

AFM 32 2

AFM 32/2

Technical Data Sheet 332 (previously TDS 270) Edition: 08/2015, supersedes all prior editions. Please see the latest issue at www.reinz- industrial.com

Material	AFM 32/2 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.
Properties	AFM 32/2 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.
Application	 for sealed joints in IC engines that are subject to high mechanical stress (e.g. intake manifolds, oil pans) for sealing transmissions, compressors, pipelines and apparatus for sealing engine, transmission, hydraulic, and refrigerating oils for sealing fuels, mixtures of water and antifreeze & corrosion inhibitors for sealing Freons, alkaline solutions, and solvents
Surfaces	As standard, both sides of AFM 32/2 are coated with a non- stick, high- friction layer that greatly facilitates disassembly. In most cases, additional surface treatment is unnecessary.



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Technical Data (nominal thickness 2.00 mm)

Density	g/ cm³	1.6 - 1.8
Ignition loss acc. to DIN 52 911	%	< 40
Tensile strength acc. to ASTM F 152 across grain acc. to DIN 52 910 across grain	N/ mm² N/ mm²	> 15 > 12
Residual stress acc. to DIN 52 913 16 h, 300 °C 16 h, 175 °C	N/ mm² N/ mm²	≈ 25 ≈ 36
Compressibility and recovery acc. to ASTM F 36, procedure J compressibility recovery	% %	7 - 12 > 50
Sealability against nitrogen acc. to DIN 3535, part 6 FA	mg/ (s⋅m)	< 0.1
Swelling acc. to ASTM F 146		
in IRM 903 Oil (replaces ASTM Oil No. 3) 5 h, 150 °C increase in thickness increase in weight	% %	< 8 < 12
in ASTM Fuel B 5 h, room temp. increase in thickness increase in weight	% %	< 7 < 10
in water / antifreeze (50:50) 5 h, 100 °C increase in thickness increase in weight	% %	< 5 < 15
Short- term peak temperature	°C	400
Maximum continuous temperature	°C	250
Maximum operating pressure	bar	150



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



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Cold creep $\varepsilon_{\rm \tiny KSW}$	%	6 - 12
Cold recovery $\varepsilon_{_{\rm KRW}}$	%	4 - 7
Hot creep during service $\varepsilon_{_{\rm WSW/T}}$	%	8 - 11
Hot recovery $\varepsilon_{_{\mathrm{WRW/T}}}$	%	≈ 0.3
Recovery R	mm	≈ 0.005
Specific leakage rate λ	mg/ (s·m)	< 2.2
Residual surface pressure 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

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

Sheets

Gaskets

1500 x 1500 mm (standard size)

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

0.30	±0.10
0.50	±0.10
0.75	±0.10
1.00	±0.10
1.50	±0.15
2.00	±0.20
3.00	±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