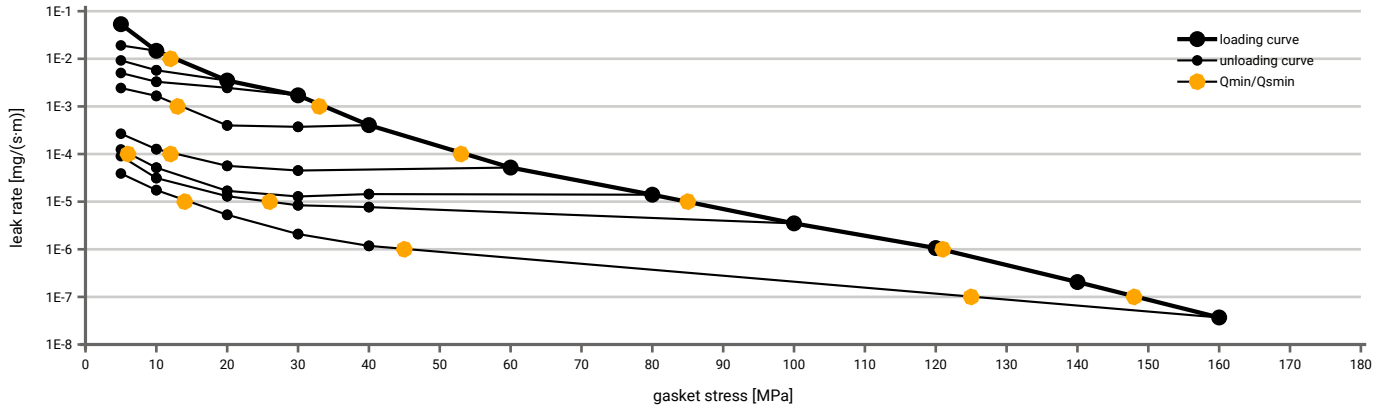
Manufacturer address	KLINGER Kempchen GmbH, Im Waldteich 21, 46147 Oberhausen, DE	According to **DIN EN 13555 2014-7**
Product name	Rivatherm Super Plus F1 RSP2S2075-I mit Innenbördel	
Product dimensions	92 x 49 x 2 mm (DIN EN 1514-1 1997-8)	

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 = 30 [MPa]	Q_A = 40 [MPa]	Q_A = 60 [MPa]	Q_A = 80 [MPa]	Q_A = 101 [MPa]	Q_A = 121 [MPa]	Q_A = 141 [MPa]	Q_A = 161 [MPa]
1E-0	5		5	5	5	5	5	5	5			5
1E-1	5		5	5	5	5	5	5	5			5
1E-2	13			5	5	5	5	5	5			5
1E-3	34					14	5	5	5			5
1E-4	54						13	6	5			5
1E-5	85								26			15
1E-6	121											46
1E-7	149											126
1E-8												

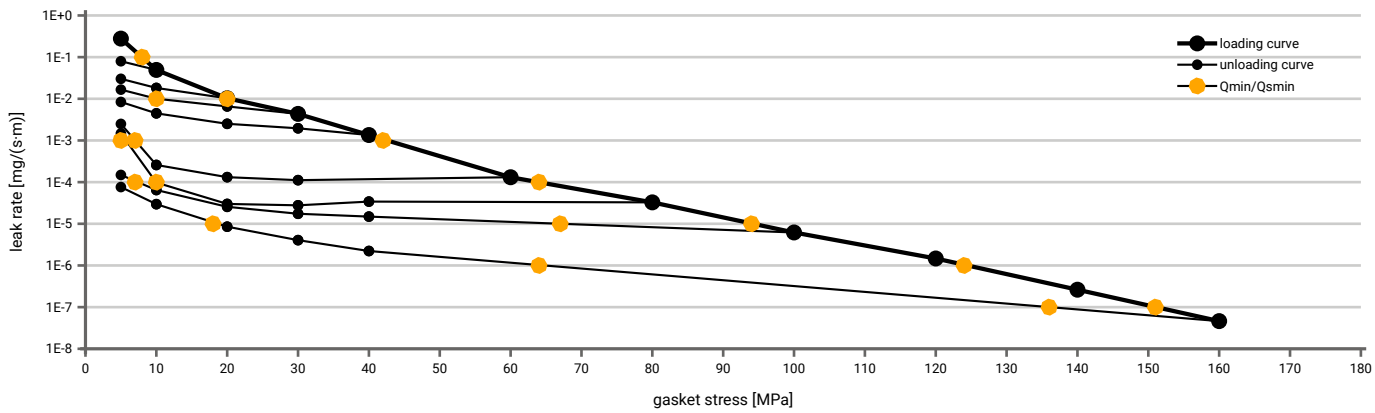
Leakage - 23 ± 2 °C / 10 bar



Minimum stress to seal $Q_{min(L)}$ (at assembly), $Q_{smin(L)}$ (after off-loading) for p = 25 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 = 30 [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			5
1E-1	8		5	5	5	5	5	5	5			5
1E-2	20				10	5	5	5	5			5
1E-3	43						7	6	5			5
1E-4	64							10	7			5
1E-5	94								67			19
1E-6	125											65
1E-7	151											136
1E-8												

Leakage - 23 ± 2 °C / 25 bar

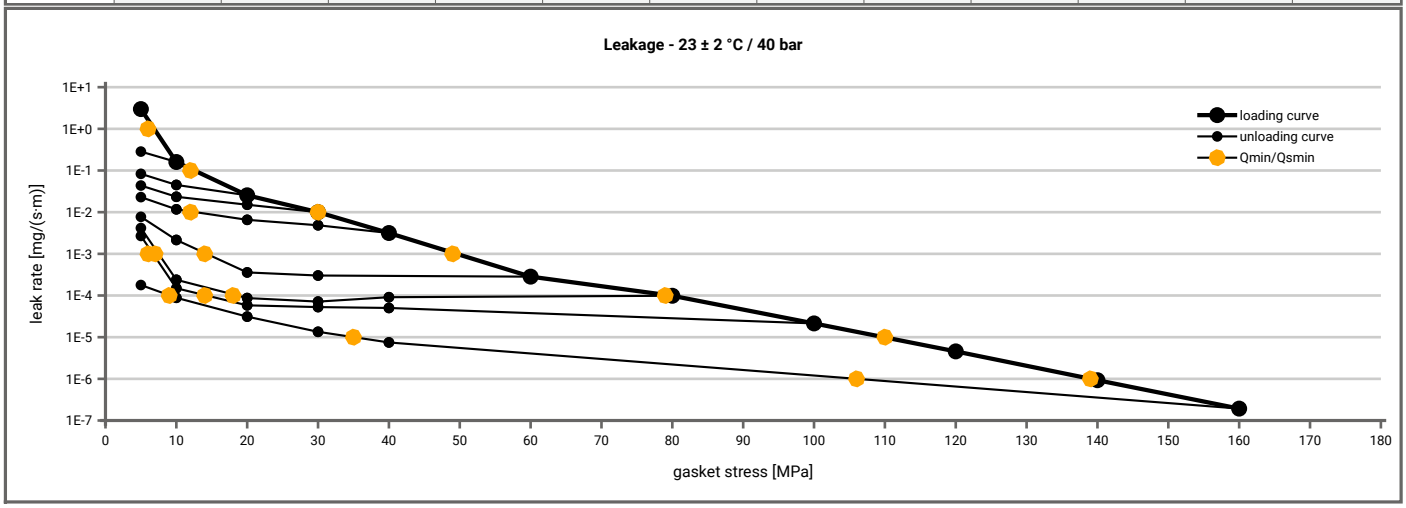


Note: the content of darkened cells was not determined respectively is unnecessary	Rev.-No.: **4**	Creation date of this sheet: **2025-06-16**

Manufacturer address	KLINGER Kempchen GmbH, Im Waldteich 21, 46147 Oberhausen, DE	According to **DIN EN 13555 2014-7**
Product name	Rivatherm Super Plus F1 RSP2S2075-I mit Innenbördel	
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 = 40 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 = 30 [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			5
1E-0	7		5	5	5	5	5	5	5			5
1E-1	13			5	5	5	5	5	5			5
1E-2	30					13	5	5	5			5
1E-3	50						14	8	7			5
1E-4	80							19	14			9
1E-5	110											35
1E-6	139											106
1E-7												



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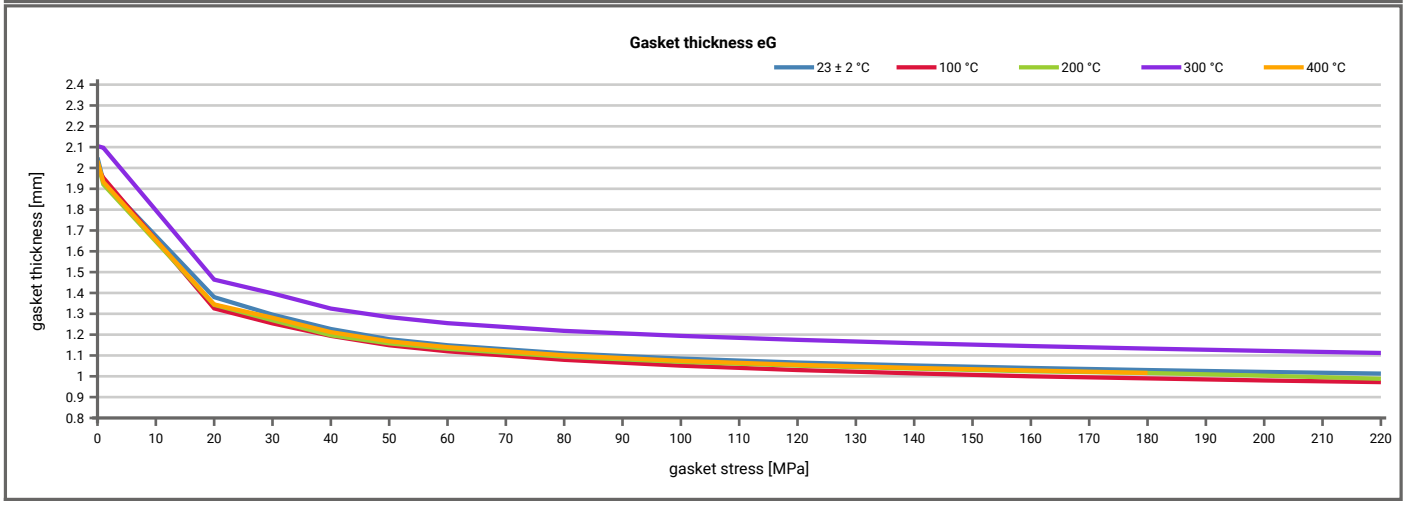
Manufacturer address	KLINGER Kempchen GmbH, Im Waldteich 21, 46147 Oberhausen, DE	According to **DIN EN 13555 2014-7**
Product name	Rivatherm Super Plus F1 RSP2S2075-I mit Innenbördel	
Product dimensions	92 x 49 x 2 mm (DIN EN 1514-1 1997-8)	

Relaxation ratio P_{QR} for stiffness C = 500 [kN/mm]										
Gasket stress	**23 ± 2 °C**		**Temperature 1 [100 °C]**		**Temperature 2 [200 °C]**		**Temperature 3 [300 °C]**		**Temperature 4 [400 °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 [50 MPa]	0.99	4	0.96	17	0.97	13	0.95	23	0.97	15
Stress level 2 [120 MPa]	1.00	0	0.99	10	1.00	5	0.98	20	1.00	0
P_{QR} and Δe_{Gc} at maximum gasket stress to be applied (Q_{smax})										
P_{QR} at Q_{smax}	1.00	0	0.99	28	1.00	0	1.00	0	1.00	8
Q_{smax}	220 MPa		220 MPa		220 MPa		220 MPa		180 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 [200 °C]**		**Temperature 3 [300 °C]**		**Temperature 4 [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	0	2.050	0	2.000	0	2.030	0	2.105	0	2.035
1	0	1.938	0	1.953	0	1.921	0	2.097	0	1.933
20	439	1.380	399	1.326	438	1.343	1052	1.464	493	1.345
30	707	1.296	616	1.254	734	1.269	1282	1.398	730	1.281
40	998	1.227	882	1.194	1012	1.197	1494	1.325	1009	1.212
50	1317	1.178	1196	1.149	1315	1.158	1943	1.284	1338	1.168
60	1645	1.149	1437	1.120	1708	1.132	2456	1.255	1661	1.140
80	2243	1.110	1960	1.079	2278	1.094	3938	1.218	2371	1.101
100	2921	1.085	2477	1.051	3012	1.069	5562	1.194	2987	1.074
120	3506	1.066	3012	1.030	3613	1.051	7075	1.175	3629	1.055
140	4110	1.052	3517	1.014	3890	1.037	7993	1.159	4436	1.040
160	4678	1.040	3947	1.000	4365	1.024	8179	1.145	5167	1.028
180	5296	1.030	4515	0.990	5673	1.016	8517	1.133	5446	1.016
200	5910	1.021	4866	0.980	6682	1.003	8530	1.122		
220	6495	1.013	5364	0.972	8694	0.988	8655	1.112		



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