

Gasket Characteristics acc. DIN 28090-1, AD-Merkblatt B7, DIN V 2505, ASME-Code

DIN 28090 Part 1 (9/95) (DIN E 2505 Part 2)										AD-Merkblatt B7 DIN V 2505		ASME-Code				
P _I	Thick. h _D	σ _{VU} *	σ _{VO} **	m	σ _{BO} **					b _D : h _D	k ₀ x K _D	k ₁	m	y	y	
[bar]	[mm]	[N/mm ²]	[N/mm ²]		[N/mm ²]						[N/mm]	[mm]		[psi]	[N/mm ²]	
					20 °C	100 °C	200 °C	300 °C	400 °C							
10	1.6	10	150	1.3	150	130	130	130	120	13 : 1	10 x b _D	1.3 x b _D	2.5	1450	10	
16	1.6	10	150	1.3	150	130	130	130	120	13 : 1	10 x b _D	1.3 x b _D	2.5	1450	10	
25	1.6	12	150	1.3	150	130	130	130	120	13 : 1	12 x b _D	1.3 x b _D	2.5	1740	12	
40	1.6	18	150	1.3	150	130	130	130	120	13 : 1	18 x b _D	1.3 x b _D	2.5	2610	18	
80	1.6	25	150	1.3	150	130	130	130	120	13 : 1	25 x b _D	1.3 x b _D	2.5	3625	25	

* σ_{VU} is determined with the gas leakage (N₂) = 0.1 mg/(s*m) (ca. 1.0 ml/min) acc. to DIN 28090-1 at test sample of dimension 90 x 50 x 1.6 mm

** σ_{VO}, σ_{BO} is determined according to DIN 28090-1 at test sample of dimension 90 x 50 x 1.6 mm

m The m-factor is a value to describe the minimum surface pressure under operating conditions. Up to now there does not exist a definite test specification. The m-factor can be looked at in different ways and depends on the tightness class, the temperature and the surface pressure in the installed state. Within the Brite EuRam research project m-factors between 1.3 and 3.8 were found as average values for graphite gaskets. The user may judge to calculate with different factors (e.g. m = 2).

m The m-factors according to DIN 28090 and ASME-code are defined variably - from this reason the values differ

Please note: All previous data cease to apply. You may take all current versions from the website www.frenzelit.com or ask at Frenzelit directly. The values have been determined with standard laboratory equipment. In view of the variety of different installation and operation conditions and process engineering options, there is no basis for warranty claims referring to the behaviour of the sealing joint. Subject to technical changes and printing errors.