



**Gasket properties**

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according to DIN 2505 V 1/86 (= AD- B7 6/86), DIN 2505 E 4/90, and ANSI- ASME VIII  
Edition: 05/2021, supersedes all prior editions.

Gasket material or gasket (minimum width $b_0 \geq 15$ mm)	Gasket thickness (mm)	Physical state of medium	DIN 2505 V 1/86 (= AD- B7 6/86)		DIN 2505 E 4/90									
			$k_0 \times K_0$ (N/mm)	$k_1$ (mm)	$\sigma_{vu}^{1)}$ (N/mm <sup>2</sup> )	$\sigma_{vo}^{2)}$ (N/mm <sup>2</sup> )	$m^{3)}$	$\sigma_{bo}^{4)}$ in N/mm <sup>2</sup> at:						
								100 °C	150 °C	200 °C	250 °C	300 °C	400 °C	
AFM 30	2.0	liquid gaseous	12 $b_0$ <sup>5)</sup> 25 $b_0$	2.0 $b_0$	12 25	150	2.0			30				
AFM 31	2.0	liquid gaseous	10 $b_0$ 20 $b_0$	2.0 $b_0$	10 20	100	2.0		40	15				
AFM 32/2	2.0	liquid gaseous	25 $b_0$ 50 $b_0$	2.5 $b_0$	25 50	160	2.5			50				
AFM 34	0.5 <sup>6)</sup>	liquid gaseous	20 $b_0$ 35 $b_0$	2.0 $b_0$	20 35	250	2.0	140	100	90	30			
	1.0 <sup>7)</sup>	liquid gaseous	20 $b_0$ 35 $b_0$	2.0 $b_0$	20 35	220	2.0	120	90	80	30			
	2.0	liquid gaseous	15 $b_0$ 30 $b_0$	2.0 $b_0$	15 30	180	2.0	100	70	60	20			
	3.0	liquid gaseous	12 $b_0$ 25 $b_0$	2.0 $b_0$	12 25	160	2.0	90	50	40	12			
AFM 34 METALL	2.0	liquid gaseous	20 $b_0$ 40 $b_0$	2.5 $b_0$	20 40	220	2.5	150	100	75	30			
AFM 34 CO ME	2.0	liquid gaseous	15 $b_0$ 25 $b_0$	2.2 $b_0$	15 25	200	2.2	100	100	80				
AFM 34 METALL/ ME	2.0	liquid gaseous	30 $b_0$ 55 $b_0$	2.8 $b_0$	30 55	240	2.8			80				
AFM 37 and AFM 33/2	2.0	liquid gaseous	15 $b_0$ <sup>5)</sup> 35 $b_0$	2.2 $b_0$	15 35	150	2.2			50				
AFM 38 and AFM 39/2	2.0	liquid gaseous	10 $b_0$ 30 $b_0$	2.0 $b_0$	10 30	80	2.0	55	35	10				
AFM 44	2.0	liquid gaseous	15 $b_0$ 35 $b_0$	2.0 $b_0$	15 35	170	2.0	100	70	60	20			
CHEMOTHERM SPE	2.0	liquid gaseous	20 $b_0$ 30 $b_0$	2.5 $b_0$	20 30	150	2.5			140		140		



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Gasket material or gasket (minimum width $b_D \geq 15$ mm)	Gasket thickness (mm)	Physical state of medium	ANSI - ASME VIII	
			$y^1$ (N/mm <sup>2</sup> )	$m^3$
<b>AFM 30</b>	2.0	liquid gaseous	12 25	2.0
<b>AFM 31</b>	2.0	liquid gaseous	10 20	2.0
<b>AFM 32/2</b>	2.0	liquid gaseous	25 50	2.5
<b>AFM 34</b>	0.5 <sup>6)</sup>	liquid gaseous	20 35	2.0
	1.0 <sup>7)</sup>	liquid gaseous	20 35	2.0
	2.0	liquid gaseous	15 30	2.0
	3.0	liquid gaseous	12 25	2.0
<b>AFM 34 METALL</b>	2.0	liquid gaseous	20 40	2.5
<b>AFM 34 CO ME</b>	2.0	liquid gaseous	15 25	2.2
<b>AFM 34 METALL/ ME</b>	2.0	liquid gaseous	30 55	2.8
<b>AFM 37 and AFM 33/2</b>	2.0	liquid gaseous	15 35	2.2
<b>AFM 38 and AFM 39/2</b>	2.0	liquid gaseous	10 30	2.0
<b>AFM 44</b>	2.0	liquid gaseous	15 35	2.0
<b>CHEMOTHERM SPE</b>	2.0	liquid gaseous	20 30	2.5

- 1)  $\sigma_{VU}$  = Minimum installed pressure (adaption) at room temperature (RT)
- 2)  $\sigma_{VO}$  = Maximum installed pressure at RT
- 3)  $m$  = Ratio of "Minimum gasket pressure under operating conditions  $\sigma_{BU}$ " to "Operating pressure = Internal pressure  $p_i$ ", thus:  $m = \sigma_{BU} / p_i$
- 4)  $\sigma_{BO}$  = Maximum gasket pressure under operating conditions at various temperatures
- 5)  $b_D$  = Effective sealing width in mm
- 6)  $R_z$   $\leq$  16  $\mu$ m
- 7)  $R_z$   $\leq$  25  $\mu$ m