# AFM 37

## AFM 37

## **Technical Data Sheet 337 (previously TDS 270)**

Edition: 05/2012, supersedes all prior editions.

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

Material AFM 37 is an asbestos- free gasket material. It is composed of aramide

fibers and other asbestos substitutes that are resistant to high temperatures. These substitutes are processed with high-grade

elastomers under elevated pressure and temperature.

Properties AFM 37 is an ecomomical gasket material. It exhibits good sealability in

contact with gases and fluids, combined with good conformability. The

material's thermal resistance is very good.

**Application** • for sealed joints that are subjected to moderate operating pressures, e.g.

in transformers, compressors, pipelines, apparatus and IC engines.

for sealing transmission, hydraulic, refrigerating, and engine oils
for sealing fuels, mixtures of water, antifreeze & corrosion inhibitors

• for sealing Freons, alkaline solutions and solvents

Surfaces As standard, both sides of AFM 37 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

**Grade Y** 

acc. to BS 7531

**Germanischer Lloyd** Approval for shipbuilding

#### **ΔFM 37**

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Technical Data (nominal thickness 2.00 mm)	Density	g/ cm³	1.9 - 2.1
	Ignition loss acc. to DIN 52 911	%	< 25
	Tensile strength acc. to ASTM F 152 across grain acc. to DIN 52 910 across grain	N/ mm² N/ mm²	> 8 > 6
	<b>Residual stress</b> acc. to DIN 52 913 16 h, 300 °C 16 h, 175 °C	N/ mm² N/ mm²	≈ 22 ≈ 32
	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)	< 0.1
	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	% %	< 10 < 15
	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	100



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"

<u>DIN 28091-2:</u>		
Cold creep $\varepsilon_{\mbox{\tiny KSW}}$	%	7 - 12
Cold recovery $\varepsilon_{_{\mathrm{KRW}}}$	%	4 - 8
Hot creep during service $\varepsilon_{_{\!$	%	13 - 15
Hot recovery $\varepsilon_{_{WRW/T}}$	%	≈ 0.65
Recovery R	mm	≈ 0.012
Specific leakage rate $\lambda$	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

Max. thickness variations in a sheet:

0.1 mm for sheet thickness ≤1.00 mm, and 0.2 mm for thickness >1.00 mm