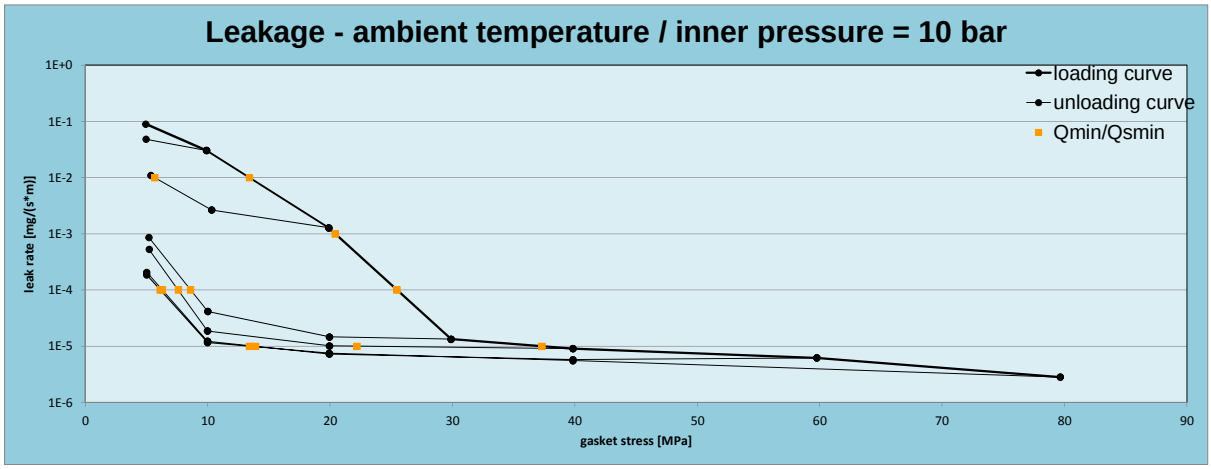
Company Address	*IDT Industrie- und Dichtungstechnik GmbH Werk Kupferring, Gewerbering 6, 09456 Annaberg-Buchholz, Germany*	According to **DIN EN 13555 2014-07**
Gasket Type	***UNIFLUOR WS 7553 3,0 mm***	
Sealing element dimensions [mm]	***49x92x3,0***	

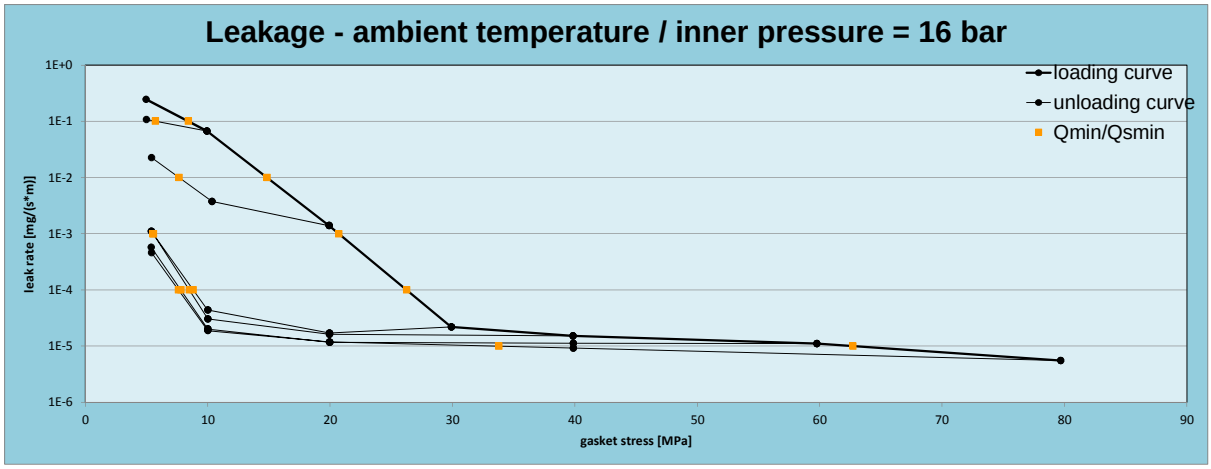
Minimum stress to seal $\mathbf{Q_{min/L}}$ (at assembly), $\mathbf{Q_{Smin/L}}$ (after off-loading) for p = 10 bar

L [mg/(s*m)]	$Q_{min/L}$ [MPa]	$Q_{Smin/L}$ [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				
10^{-0}			5	5	5	5	5				
10^{-1}			5	5	5	5	5				
10^{-2}	13		6	5	5	5	5				
10^{-3}	20			5	5	5	5				
10^{-4}	25			9	8	6	6				
10^{-5}	37				22	14	13				
10^{-6}											
10^{-7}											
10^{-8}											



Minimum stress to seal $\mathbf{Q_{min/L}}$ (at assembly), $\mathbf{Q_{Smin/L}}$ (after off-loading) for p = 16 bar

L [mg/(s*m)]	$Q_{min/L}$ [MPa]	$Q_{Smin/L}$ [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				
10^{-0}		5	5	5	5	5	5				
10^{-1}	8	6	5	5	5	5	5				
10^{-2}	15		8	5	5	5	5				
10^{-3}	21			6	6	5	5				
10^{-4}	26			9	8	8	8				
10^{-5}	63						34				
10^{-6}											
10^{-7}											
10^{-8}											



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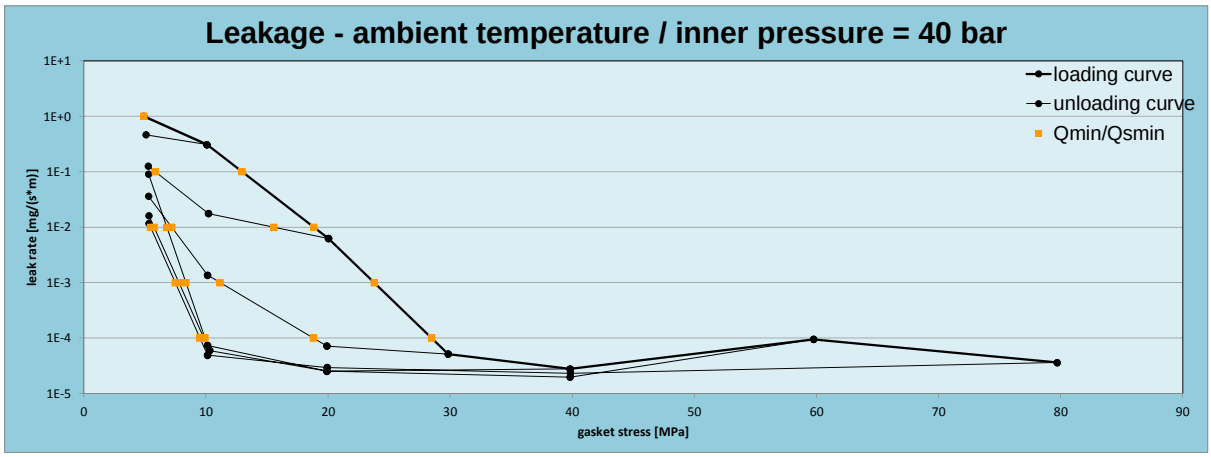
Company Address	*IDT Industrie- und Dichtungstechnik GmbH Werk Kupferring, Gewerbering 6, 09456 Annaberg-Buchholz, Germany*	According to **DIN EN 13555 2014-07**
Gasket Type	***UNIFLUOR WS 7553 3,0 mm***	
Sealing element dimensions [mm]	***49x92x3,0***	

L [mg/(s*m)]	$Q_{min/L}$ [MPa]	Minimum stress to seal $Q_{min/L}$ (at assembly), $Q_{Smin/L}$ (after off-loading) for p = 40 bar $Q_{Smin/L}$ [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				
10^{-0}	5		5	5	5	5	5				
10^{-1}	13		6	5	5	5	5				
10^{-2}	19		16	7	7	6	5				
10^{-3}	24			11	8	8	7				
10^{-4}	28			19	10	10	10				
10^{-5}											
10^{-6}											
10^{-7}											
10^{-8}											



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Gasket Type	***UNIFLUOR WS 7553 3,0 mm***	
Sealing element dimensions [mm]	***49x92x3,0***	

Relaxation ratio P_{QR} for stiffness **C** = 500 kN/mm

Gasket stress	ambient temperature		temperature 1 [100 °C]		temperature 2 [150 °C]		temperature 3 [200 °C]			
	P_{QR}	Δe_{Gc} [mm]	P_{QR}	Δe_{Gc} [mm]	P_{QR}	Δe_{Gc} [mm]	P_{QR}	Δe_{Gc} [mm]	P_{QR}	Δe_{Gc} [mm]
Stress level 1 [10 MPa]					0.70	0.025	0.70	0.025		
Stress level 2 [20 MPa]	0.93	0.010	0.61	0.068	0.55	0.075	0.44	0.100		
Stress level 3 [30 MPa]							0.39	0.156		
Stress level 4 [40 MPa]	0.87	0.043	0.58	0.145						
P_{QR} and Δe_{Gc} at maximal applicable gasket stress Q_{smax}										
P_{QR} at Q_{Smax}	0.84	0.072	0.59	0.170	0.46	0.188	0.38	0.214		
Q_{Smax}	50 MPa		50 MPa		40 MPa		40 MPa			

Sekant unloading modulus of the gasket E_G [MPa] and gasket thickness e_G [mm]

Gasket stress [MPa]	ambient temperature		temperature 1 [100 °C]		temperature 2 [150 °C]		temperature 3 [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		2.990		2.997		3.040		2.970		
1		2.965		2.985		3.025		2.955		
5	850	2.936	3329	2.968	830	2.987	968	2.955		
10	3220	2.925	4044	2.941	739	2.784	871	2.816		
15	2413	2.907	2248	2.866	744	2.446	915	2.419		
20	3281	2.882	1632	2.666	925	2.175	1203	2.099		
30	2759	2.729	1849	2.209	1253	1.788	1619	1.690		
40	2544	2.439	2329	1.886	1265	1.564	1979	1.463		
50	2776	2.188	2702	1.675						
60										
80										
100										
120										
140										
160										
180										
200										
220										
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440										
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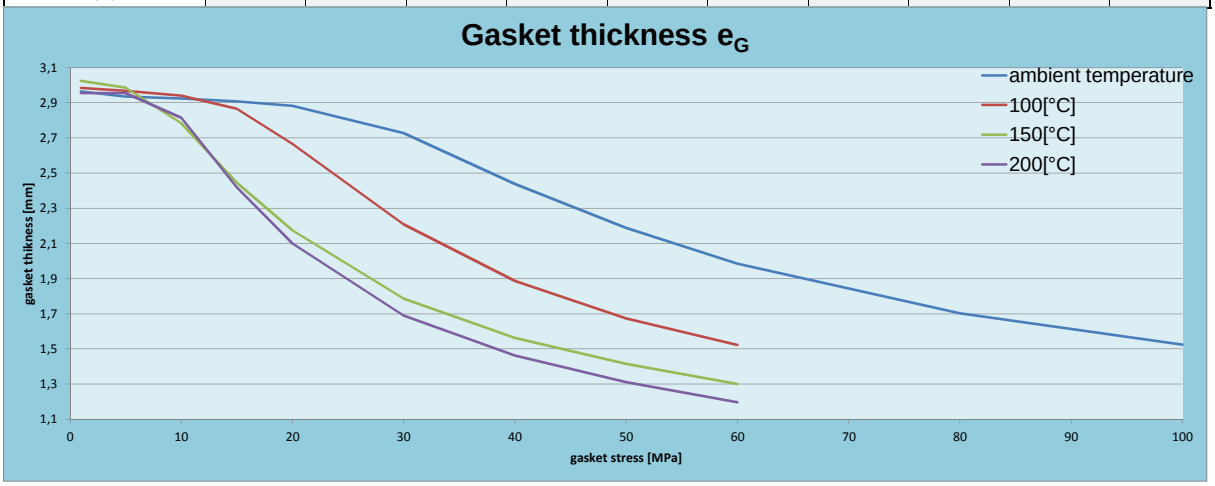

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