

Characteristic of Spiral Wound Gasket – type of DIMERFLEX ST 10 / 20 / 30 / 40

- coefficients acc. to ASME and AD-Merkblatt B7 are valid for EG / PTFE filler

* - coefficient acc. to ČSN EN 13555 / 2005 are valid for type DIMERFLEX ST40 with EG filler

sealing element: th.: 4,8mm, EG (expanded graphite), density: 1,0 g/cm³, ash content: ≤ 2%

th.: 4,8mm, PTFE, th.: 0,5 mm, density: 1,6 g/cm³

other ring: th.: 3,0mm, CS, SS 316L

inner ring: th.: 3,0mm, SS 316L

acc. to: ČSN EN 13555 / 2005 *						
L	Q _{min/L}	Q _{Smin/L} for				
[mg/(s*m)]	40bar/25°C/N ₂	Q _A =40	Q _A =60	Q _A =80	Q _A =100	Q _A =160
	(MPa)	(MPa)				
L _{0,1}	11	<10	<10	<10	<10	<10
L _{0,01}	21	<10	<10	<10	<10	<10
L _{0,001}	28	25	28	33	23	20
L _{0,0001}	34	33	44	59	32	31
P_{QR} (for 500 kN/mm / 20°C)		0,98				
GASKET STRESS (MPa)		E _G (MPa)				
(for max 400 MPa / T _A 25°C / T ₁ 400°C)		T _A 25 (°C)	T ₁ 400 (°C)			
20		1192	1111			
30		1648	1766			
40		2229	2732			
50		2869	3760			
60		3222	4091			
80		3529	5107			
100		4090	6219			
120		4890	7816			
140		5861	9082			
160		6813	9776			
180		7782	10557			
200		8672	10701			
220		9686	11135			
240		10873	12025			
260		12342	12204			
280		14116	12976			
300		16177	13386			
320		18826	13591			
340		22717	13908			
360		27119	14083			
380		32561	14709			
400		39578	15132			

acc. to: ASME F 586 / 1989		
m	y	y
factor	(MPa)	(PSI)
3	69	10000
3**	35	5000

acc. to: AD-MERBLATT B7	
k ₁	k ₀ x K _D
(mm)	(N/mm)
factor	
1,4 x b _D	55 x b _D

Terminology: L - tightness class
 Q_{min/L} - min stress to seal at assembly
 Q_{Smin/L} - min stress to seal after off-loading
 P_{QR} - creep relaxation factor
 E_G - modulus of elasticity
 m – factor
 y - yield factor
 ** - low stress

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