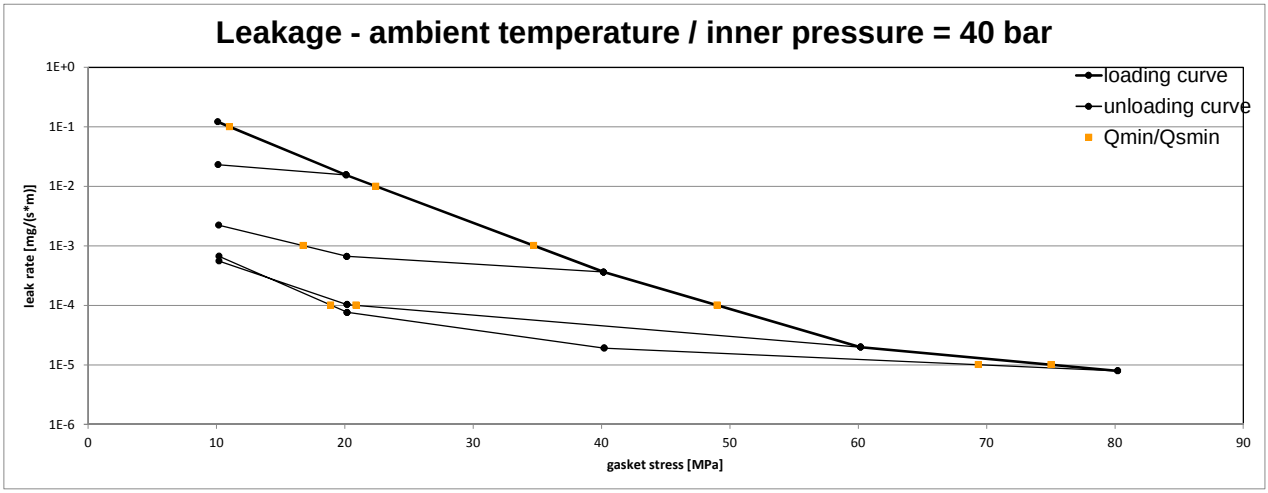
L [mg/(s*m)]	$Q_{min/L}$ [MPa]	Minimum stress to seal $\mathbf{Q_{min/L}}$ (at assembly), $\mathbf{Q_{Smin/L}}$ (after off-loading) for p = 20 bar $Q_{Smin/L}$ [MPa]									
		Q_A= 20 MPa	Q_A= 40 MPa	Q_A= 60 MPa	Q_A= 80 MPa						
10^{-0}	10	10	10	10	10						
10^{-1}	10	10	10	10	10						
10^{-2}	16	10	10	10	10						
10^{-3}	27		10	10	10						
10^{-4}	38		26	11	10						
10^{-5}	57			50	32						
10^{-6}											
10^{-7}											
10^{-8}											



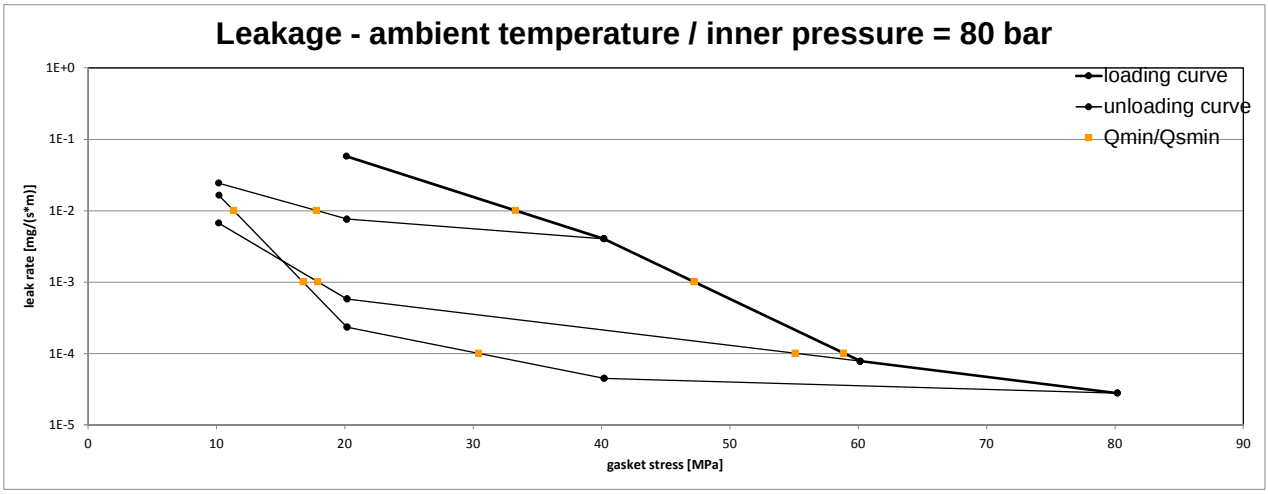
Note: the content of darkened cells was not determined respectively is unnecessary	Rev - No: **1**	Creation date of this sheet:	**2015-04-23**

Company Address	Frenzelit-Werke, Frankenhammer 7, 95460 Bad Berneck, Germany	According to **DIN EN 13555 2014-07**
Gasket Type	*novapress® UNIVERSAL*	
Sealing element dimensions [mm]	*92 x 49 x 2*	

L [mg/(s*m)]	$Q_{min/L}$ [MPa]	Minimum stress to seal $\mathbf{Q_{min/L}}$ (at assembly), $\mathbf{Q_{Smin/L}}$ (after off-loading) for p = 40 bar $Q_{Smin/L}$ [MPa]									
		Q_A= 20 MPa	Q_A= 40 MPa	Q_A= 60 MPa	Q_A= 80 MPa						
10^{-0}	10	10	10	10	10						
10^{-1}	11	10	10	10	10						
10^{-2}	22		10	10	10						
10^{-3}	35		17	10	10						
10^{-4}	49			21	19						
10^{-5}	75				69						
10^{-6}											
10^{-7}											
10^{-8}											



L [mg/(s*m)]	$Q_{min/L}$ [MPa]	Minimum stress to seal $\mathbf{Q_{min/L}}$ (at assembly), $\mathbf{Q_{Smin/L}}$ (after off-loading) for p = 80 bar $Q_{Smin/L}$ [MPa]									
		Q_A= 40 MPa	Q_A= 60 MPa	Q_A= 80 MPa							
10^{-0}	20	20	20	20							
10^{-1}	20	20	20	20							
10^{-2}	33	18	20	11							
10^{-3}	47		18	17							
10^{-4}	59		55	30							
10^{-5}											
10^{-6}											
10^{-7}											
10^{-8}											



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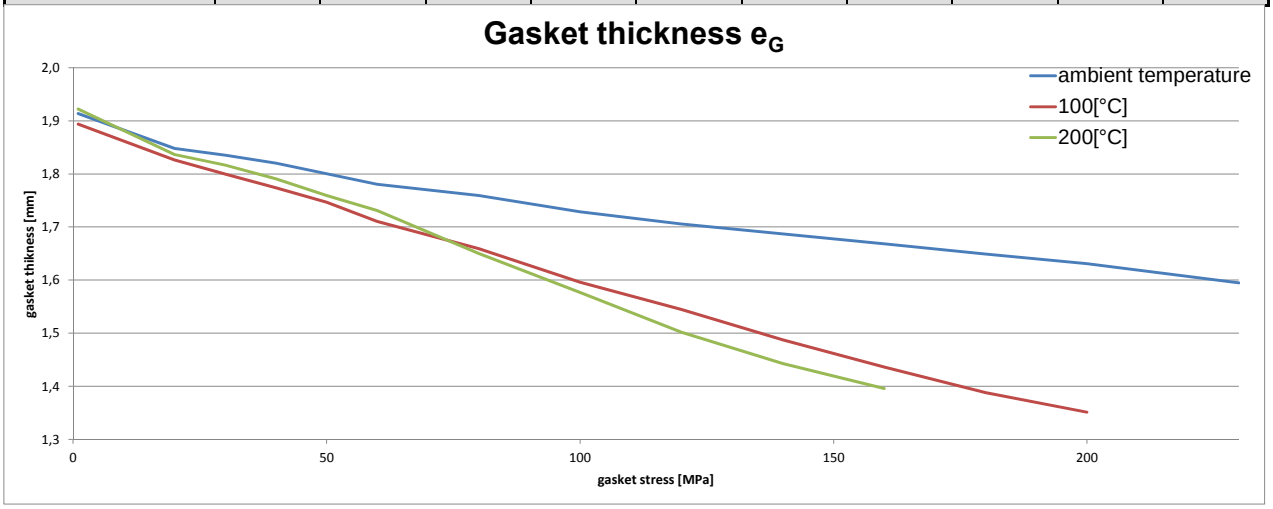
Company Address	*Frenzelit-Werke, Frankenhammer 7, 95460 Bad Berneck, Germany*	According to **DIN EN 13555 2014-07**
Gasket Type	*novapress® UNIVERSAL*	
Sealing element dimensions [mm]	*92 x 49 x 2*	

Relaxation ratio P_{QR} for stiffness **C** = 500 kN/mm										
Gasket stress	ambient temperature		temperature 1 [100 °C]		temperature 2 [200 °C]					
	P_{QR}	Δe_{Gc} [mm]	P_{QR}	Δe_{Gc} [mm]	P_{QR}	Δe_{Gc} [mm]	P_{QR}	Δe_{Gc} [mm]	P_{QR}	Δe_{Gc} [mm]
Stress level 1 [30 MPa]	0.98	0.006	0.89	0.028	0.82	0.047				
P_{QR} and Δe_{Gc} at maximal applicable gasket stress Q_{smax}										
P_{QR} at Q_{Smax}	0.97	0.058	0.87	0.227	0.79	0.282				
Q_{Smax}	230 MPa		200 MPa		160 MPa					

Sekant unloading modulus of the gasket E_G [MPa] and gasket thickness e_G [mm]										
Gasket stress [MPa]	ambient temperature		temperature 1 [100 °C]		temperature 2 [200 °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		1.920		1.907		1.925				
1		1.914		1.894		1.922				
20	1715	1.848	1862	1.826	3149	1.836				
30	4213	1.835	1661	1.799	2757	1.817				
40	4762	1.820	2662	1.774	2343	1.791				
50	3745	1.801	3595	1.747	3519	1.759				
60	3739	1.780	3030	1.710	4836	1.731				
80	13190	1.759	6731	1.659	3890	1.650				
100	5676	1.729	3768	1.596	6600	1.577				
120	6622	1.706	6172	1.545	4257	1.502				
140	8678	1.687	5509	1.487	5045	1.443				
160	8691	1.668	5755	1.436	5929	1.396				
180	7713	1.649	5580	1.388						
200	9424	1.631	8310	1.351						
220	7575	1.607								
230	7393	1.595								



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