

**AFM 80****AFM 80****Technical Data Sheet 380**

Edition: 06/2024, supersedes all prior editions.

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

Material	AFM 80 is an asbestos-free gasket material. It contains aramide fibers, inorganic fillers and other high-temperature resistant substances which are bonded with high-quality elastomers with high strength and especially gas-tight under increased pressure and increased temperature.
Properties	AFM 80 inimitably unites key aspects of gasket technology in a single material: adaptability, gas-tightness and strength. It boasts excellent mechanical/thermal resistance yet is soft and adaptable at the same time. It is ideally suited for sealing gases and fluids. AFM 80 achieves exceptional sealing results and adapts to the component surfaces even at low surface pressures – even under heavy loads from pressure, vibration or narrow sealing webs.
Application	<ul style="list-style-type: none">• for refrigerating compressors, apparatus, transmissions, air compressors, housings• for flanged joints, pumps, fittings• for applications requiring a gasket material showing excellent mechanical strength as well as adaptability• for sealing refrigerant fluids and oils, transmission/ hydraulic/ engine oils, fuels etc.• for sealing gases, e.g., carbon dioxide, nitrogen, natural gas, hydrogen etc.
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	DIN-DVGW acc. to DIN 3535, part 6 FA DIN 30653 (formerly VP 401) - applied for - Gaskets with higher thermal resistance (HTB)



AFM 80

Technical Data
(nominal thickness
2.00 mm)

Density	g/ cm ³	1.65 - 1.85
Ignition loss acc to DIN 52 911	%	< 37
Tensile strength		
acc. to ASTM F 152 accross grain	N/ mm ²	> 11
acc. to DIN 52 910 accross grain	N/ mm ²	> 9
Residual stress acc. to DIN 52 913		
16 h, 175 °C	N/ mm ²	≈ 33
Compressibility and recovery		
acc. to ASTM F 36, procedure J		
compressibility	%	11 - 18
recovery	%	> 55
Sealability against nitrogen		
acc. to DIN 3535, part 6 FA	mg/ (s·m)	≈ 0.005
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	%	< 15
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	%	< 10
increase in weight	%	< 15
Short- term peak temperature	°C	400
Maximum continuous temperature	°C	250
Maximum operating pressure	bar	120



Max. continuous temperature and max. pressure must not occur simultaneously.



AFM 80



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