

**AFM 32 2****AFM 32/2****Technical Data Sheet 332 (previously TDS 270)**

Edition: 08/2015, supersedes all prior editions.

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<b>Material</b>	<b>AFM 32/2</b> is an asbestos- free gasket material. It consists of aramide fibers and other asbestos substitutes that are resistant to high temperatures and are processed with high- grade elastomers under elevated pressure and temperature.
<b>Properties</b>	<b>AFM 32/2</b> exhibits excellent thermal/ mechanical resistance as well as high tensile strength. It is also conformable and is particularly suitable for sealing oils and other fluid substances.
<b>Application</b>	<ul style="list-style-type: none"><li>• for sealed joints in IC engines that are subject to high mechanical stress (e.g. intake manifolds, oil pans)</li><li>• for sealing transmissions, compressors, pipelines and apparatus</li><li>• for sealing engine, transmission, hydraulic, and refrigerating oils</li><li>• for sealing fuels, mixtures of water and antifreeze &amp; corrosion inhibitors</li><li>• for sealing Freons, alkaline solutions, and solvents</li></ul>
<b>Surfaces</b>	As standard, both sides of <b>AFM 32/2</b> are coated with a non- stick, high- friction layer that greatly facilitates disassembly. In most cases, additional surface treatment is unnecessary.



**AFM 32 2**

**Technical Data**  
(nominal thickness  
2.00 mm)

<b>Density</b>	g/ cm <sup>3</sup>	1.6 - 1.8
<b>Ignition loss</b> acc. to DIN 52 911	%	< 40
<b>Tensile strength</b> acc. to ASTM F 152 across grain acc. to DIN 52 910 across grain	N/ mm <sup>2</sup> N/ mm <sup>2</sup>	> 15 > 12
<b>Residual stress</b> acc. to DIN 52 913 16 h, 300 °C 16 h, 175 °C	N/ mm <sup>2</sup> N/ mm <sup>2</sup>	≈ 25 ≈ 36
<b>Compressibility and recovery</b> acc. to ASTM F 36, procedure J compressibility recovery	% %	7 - 12 > 50
<b>Sealability</b> against nitrogen acc. to DIN 3535, part 6 FA	mg/ (s·m)	< 0.1
<b>Swelling</b> acc. to ASTM F 146		
<b>in IRM 903 Oil</b> (replaces ASTM Oil No. 3) 5 h, 150 °C increase in thickness increase in weight	% %	< 8 < 12
<b>in ASTM Fuel B</b> 5 h, room temp. increase in thickness increase in weight	% %	< 7 < 10
<b>in water / antifreeze</b> (50:50) 5 h, 100 °C increase in thickness increase in weight	% %	< 5 < 15
Short- term <b>peak temperature</b>	°C	400
Maximum <b>continuous temperature</b>	°C	250
Maximum <b>operating pressure</b>	bar	150



**Max. continuous temperature and max. pressure must not occur simultaneously, please refer to the table entitled "Max. operating pressures at various temperatures and with various media".**



**AFM 32 2**

**DIN 28091-2:**

<b>Cold creep</b> $\epsilon_{KSW}$	%	6 - 12
<b>Cold recovery</b> $\epsilon_{KRW}$	%	4 - 7
<b>Hot creep during service</b> $\epsilon_{WSW/T}$	%	8 - 11
<b>Hot recovery</b> $\epsilon_{WRW/T}$	%	≈ 0.3
<b>Recovery R</b>	mm	≈ 0.005
<b>Specific leakage rate</b> $\lambda$	mg/ (s·m)	< 2.2
<b>Residual surface pressure</b> after 1000 h (in air at 100 °C)	%	> 50

**Sealing parameters**, see corresponding [Table](#)



The data quoted above are valid for the material "as delivered" without any additional treatment. In view of the countless possible installation and operating conditions, definitive conclusions cannot be drawn for all applications regarding the behaviour in a sealed joint. Therefore, we do not give any warranty for technical data, as they do not represent assured characteristics. If you have any doubt, please contact us and specify the exact operating conditions.

**Form of delivery**

**Gaskets** according to a drawing, dimensions supplied, or other arrangement.

**Sheets** 1500 x 1500 mm (standard size)

**Nominal thicknesses and tolerances** acc. to DIN 28091-1 (mm)  
Dimensional limits within a shipment

<b>0.30</b>	±0.10
<b>0.50</b>	±0.10
<b>0.75</b>	±0.10
<b>1.00</b>	±0.10
<b>1.50</b>	±0.15
<b>2.00</b>	±0.20
<b>3.00</b>	±0.30

Max. thickness variation in a sheet:  
0.1 mm for sheet thickness ≤1.00 mm, and 0.2 mm for thickness >1.00 mm