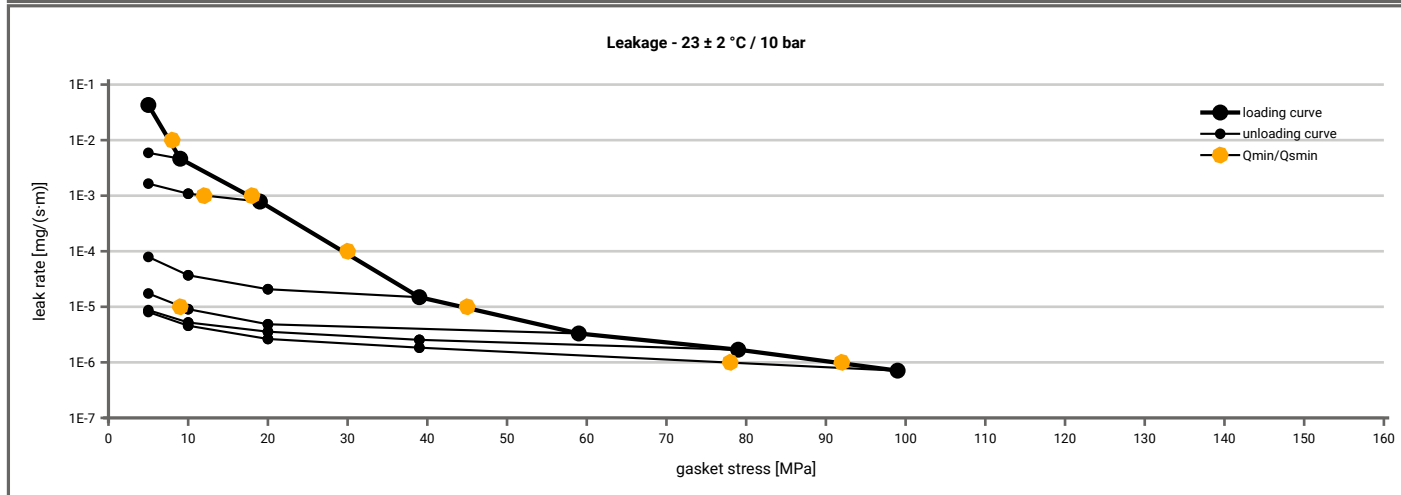
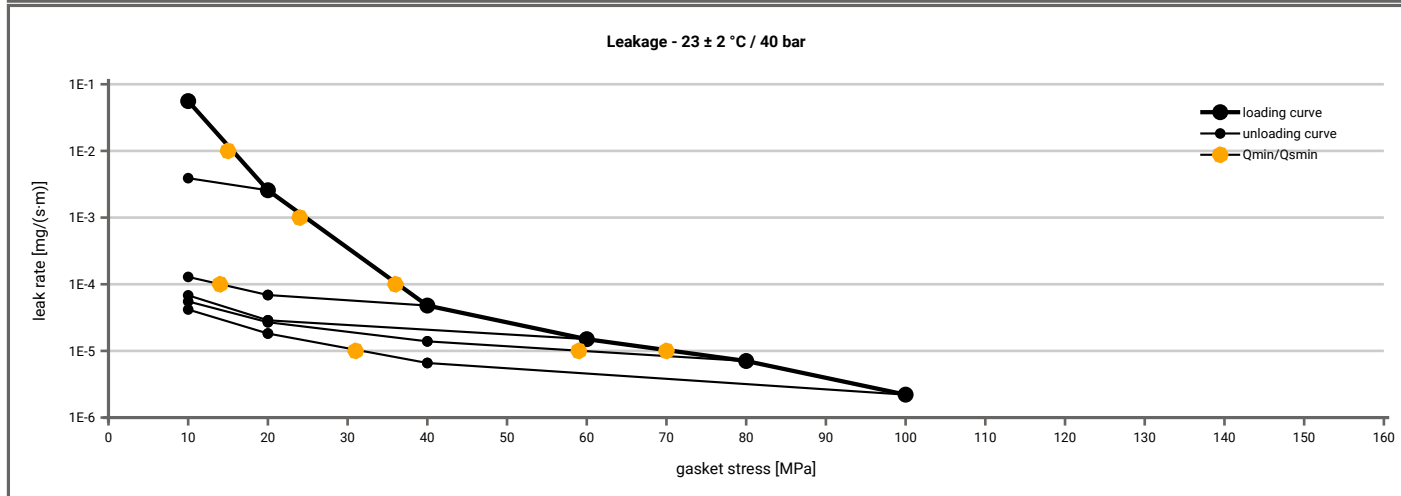


Manufacturer address	KLINGER GmbH, Richard Klinger Str. 37, 65510 Idstein, DE	According to DIN EN 13555 2014-7
Product name	top-chem2005	
Product dimensions	92 x 49 x 2 mm (DIN EN 1514-1 1997-8)	

Minimum stress to seal $Q_{min(L)}$ (at assembly), $Q_{smin(L)}$ (after off-loading) for $p = 10$ bar ($T = 23 \pm 2$ °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]
1E-0	5		5	5	5	5	5	5
1E-1	5		5	5	5	5	5	5
1E-2	8		5	5	5	5	5	5
1E-3	18			12	5	5	5	5
1E-4	30				5	5	5	5
1E-5	45					9	5	5
1E-6	92							78
1E-7								
1E-8								



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]
1E-0	10		10	10	10	10	10
1E-1	10		10	10	10	10	10
1E-2	16		10	10	10	10	10
1E-3	25			10	10	10	10
1E-4	36			14	10	10	10
1E-5	71					59	32
1E-6							
1E-7							
1E-8							



Note: the content of darkened cells was not determined respectively is unnecessary	Rev.-No.: 1	Creation date of this sheet: 2017-06-26
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Manufacturer address	KLINGER GmbH, Richard Klinger Str. 37, 65510 Idstein, DE	According to DIN EN 13555 2014-7
Product name	top-chem2005	
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]					
	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 [10 MPa]					0.94	5				
Stress level 2 [20 MPa]	0.95	8	0.93	12	0.88	20				
Stress level 3 [30 MPa]	0.97	9	0.90	26						
P_{QR} and Δe_{Gc} at maximum gasket stress to be applied Q_{smax}										
P_{QR} at Q_{smax}	0.77	193	0.91	30	0.88	20				
Q_{smax}	100 MPa		40 MPa		20 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]					
	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	2.000	0	2.055	0	2.055				
1	0	1.989	0	2.032	0	2.054				
20	3283	1.954	2705	1.968	2797	1.985				
30	5965	1.930	4216	1.949						
40	6893	1.913	3334	1.918						
50	6811	1.896								
60	8954	1.881								
80	10903	1.854								
100	12455	1.804								

