

**AFM 44****AFM 44****Technical Data Sheet 344**

Edition: 08/2015, supersedes all prior editions.

Please see the latest issue at www.reinz-industrial.com

Material	AFM 44 is an asbestos-free gasket material. It consists of carbon fibers and other asbestos substitutes that are resistant to high temperatures and are processed with high-grade elastomers under elevated pressure and temperatures.
Properties	AFM 44 exhibits very good temperature resistance together with high mechanical strength, as shown by its high values for residual stress and tensile strength. It is ideally suited for sealing gases and liquids, and also features high chemical resistance, e.g. with lyes.
Application	<ul style="list-style-type: none">• in the petroleum and chemical processing industries• for pipe flanges to DIN and ANSI, apparatus, pumps, heat exchangers, and fittings in industrial applications• for sealing engine, transmission, hydraulic, and refrigerating oils• for sealing fuels, mixtures of water, antifreeze & corrosion inhibitors• for sealing leaches, lyes, and solvents
Surfaces	As standard, both sides of AFM 44 are coated with a non-stick layer that greatly facilitates disassembly. In most cases, additional surface treatment is unnecessary.
Approvals	Grade X acc. to BS 7531



AFM 44

Technical Data
(nominal thickness
2.00 mm)

Density	g/ cm ³	1.75 - 1.95
Ignition loss acc. to DIN 52 911	%	< 34
Tensile strength acc. to ASTM F 152, across grain acc. to DIN 52 910, across grain	N/ mm ² N/ mm ²	> 15 > 10
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	% %	6 - 10 > 60
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	%	< 10
increase in weight	%	< 10
in ASTM Fuel B 5 h, room temp.		
increase in thickness	%	< 10
increase in weight	%	< 10
in water / antifreeze (50:50) 5 h, 100 °C		
increase in thickness	%	< 7
increase in weight	%	< 7
Short- term peak temperature	°C	440
Maximum continuous temperature	°C	270
Maximum operating pressure	bar	130



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".

Sealing parameters see corresponding [Table](#)

**AFM 44**

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

0.50	±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