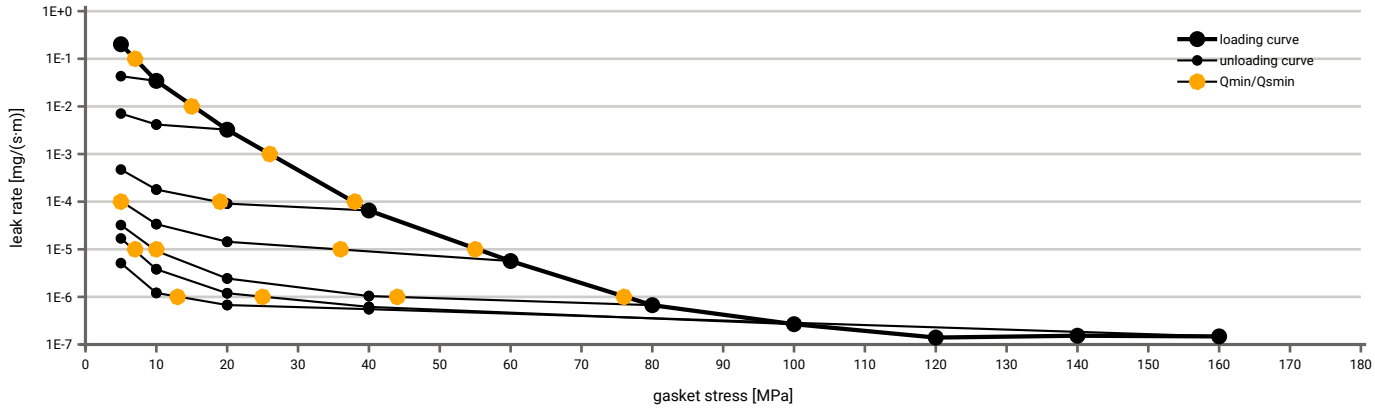
Manufacturer address	Gambit Lubawka Sp. z o.o., ul.Wojska Polskiego 16, 58-420 Lubawka, PL	According to DIN EN 13555 2014-7
Product name	AF-153	
Product dimensions	92 x 49 x 2 mm (DIN EN 1514-1 1997-8)	

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 = 5.4 [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-0	5		5	5	5	5	5	5			5
1E-1	7		5	5	5	5	5	5			5
1E-2	16			5	5	5	5	5			5
1E-3	26				5	5	5	5			5
1E-4	38				19	6	5	5			5
1E-5	56					36	10	7			5
1E-6	77						44	26			14
1E-7											
1E-8											

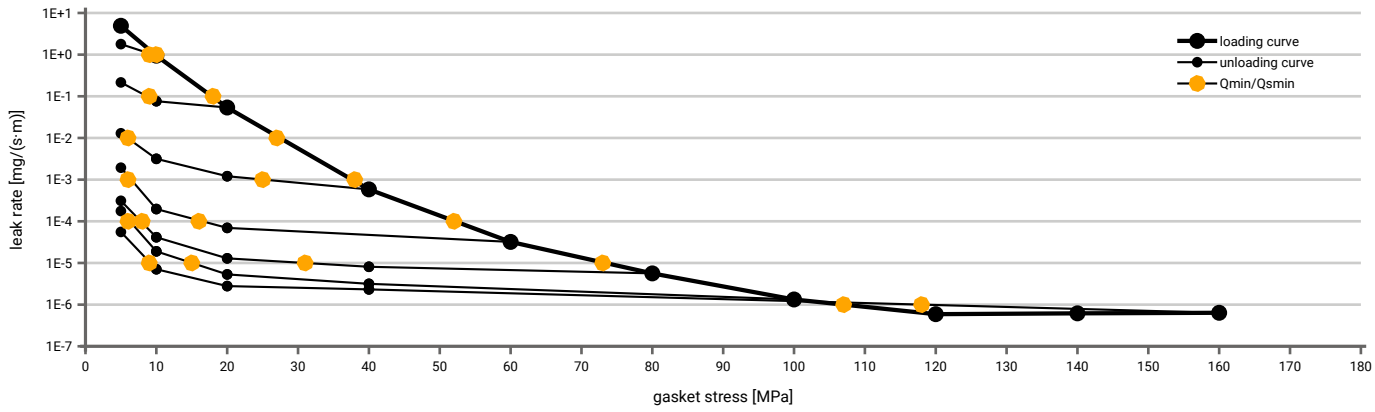
Leakage - 23 ± 2 °C / 10 bar



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 = 5.4 [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	10		10	5	5	5	5	5			5
1E-1	18			9	5	5	5	5			5
1E-2	28				6	5	5	5			5
1E-3	38				26	7	5	5			5
1E-4	53					17	8	7			5
1E-5	74						31	15			10
1E-6	107										119
1E-7											
1E-8											

Leakage - 23 ± 2 °C / 40 bar

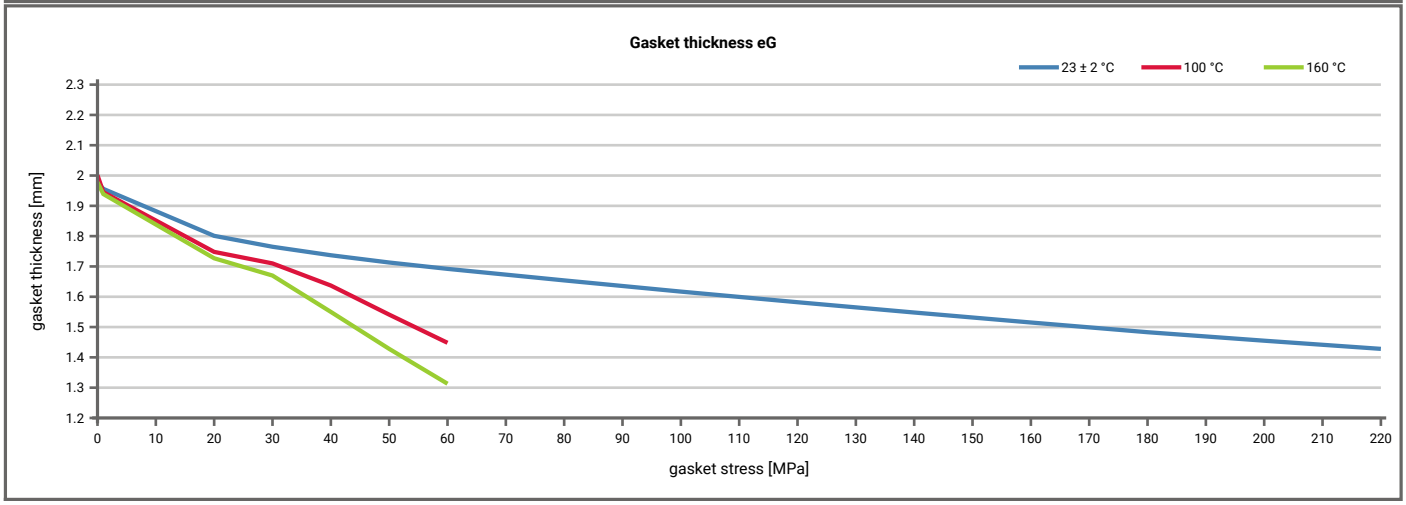


Note: the content of darkened cells was not determined respectively is unnecessary	Rev.-No.: **1**	Creation date of this sheet: **2014-11-24**

Manufacturer address	Gambit Lubawka Sp. z o.o., ul.Wojska Polskiego 16, 58-420 Lubawka, PL	According to **DIN EN 13555 2014-7**
Product name	AF-153	
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 [160 °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]	0.95	13	0.75	63	0.65	88				
Stress level 2 [50 MPa]	0.96	17	0.68	136	0.56	185				
P_{QR} and Δe_{Gc} at maximum gasket stress to be applied Q_{smax}										
P_{QR} at Q_{smax}	0.97	65	0.67	166	0.53	237				
Q_{smax}	220 MPa		60 MPa		60 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 [160 °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	1.978	0	2.001	0	1.978				
1	0	1.956	0	1.945	0	1.939				
20	1232	1.801	2100	1.748	2251	1.727				
30	1768	1.765	2578	1.710	2682	1.670				
40	2376	1.737	3069	1.637	2723	1.550				
50	2945	1.713	3806	1.541	3330	1.428				
60	3376	1.692	4729	1.448	3664	1.313				
80	4109	1.654								
100	4667	1.617								
120	5158	1.582								
140	5628	1.548								
160	5989	1.515								
180	6292	1.483								
200	6718	1.455								
220	6920	1.428								



Note: the content of darkened cells was not determined respectively is unnecessary	Rev.-No.: **1**	Creation date of this sheet: **2014-11-24**