

Company Address	IDT Industrie- und Dichtungstechnik GmbH IDT Werk Kupferring, Postfach 100 152, D-09441 Annaberg-Buchholz
Gasket Type	IDT-SIGRAFLEX-Universal mit Innenbördel 1.4571 IDT-WS 3862-IB-1.4571, FD10 Dichtungsdicke 2,0mm, Bördeldicke 0,15mm
Thickness e_{GO} [mm]	1,96

Minimum stress to seal $Q_{min/L}$ (at assembly), $Q_{Smin/L}$ (after off-loading) for $p = 40$ bar									
L [mg/(s*m)]	$Q_{min/L}$ [MPa]	$Q_{Smin/L}$ [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]
10^0	<10		<10	<10	<10	<10			<10
10^{-1}	15		<10	<10	<10	<10			<10
10^{-2}	31		35	11	<10	<10			<10
10^{-3}	55			32	17	18			<10
10^{-4}	87					42			15
10^{-5}	142								
10^{-6}									
10^{-7}									
10^{-8}									

Relaxation ratio P_{QR} for stiffness $C = 500$ kN/mm			
Gasket stress [MPa]	ambient temperature	temperature 1 [150 °C]	temperature 2 [300 °C]
Stress level 1 [30 MPa]	0,98	0,91	0,87
Stress level 2 [50 MPa]	0,98	0,95	0,92
Q_{Smax} [200 / 180 / 160 MPa]	0,98	0,99	0,97

Maximal applicable gasket stress Q_{Smax}		
Q_{Smax} [MPa] – ambient temperature	Q_{Smax} [MPa] – temperature 1 [150 °C]	Q_{Smax} [MPa] – temperature 2 [300 °C]
200	180	160

Sekant unloading modulus of the gasket E_G [MPa]			
Gasket stress [MPa]	ambient temperature	temperature 1 [150 °C]	temperature 2 [300 °C]
20	419	566	586
30	731	804	871
40	859	1087	1068
50	1053	1499	1520
60	1478	1454	1526
80	1719	2105	2408
100	2053	2117	2035
120	1934	2204	2403
140	2010	2364	3026
160	2187	2583	2820
180	2272	2688	
200	2265		
220			
240			

Note: the content of darkened cells was not determined respectively is unnecessary

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