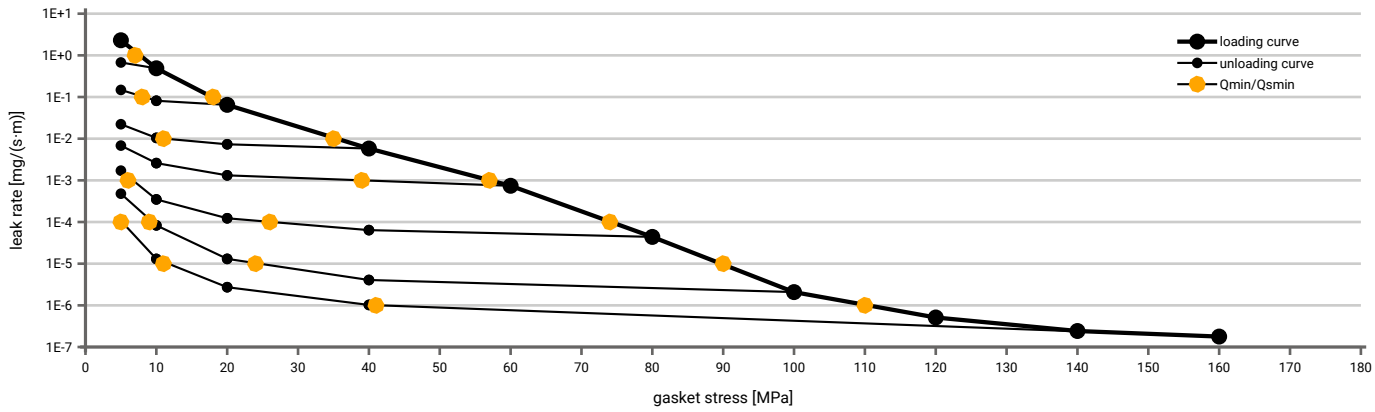
Manufacturer address	Gambit Lubawka Sp. z o.o., ul.Wojska Polskiego 16, 58-420 Lubawka, PL	According to **DIN EN 13555 2005-2**
Product name	AF-OIL®	
Product dimensions	92 x 49 x 2 mm (DIN EN 1514-1 1997-8)	

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 [MPa]	Q_A = 10 [MPa]	Q_A = 20 [MPa]	Q_A = 40 [MPa]	Q_A = 60 [MPa]	Q_A = 80 [MPa]	Q_A = 100 [MPa]	Q_A = 120 [MPa]	Q_A = 140 [MPa]	Q_A = 160 [MPa]
1E+1	5		5	5	5	5	5	5			5
1E-0	8		5	5	5	5	5	5			5
1E-1	18			8	5	5	5	5			5
1E-2	36				11	5	5	5			5
1E-3	57					39	7	5			5
1E-4	74						27	10			5
1E-5	90							25			12
1E-6	111										42
1E-7											
1E-8											

Leakage - 23 ± 2 °C / 10 bar

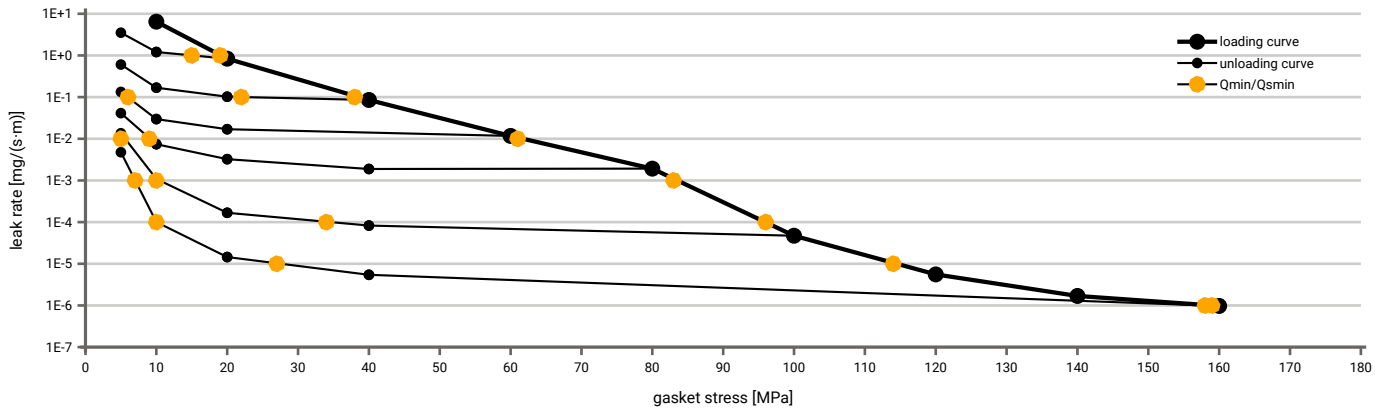


Minimum stress to seal $Q_{min(L)}$ (at assembly), $Q_{smin(L)}$ (after off-loading) for p = 40 bar (T = 23 ± 2 °C)

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]	Q_A = 100 [MPa]	Q_A = 120 [MPa]	Q_A = 140 [MPa]	Q_A = 160 [MPa]
1E+1	10		5	5	5	5	5			5
1E-0	19		15	5	5	5	5			5
1E-1	39			23	6	5	5			5
1E-2	62					9	6			5
1E-3	84						11			7
1E-4	96						35			10
1E-5	115									28
1E-6	159									158
1E-7										
1E-8										

Manufacturer address	Gambit Lubawka Sp. z o.o., ul.Wojska Polskiego 16, 58-420 Lubawka, PL	According to **DIN EN 13555 2005-2**
Product name	AF-OIL®	
Product dimensions	92 x 49 x 2 mm (DIN EN 1514-1 1997-8)	

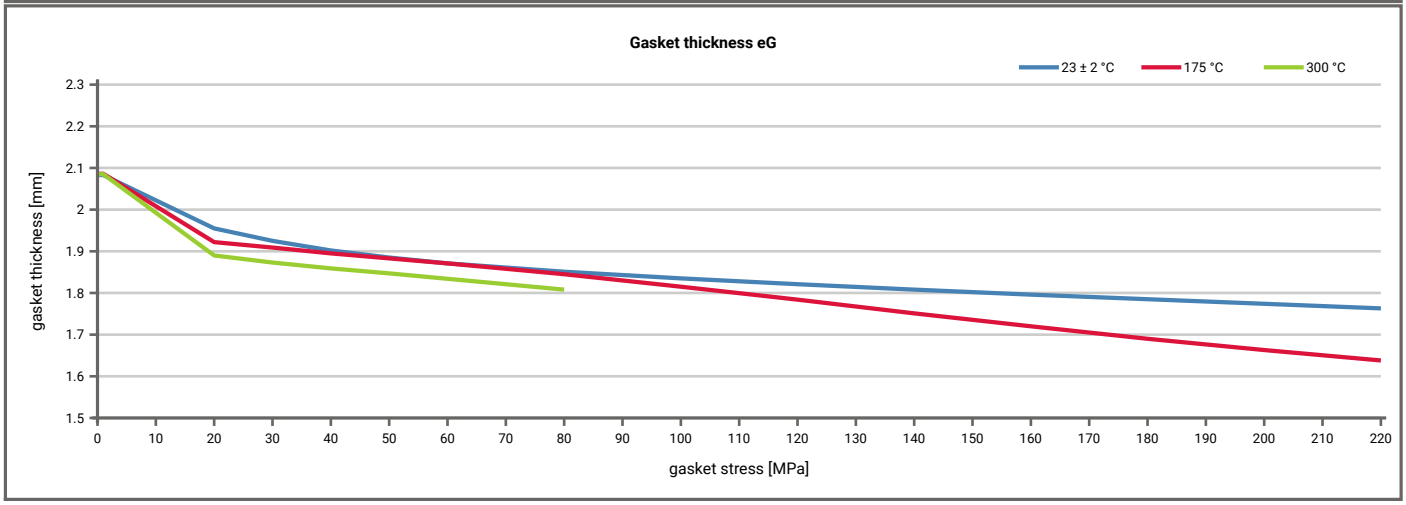
Leakage - 23 ± 2 °C / 40 bar



Manufacturer address	Gambit Lubawka Sp. z o.o., ul.Wojska Polskiego 16, 58-420 Lubawka, PL	According to **DIN EN 13555 2005-2**
Product name	AF-OIL®	
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 [175 °C]**		**Temperature 2 [300 °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]	0.94	15	0.82	45	0.61	98				
Stress level 2 [50 MPa]	0.97	15	0.90	44	0.69	132				
P_{QR} and Δe_{Gc} at maximum gasket stress to be applied Q_{smax}										
P_{QR} at Q_{smax}	0.99	18	0.86	258	0.67	222				
Q_{smax}	220 MPa		220 MPa		80 MPa					

Sekant unloading modulus of the gasket E_G [MPa] and gasket thickness e_G [mm]										
Gasket stress [MPa]	**23 ± 2 °C**		**Temperature 1 [175 °C]**		**Temperature 2 [300 °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	2.083	0	2.086	0	2.085				
1	0	2.083	0	2.086	0	2.085				
20	1133	1.955	1681	1.922	9216	1.890				
30	1766	1.925	2311	1.909	5236	1.873				
40	2458	1.902	2661	1.895	4853	1.859				
50	3187	1.885	3370	1.883	5285	1.847				
60	3982	1.871	3679	1.871	5453	1.834				
80	5399	1.851	4440	1.845	6179	1.808				
100	6535	1.835	4784	1.815						
120	7345	1.821	5133	1.784						
140	8098	1.808	5522	1.751						
160	8523	1.796	5871	1.720						
180	8926	1.785	6239	1.690						
200	9384	1.774	6468	1.663						
220	9739	1.763	6772	1.638						



Note: the content of darkened cells was not determined respectively is unnecessary	Rev.-No.: **1**	Creation date of this sheet: **2012-05-16**