

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 <sub>1</sub>	Dicke h <sub>D</sub>	σ <sub>VU</sub>	σ <sub>VO</sub>	m	σ <sub>BO</sub>					b <sub>D</sub> : h <sub>D</sub>	k <sub>0</sub> x K <sub>D</sub>	k <sub>1</sub>	m	y	y
[bar]	[mm]	[N/mm <sup>2</sup> ]	[N/mm <sup>2</sup> ]		[N/mm <sup>2</sup> ]						[N/mm]	[mm]		[psi]	[N/mm <sup>2</sup> ]
					20°C	100°C	200°C	300°C	400°C						
10	1.0	< 10	425	1.3	425	60	40	20	-	10 : 1	10 x b <sub>D</sub>	1.3 x b <sub>D</sub>	2.5	1450	10
	1.5	10	330	1.3	330	55	30	15	-	6.7 : 1	10 x b <sub>D</sub>	1.3 x b <sub>D</sub>	2.5	1450	10
	2.0	10	285	1.3	285	55	25	15	-	5 : 1	10 x b <sub>D</sub>	1.3 x b <sub>D</sub>	2.5	1450	10
	3.0	19	240	1.3	240	45	20	10	-	3.3 : 1	19 x b <sub>D</sub>	1.3 x b <sub>D</sub>	2.5	2755	19
16	1.0	11	425	1.3	425	60	40	20	-	10 : 1	11 x b <sub>D</sub>	1.3 x b <sub>D</sub>	2.5	1595	11
	1.5	12	330	1.3	330	55	30	15	-	6.7 : 1	12 x b <sub>D</sub>	1.3 x b <sub>D</sub>	2.5	1740	12
	2.0	12	285	1.3	285	55	25	15	-	5 : 1	12 x b <sub>D</sub>	1.3 x b <sub>D</sub>	2.5	1740	12
	3.0	26	240	1.3	240	45	20	10	-	3.3 : 1	26 x b <sub>D</sub>	1.3 x b <sub>D</sub>	2.5	3770	26
25	1.0	15	425	1.3	425	60	40	20	-	10 : 1	15 x b <sub>D</sub>	1.3 x b <sub>D</sub>	2.5	2175	15
	1.5	15	330	1.3	330	55	30	15	-	6.7 : 1	15 x b <sub>D</sub>	1.3 x b <sub>D</sub>	2.5	2175	15
	2.0	15	285	1.3	285	55	25	15	-	5 : 1	15 x b <sub>D</sub>	1.3 x b <sub>D</sub>	2.5	2175	15
	3.0	32	240	1.3	240	45	20	10	-	3.3 : 1	32 x b <sub>D</sub>	1.3 x b <sub>D</sub>	2.5	4640	32
40	1.0	21	425	1.3	425	60	40	20	-	10 : 1	21 x b <sub>D</sub>	1.3 x b <sub>D</sub>	2.5	3045	21
	1.5	22	330	1.3	330	55	30	15	-	6.7 : 1	22 x b <sub>D</sub>	1.3 x b <sub>D</sub>	2.5	3190	22
	2.0	23	285	1.3	285	55	25	15	-	5 : 1	23 x b <sub>D</sub>	1.3 x b <sub>D</sub>	2.5	3335	23
	3.0	37	240	1.3	240	45	20	10	-	3.3 : 1	37 x b <sub>D</sub>	1.3 x b <sub>D</sub>	2.5	5365	37

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](http://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.