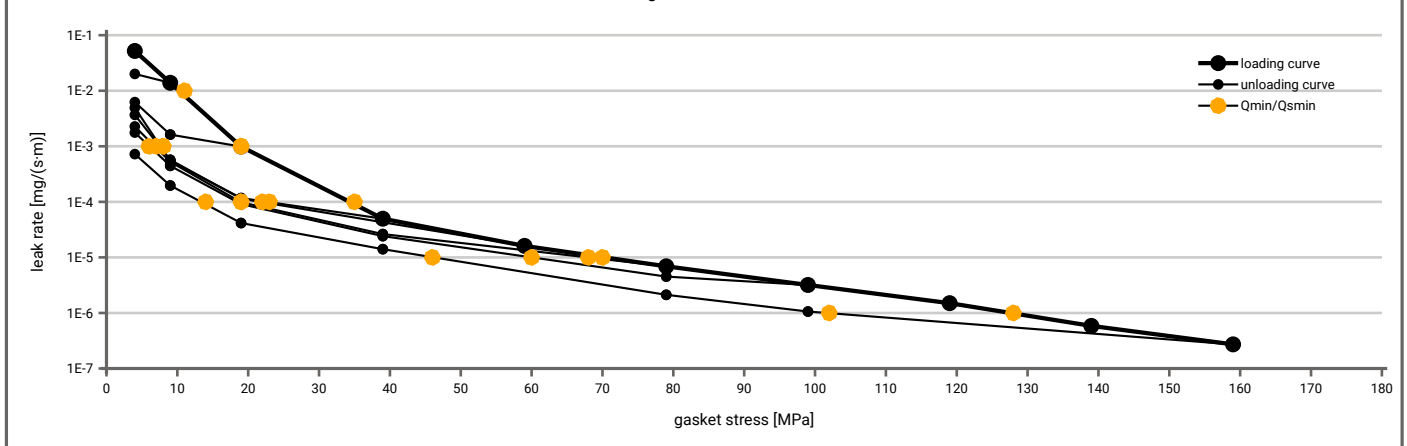


Manufacturer address	DONIT TESNIT d.o.o., Cesta komandanta Staneta 38, SI-1215 Medvode, SI	According to DIN EN 13555 2005-2
Product name	MW12A-3 (corrugated gasket; 1.4571 / nuclear graphite - 0.8 mm)	
Product dimensions	84 x 49 x 2.9 mm (DIN EN 1514-4 1997-8)	

Minimum stress to seal $Q_{min(L)}$ (at assembly), $Q_{smin(L)}$ (after off-loading) for $p = 20$ bar ($T = 23 \pm 2$ °C)

L [mg/(s·m)]	$Q_{min(L)}$ [MPa]	$Q_{smin(L)}$ [MPa]									
		$Q_A = 4.8$ [MPa]	$Q_A = 9.8$ [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	5		5	5	5	5	5	5			5
1E-2	11			5	5	5	5	5			5
1E-3	20			20	8	8	8	7			5
1E-4	35				23	22	20	19			14
1E-5	71						69	61			47
1E-6	128										102
1E-7											
1E-8											

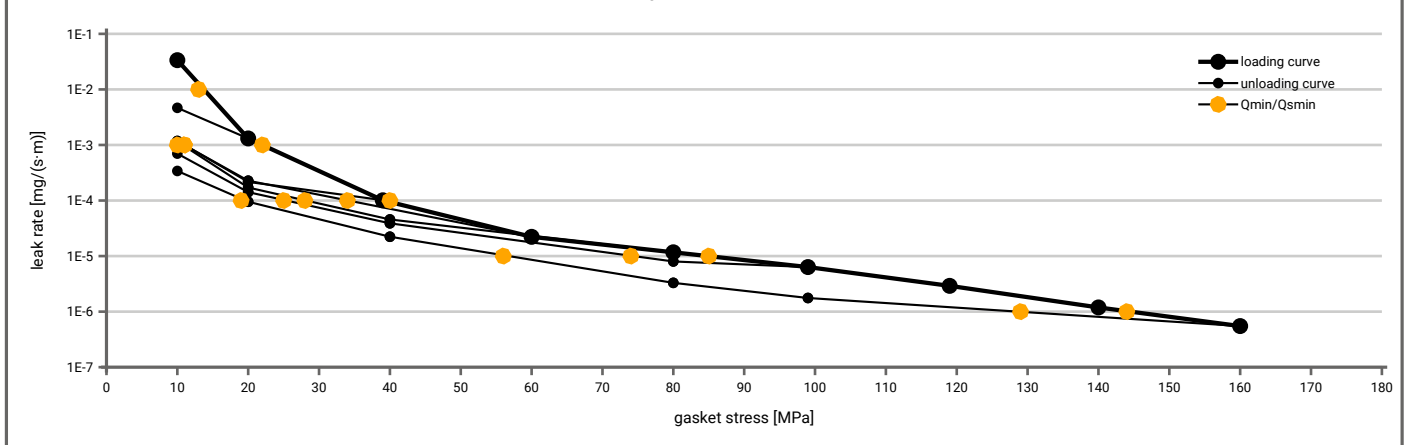
Leakage - 23 ± 2 °C / 20 bar



Minimum stress to seal $Q_{min(L)}$ (at assembly), $Q_{smin(L)}$ (after off-loading) for $p = 40$ bar ($T = 23 \pm 2$ °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-0	10		10	10	10	10	10	10			10
1E-1	10		10	10	10	10	10	10			10
1E-2	14		10	10	10	10	10	10			10
1E-3	22			11	11	11	11	10			10
1E-4	40				34	28	25	20			20
1E-5	85						74	57			57
1E-6	144							129			129
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: 2014-03-31

Manufacturer address	DONIT TESNIT d.o.o., Cesta komandanta Staneta 38, SI-1215 Medvode, SI	According to DIN EN 13555 2005-2
Product name	MW12A-3 (corrugated gasket; 1.4571 / nuclear graphite - 0.8 mm)	
Product dimensions	84 x 49 x 2.9 mm (DIN EN 1514-4 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 [30 MPa]	0.96	10	0.83	37	0.80	45	0.75	56	0.69	69
Stress level 2 [50 MPa]	0.99	5	0.91	35	0.87	48	0.86	53	0.83	62
Stress level 3 [90 MPa]	0.99	7	0.96	30	0.93	46	0.92	53	0.91	63
P_{QR} and Δe_{Gc} at maximum gasket stress to be applied Q_{smax}										
P_{QR} at Q_{smax}	1.00	0	0.98	29	0.96	58	0.94	88	0.94	88
Q_{smax}	220 MPa		200 MPa		200 MPa		200 MPa		200 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	2.738	0	2.724	0	2.747	0	2.841	0	2.745
1	0	2.738	0	2.724	0	2.747	0	2.841	0	2.745
10	347	2.137	429	1.882	366	1.873	572	1.905	363	1.871
20	821	1.542	738	1.487	836	1.469	816	1.527	707	1.478
30	1191	1.463	1224	1.428	1294	1.409	1324	1.463	1309	1.409
40	1569	1.414	2338	1.392	1246	1.367	1524	1.415	1805	1.367
50	1974	1.377	1658	1.355	1727	1.335	2068	1.381	2753	1.333
60	1848	1.341	2421	1.331	2224	1.309	3395	1.358	1990	1.300
80	2949	1.297	4436	1.301	3187	1.269	2914	1.311	3228	1.259
100	3556	1.265	4681	1.273	3607	1.240	4466	1.284	4765	1.233
120	4542	1.243	3909	1.247	4388	1.219	6395	1.265	4592	1.212
140	4749	1.225	5029	1.227	4939	1.200	7776	1.247	5536	1.196
160	5471	1.212	6459	1.214	5188	1.183	6539	1.227	6135	1.182
180	6510	1.199	8200	1.203	5323	1.163	6558	1.206	6549	1.167
200	7551	1.190	10543	1.191	5795	1.144	9743	1.187	6434	1.153
220	8063	1.180								

