



# VICTOR REINZ®

Sealing Products



## THE CHALLENGE

Very narrow sealing surfaces, extreme local forces, continually changing temperatures: No small thing for a small seal. Especially when the media to be sealed include natural gas, (hot) water, and heat transfer fluids. Here, reliability is a must, as well as the approvals for natural gas and drinking water applications.

## THE SOLUTION FROM VICTOR REINZ

Utmost strength and reliability – also with very unfavorable width/thickness ratios: AFM 34. It provides everything else demanded from threaded coupling seals: gas tightness, chemical resistance, and mechanical strength at elevated temperatures. What's more, the approvals for use as seals/gaskets in drinking water (KTR, WRAS) and natural gas applications (DIN-DVGW) are standard features of AFM 34. So that natural gas and solar energy can be used for space heating and hot water supply without problems.

What kind of challenge do you face?  
Give us a call!



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Case study no. 10:

### No small thing

– AFM 34 seals for threaded couplings in gas heating devices and solar-thermal systems



Technical Data <sup>1)</sup> (nominal thickness 2.00 mm)	AFM 34	
<b>Tensile strength</b> (across grain)	ASTM F 152	> 18 N/mm <sup>2</sup>
<b>Residual stress</b>	DIN 52913	
16 hrs, 300 °C		~ 25 N/mm <sup>2</sup>
16 hrs, 175 °C		~ 36 N/mm <sup>2</sup>
<b>Compressibility and recovery</b>	ASTM F 36 J	
Compressibility		5-8 %
Recovery		> 55 %
<b>Sealability</b>		
DIN 3535-6 FA		~ 0.02 mg/(s·m)
according to TA-Luft (VDI 2440/2200)		
Q=30 MPa, T=200 °C (2000 h), $\Delta p_{HE}=1$ bar		8.6·10 <sup>-8</sup> mbar·l/(s·m)
<b>Swelling</b>	ASTM F 146	
- in oil IRM 903, 5 hrs, 150 °C		
Increase in thickness		< 7 %
Increase in weight		< 7 %
- in ASTM Fuel B, 5 hrs RT		
Increase in thickness		< 10 %
Increase in weight		< 10 %
- in water/antifreeze (50:50), 5 hrs, 100 °C		
Increase in thickness		< 10 %
Increase in weight		< 10 %
<b>Continuous temperature</b> maximum <sup>2)</sup>		250 °C
<b>Operating pressure</b> maximum <sup>2)</sup>		150 bar

Form of delivery	AFM 34	
<b>Gaskets</b> according to drawings, dimensional specifications, or other agreements		
<b>Sheets</b> (standard format)	1500 x 1500 mm	
<b>Nominal thickness</b>	0.30 to 5.00 mm	
<b>Tolerances</b>	according to DIN 28091-1	

#### Release specifications

DIN-DVGW, SVGW, ÖVGW
FDA-compliant (21 CFR § 177.2600)
KTW, WRc/WRAS
VP401 (HTB), Fire Safe, BAM
Grade X
TA-Luft

**Note:** Refer to data sheet No. 334 or visit our website at [www.reinz.com/datasheet](http://www.reinz.com/datasheet) for more detailed information.

<sup>1)</sup> The preceding technical data applies to the material in its delivery condition without additional treatment or handling.

<sup>2)</sup> Maximum continuous temperature and maximum pressure may not occur simultaneously.

#### REINZ-Dichtungs-GmbH

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