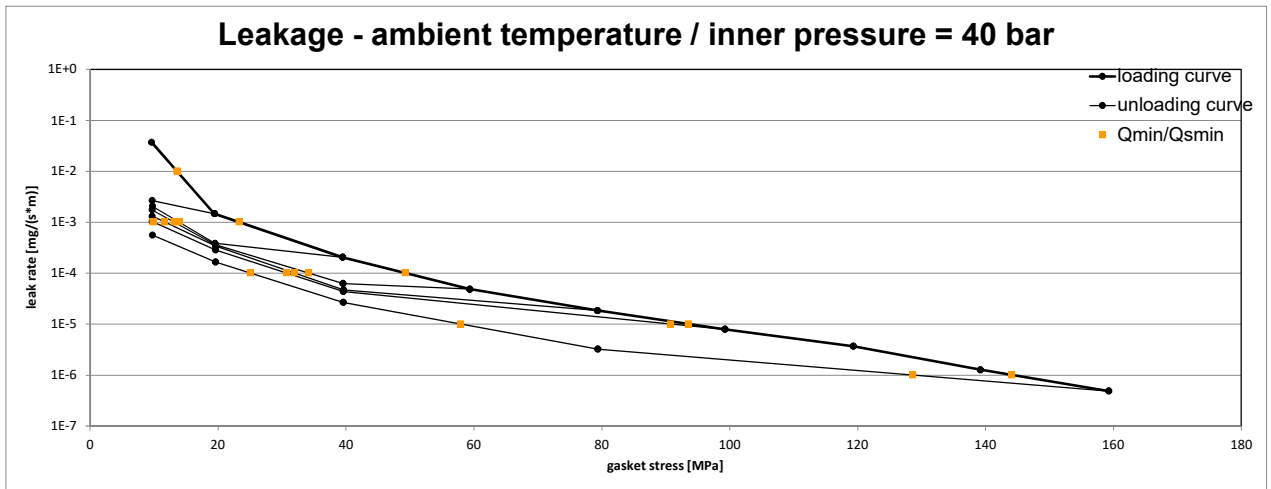


Company Address	Möller Metalldichtungen GmbH, Brunnenweg 10, 39444 Hecklingen, Germany	According to <b>DIN EN 13555</b> 2014-07
Gasket Type	MMK(Z) (kammprofile gasket with graphite layers)	
Sealing element dimensions [mm]	69 x 53 x 4,8	

L [mg/(s*m)]	Q <sub>min,L</sub> [MPa]	Minimum stress to seal Q <sub>min,L</sub> (at assembly), Q <sub>Smin,L</sub> (after off-loading) for p = 40 bar									
		Q <sub>Smin,L</sub> [MPa]									
		Q <sub>A</sub> = 20 MPa	Q <sub>A</sub> = 40 MPa	Q <sub>A</sub> = 60 MPa	Q <sub>A</sub> = 80 MPa	Q <sub>A</sub> = 100 MPa	Q <sub>A</sub> = 120 MPa	Q <sub>A</sub> = 140 MPa	Q <sub>A</sub> = 160 MPa		
10 <sup>-9</sup>	10	10	10	10	10	10			10		
10 <sup>-1</sup>	10	10	10	10	10	10			10		
10 <sup>-2</sup>	14	10	10	10	10	10			10		
10 <sup>-3</sup>	23		14	13	12	10			10		
10 <sup>-4</sup>	49			34	32	31			25		
10 <sup>-5</sup>	94					91			58		
10 <sup>-6</sup>	144								129		
10 <sup>-7</sup>											
10 <sup>-8</sup>											



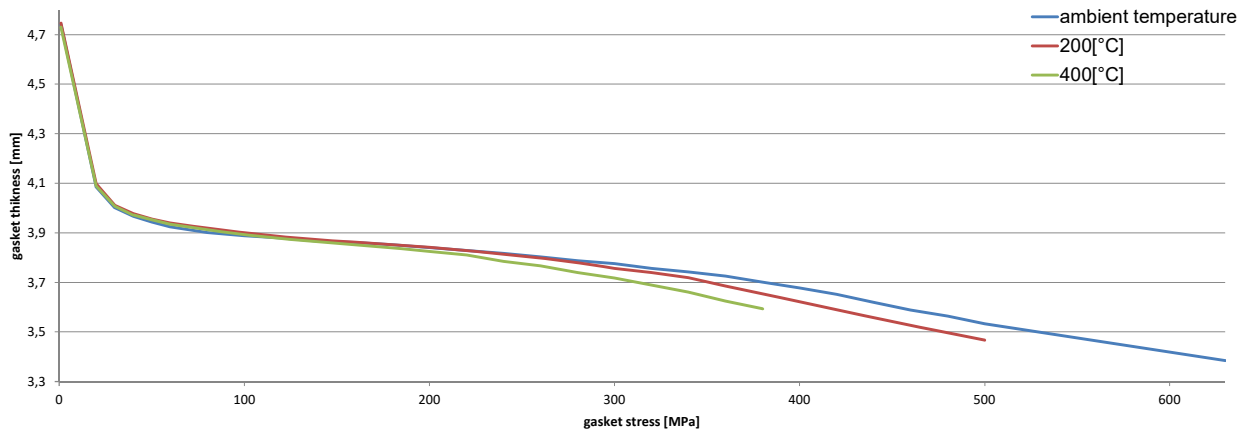
Note: the content of darkened cells was not determined respectively is unnecessary      Rev - No: 3      Creation date of this sheet: 2018-06-08

Company Address	Möller Metall dichtungen GmbH, Brunnenweg 10, 39444 Hecklingen, Germany	According to <b>DIN EN 13555</b> 2014-07
Gasket Type	MMK(Z) (kammprofile gasket with graphite layers)	
Sealing element dimensions [mm]	69 x 53 x 4,8	

Relaxation ratio $P_{QR}$ for stiffness $C = 500$ kN/mm										
Gasket stress	ambient temperature		temperature 1 [200 °C]		temperature 2 [400 °C]					
	$P_{QR}$	$\Delta e_{Gc}$ [mm]	$P_{QR}$	$\Delta e_{Gc}$ [mm]	$P_{QR}$	$\Delta e_{Gc}$ [mm]	$P_{QR}$	$\Delta e_{Gc}$ [mm]	$P_{QR}$	$\Delta e_{Gc}$ [mm]
Stress level 1 [30 MPa]	0.97	0.003	0.93	0.007	0.86	0.013				
Stress level 2 [100 MPa]	1.00	0.000	0.98	0.006	0.97	0.009				
$P_{QR}$ and $\Delta e_{Gc}$ at maximal applicable gasket stress $Q_{Smax}$										
$P_{QR}$ at $Q_{Smax}$	0.99	0.019	0.97	0.054	0.94	0.076				
$Q_{Smax}$	635 MPa		500 MPa		380 MPa					

Sekant unloading modulus of the gasket $E_G$ [MPa] and gasket thickness $e_G$ [mm]										
Gasket stress [MPa]	ambient temperature		temperature 1 [200 °C]		temperature 2 [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										
1		4.742		4.747		4.731				
20	3631	4.085	4010	4.099	4854	4.090				
30	4172	4.002	5003	4.012	6481	4.008				
40	4755	3.966	6927	3.978	9854	3.972				
50	6590	3.944	7219	3.956	9307	3.953				
60	6277	3.925	8159	3.940	7828	3.935				
80	8653	3.900	11870	3.919	11196	3.913				
100	12550	3.888	10097	3.899	11523	3.893				
120	15579	3.879	11979	3.886	10451	3.876				
140	14939	3.867	12565	3.871	13728	3.864				
160	16568	3.860	15545	3.862	17745	3.852				
180	17829	3.852	19136	3.852	20245	3.839				
200	18146	3.841	23094	3.842	21326	3.824				
220	16769	3.828	21636	3.828	26196	3.810				
240	17881	3.817	23040	3.814	19090	3.785				
260	20141	3.803	24247	3.799	20264	3.767				
280	20508	3.787	20899	3.779	19527	3.739				
300	24255	3.776	19671	3.756	24006	3.717				
320	25840	3.756	24913	3.740	24034	3.689				
340	28825	3.742	29813	3.719	24385	3.661				
360	33804	3.725	21430	3.685	21775	3.625				
380	26288	3.701	22874	3.655	23455	3.593				
400	26666	3.677	26110	3.622						
420	28375	3.652	24368	3.589						
440	24859	3.620	29093	3.558						
460	24317	3.589	24020	3.526						
480	26869	3.563	26136	3.496						
500	25899	3.532	27776	3.467						
630	26631	3.385								

### Gasket thickness $e_G$



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