

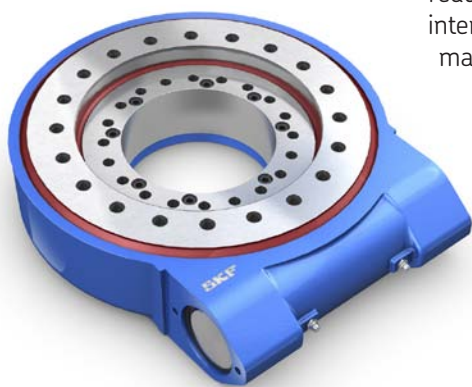
Improving solar tracking performance and reliability with the SKF Solar Hub

Benefits

- Designed for 20-year life
- Virtually maintenance-free
- Minimal backlash for accurate tracking
- Higher stiffness increases power generation
- Built for severe environments
- Higher load and torque carrying capabilities
- Optimal grease for longer service life
- Lubricated, sealed and assembled for extended service life
- Minimized footprint to reduce size and overall cost

Typical applications

- Solar tracking systems for:
 - Photovoltaics (PV)
 - Concentrating photovoltaics (CPV)
 - Concentrating solar power (CSP)



Precision tracking to generate more power and more profitability

SKF Solar Hub will allow for increased power generation and improved system efficiency. Designed to custom solar requirements, it provides the necessary mechanical movement and torque to allow the solar panels to accurately track the sun as it moves across the sky. Using the SKF Solar Hub for the azimuth function can typically provide an increase in efficiency of 15–20% relative to a fixed installation.

Advanced technology benefits manufacturers as well as end users

SKF Solar Hub integrates a self-locking gearbox, bearings, lubricant, and robust sealing solution in a housing for optimal performance in severe outdoor conditions. In contrast to the traditional drive, the SKF Solar Hub provides a virtually maintenance-free, reliable, and cost-effective way to track the sun.

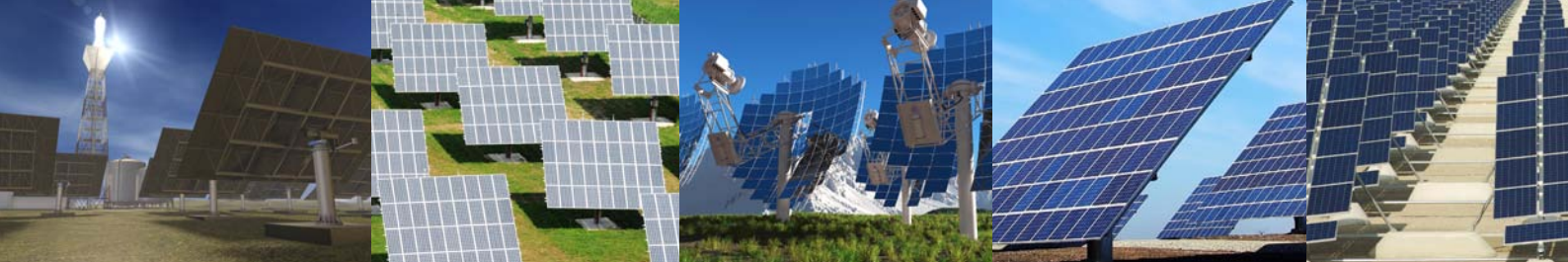
On site, the SKF Solar Hub is designed to be a bolt-in solution requiring minimal time to install in the field, saving time and expenses. And because the SKF Solar Hub is virtually maintenance-free, downtime is minimized and costs are reduced over today's maintenance-intensive solutions. By minimizing maintenance and maximizing power generation, SKF Solar Hub users can achieve lower levelized cost of energy (LCOE).



SKF offers a complete approach

As the world leader and innovator in rotating equipment technology for more than 100 years, SKF has a unique understanding of how machine components and industrial processes are interrelated, in every major industry worldwide. This knowledge – coupled with our expertise in sealing solutions, lubrication systems, linear motion, machinery maintenance, mechatronics, and services – enables us to deliver real-world solutions that help maximize mechanical performance over the entire lifecycle of an asset.

As a result, SKF can be your single source for solar tracking components including linear actuators, rotary drives and related technologies and services.

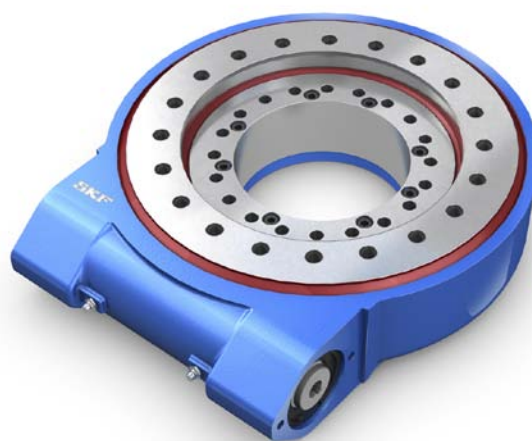


Lower lifetime system costs with SKF Solar Hub

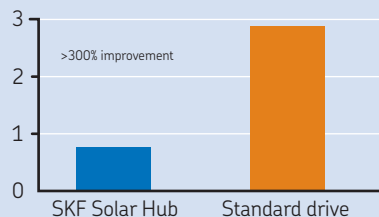
Combining robust design, easy installation, virtually maintenance-free operation and reduced downtime, SKF Solar Hub can help to reduce solar power generation costs while increasing productivity and profitability.

Technical data

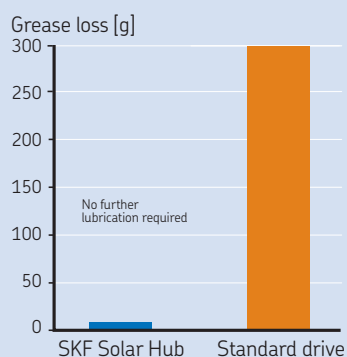
Technical data	SKF Solar Hub CRSD 290
Dynamic torque	10,5 kNm
Static torque	21 kNm
Axial load rating	65,5 kN
Radial load rating	39,7 kN
Overturning moment	45,7 kNm
Self-locking gears	Yes
Gear ratio	1:90
Voltage	DC / AC – motor optional
Feedback positioning	Encoder – optional with motor
Operating temperature	-20 to +60 °C
Type of protection	IP 65
Weight	102 kg
Inner bolt pattern	Ø230 mm, 20 x M16 12.9
Outer bolt pattern	Ø340 mm, 20 x M16 12.9



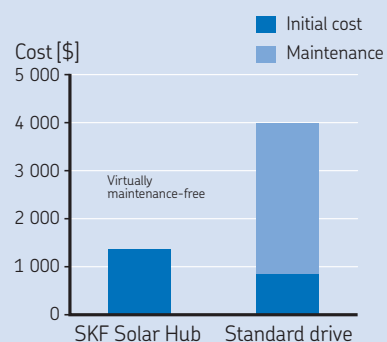
Wear (20-year life, accelerated testing)



Grease loss (20-year life - accelerated testing)



Cost of ownership (20-year life cost/tracker)



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