



AFM 30

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Technical Data Sheet 330 (previously TDS 270)

Edition: 05/2012, supersedes all prior editions.

Please see the latest issue at www.reinz.com/datasheet

Material	AFM 30 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 30 is conformable and exhibits excellent mechanical/ thermal resistance, as shown by its high value of residual stress. It is ideal for sealing gases and fluids.
Application	<ul style="list-style-type: none">• for compressors, pipelines, apparatus, transmissions, gas meters and IC engines• for sealing engine, transmission, hydraulic, and refrigerating oils• for sealing fuels, mixtures of water, antifreeze & corrosion inhibitors• for sealing Freons, alkaline solutions, and solvents
Surfaces	As standard, both sides of AFM 30 are coated with a non- stick, high- friction layer that greatly facilitates disassembly. In most cases, additional surface treatment is unnecessary.
Approvals	<p>DIN- DVGW acc. to DIN 3535, part 6 FA</p> <p>VP 401 Gaskets with higher thermal resistance</p> <p>BAM German Federal Institute for Materials Research and Testing, flanged joints in oxygen- conducting steel pipes up to 100 bar and 80 °C</p> <p>HTB Higher thermal resistance acc. to DIN 3374/3376 (0.1 and 1.0 bar at 650 °C for 30 minutes)</p> <p>Germanischer Lloyd Approval for shipbuilding</p>



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Technical Data
(nominal thickness 2.00 mm)

Density	g/ cm ³	1.75 - 1.95
Ignition loss acc. to DIN 52 911	%	< 36
Tensile strength acc.to ASTM F 152 across grain acc. to DIN 52 910 across grain	N/ mm ² N/ mm ²	> 12 > 9
Residual stress acc. to DIN 52 913 16 h, 300 °C 16 h, 175 °C	N/ mm ² N/ mm ²	≈ 25 ≈ 36
Compressibility and recovery acc. to ASTM F 36, procedure J compressibility recovery	% %	7 - 15 > 50
Sealability against nitrogen acc. to DIN 3535, part 6 FA	mg/ (s·m)	≈ 0.05
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	 % %	 < 10 < 10
in ASTM Fuel B 5 h, room temp. increase in thickness increase in weight	 % %	 < 10 < 10
in water / antifreeze (50:50) 5 h, 100 °C increase in thickness increase in weight	 % %	 < 5 < 10
Short- term peak temperature	°C	400
Maximum continuous temperature	°C	250
Maximum operating pressure	bar	125



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 30

DIN 28091-2:

Cold creep ϵ_{KSW}	%	7 - 15
Cold recovery ϵ_{KRW}	%	4 - 8
Hot creep during service $\epsilon_{WSW/T}$	%	11 - 14
Hot recovery $\epsilon_{WRW/T}$	%	≈ 0.65
Recovery R	mm	≈ 0.012
Specific leakage rate λ	mg/ (s·m)	< 0.1
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

- 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:

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
4.00	±0.40
5.00	±0.50

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