

**AFM 37****AFM 37****Technical Data Sheet 337 (previously TDS 270)**

Edition: 08/2015, supersedes all prior editions.

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|--------------------|---|
| 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 economical 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 | <ul style="list-style-type: none">• 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 (DNV GL) Approval for shipbuilding |



AFM 37

Technical Data
(nominal thickness
2.00 mm)

| | | | |
|---|--|--------------------|-----------|
| Density | | g/ cm ³ | 1.9 - 2.1 |
| Ignition loss acc to DIN 52 911 | | % | < 25 |
| Tensile strength | | | |
| acc. to ASTM F 152 accross grain | | N/ mm ² | > 8 |
| acc. to DIN 52 910 accross grain | | N/ mm ² | > 6 |
| Residual stress acc. to DIN 52 913 | | | |
| 16 h, 300 °C | | N/ mm ² | ≈ 22 |
| 16 h, 175 °C | | N/ mm ² | ≈ 32 |
| Compressibility and recovery | | | |
| acc. to ASTM F 36, procedure J | | | |
| compressibility | | % | 7 - 15 |
| recovery | | % | > 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 | | % | < 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 | | % | < 5 |
| increase in weight | | % | < 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"



AFM 37

| | | |
|--|------------|---------|
| DIN 28091-2: | % | 7 - 12 |
| Cold creep ϵ_{KSW} | | |
| Cold recovery ϵ_{KRW} | % | 4 - 8 |
| Hot creep during service $\epsilon_{WSW/T}$ | % | 13 - 15 |
| 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 |

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