



Industry solutions for solar technology

Reliable and economic – Simrit sealing technology
for solar energy systems

Your Technology Specialist

simrit[®]

Industry solutions for solar technology



With its worldwide leadership in sealing competence, Simrit delivers trend-setting solutions to the continuously growing solar technology market.

The initial pioneering work in solar technology has long been replaced by comprehensive series production. Growing production volumes, system security and cost-effectiveness are the parameters which today bring success in the market. Sealing technology from Simrit is a deciding contributory factor here. Our components for solar heat and photovoltaics provide outstanding temperature and UV resistance, reduce the number of parts required and thus en-

sure cost-effective equipment deployment with their long-term stability and high functional reliability.

Outstanding expertise in materials, design and functional optimisation

As the world's leading sealing specialist, we combine top materials competence, design expertise and realisation with technologies tried and tested by our group, such as innovative compound engineering for 2-component solutions or RFN® for installation-friendly surface optimisation. This opens up unique opportunities to develop a sealing system to exactly fit your individual application specifications and create the optimum conditions to maximise

system security and cost-efficiency. In addition, we make sure that your components and systems are compliant with international standards by continuously extending approvals and certifications, such as UL certification.

Simrit sealing systems reliably protect your solar technology



Thermal loads, dirt, dust – Simrit sealing technology offers optimum protection from environmental influences and is suitable for use with solar energy systems.

The right sealing solution for each application: Simrit offers an economic range of seals with excellent sealing properties especially for solar technology. Thanks to innovative developments in materials and design our customised solutions are ideal, for example, against thermal loads and also offer a high level of added value due to simplified installation spaces and parts versatility.

O-Rings and moulded parts

Especially in solar engineering, Simrit O-rings and moulded parts are versatile and easy to use. Our solutions are particularly easy to install in the space available. In addition, Simrit moulded seals offer a compact and stable design with high stability. Composite elastomer-plastic designs stand out due to

their low weight and also eliminate corrosion risk. The design possibilities are almost endless.

The ideal long-life seal – high temperature stability, ozone and UV compatible

The extreme temperatures occurring in solar technology affect seals in particular. Depending on application the service life of a seal can be additionally compromised by the contacting media such as air, water and heat transfer medium. The 70 EPDM 291 material developed by Simrit represents an extremely temperature-resistant solution for O-rings and moulded components that exhibits impressive sealing properties in long-term use and is also ozone and UV resistant.



This long-term stability combined with a low compression set ensures durable, reliable and cost-effective operation of your solar energy system. Ideal, for example, for reliably sealing off the connection between tubes and connector housing in modern solar energy systems from both the ambient air and the heat transfer medium.

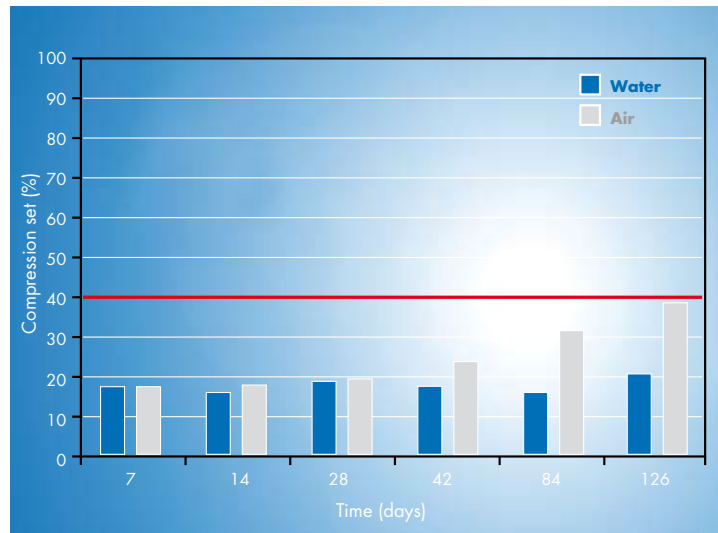
Innovative moulded parts for solar engineering

Durable, stable, economic – Simrit has developed an innovative seal design especially for solar engineering applications and thus offers the ideal seal for your entire solar energy system, from roof to heat storage tank.

This special solution provides the industry with excellent added value in two respects:

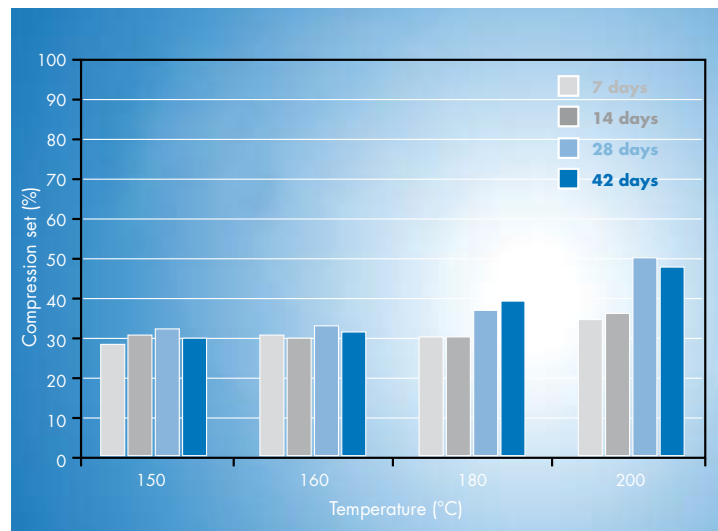
- reliable sealing at temperatures of more than 200°C
- reduction in the number of sealing elements by up to 8 parts in the system

Compression set at 110°C



At moderate temperatures (110°C) the compression set remains at a very low level even after 3.000 hours in water or exposed to air.

Compression set after 1.000 hours at 150°C/160°C/180°C/200°C



Even at high temperatures (200°C) and a long-term load of 1.000 hours, the compression set in water remains



Safe comprehensive solutions for photovoltaic applications

Photovoltaic modules are equipped with terminal boxes which must safeguard electronic contacts – even after many years of operation. Simrit has successfully risen to this challenge by developing special liquid silicon rubbers. Our solutions excel due to their high wear resistance against environmental impacts such as changing temperatures, water, ozone levels and ultraviolet light. The design of the innovative lip seals additionally compensates for manufacturing-related tolerances between the cover and housing of the terminal box. This is done in a way that is gentle on the component, because they enable lower installation and reaction forces than O-rings. All this while providing the same sealing strength.

2-component advantages for technology and cost-efficiency

Thinking one step ahead, the housing covers of the terminal boxes can also be manufactured as 2-component units which are also UL-certified. For this, Simrit offers the cover and housing as one inseparable unit. This gives a 100% guarantee of the seal's safe, captive fit and simultaneously reduces your installation and logistics expenses. At all times you can be sure that you are using first-class sealing materials.



Innovative Simrit sealing element made of high-performance EPDM.



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The logo for Simrit, featuring the word "simrit" in a bold, blue, lowercase sans-serif font. A registered trademark symbol (®) is positioned to the upper right of the letter 't'.