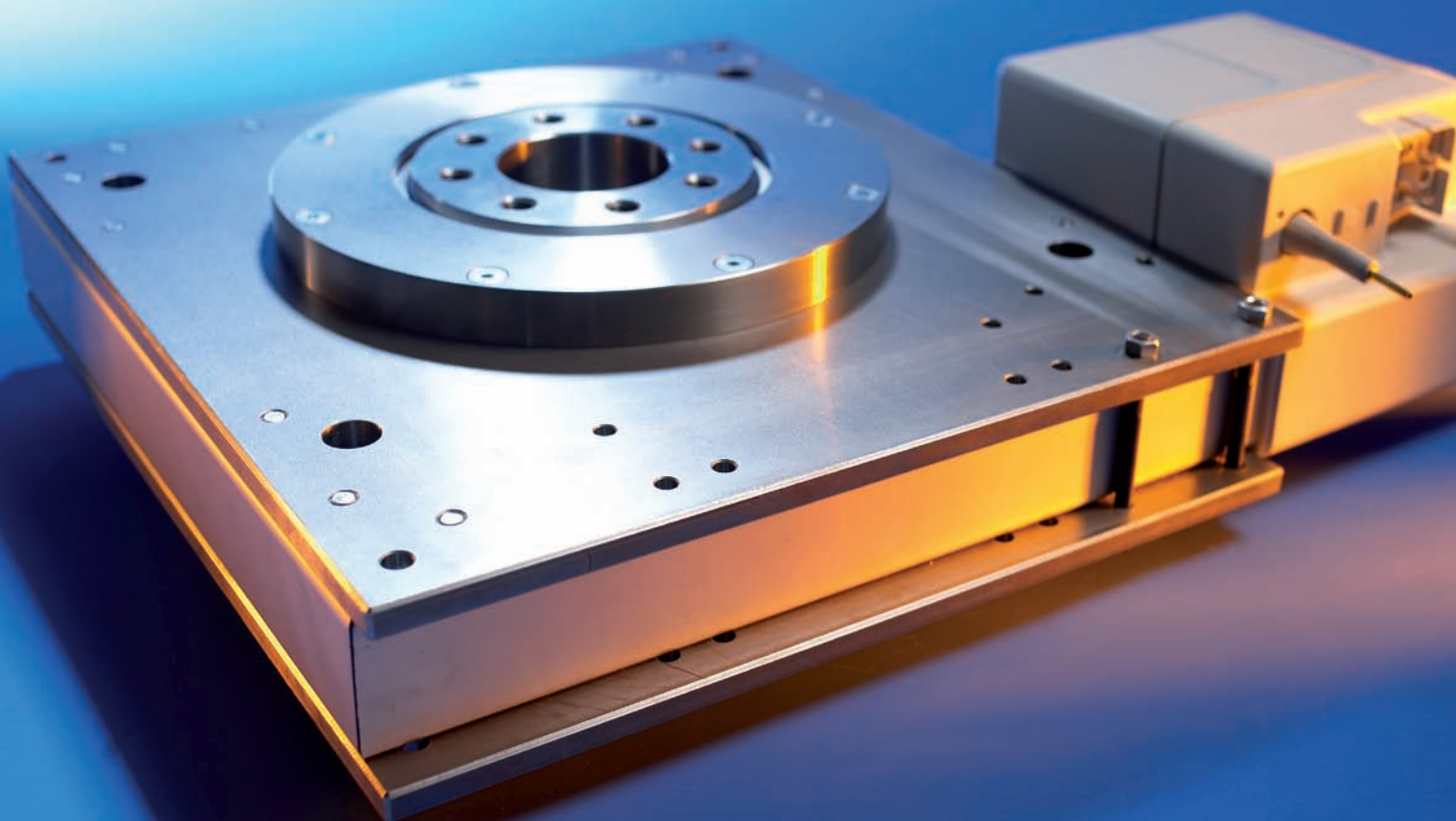




TRACKING SYSTEM

for solar cells
consisting of low-profile gearbox, tilting drive and control unit



low-profile gearbox – tilting drive – control unit

Solar tracking system for solar cells

Tracking systems adjust solar cells to the current position of the sun. Depending on the location, the tracking system can increase the efficiency of the cell by up to 40 % compared with stationary systems. Our system is suitable for solar modules up to 40 m² and two-axis programmable tracking.

The low-profile gearbox (see front picture) comprises a powerful asynchronous motor and a rugged low-backlash gearbox with a high gear reduction of 4112:1. The low-profile geared motor is made of high-quality material including zinc-coated steel and anodized aluminum to meet the requirements specific for solar applications. The asynchronous motor used is available in three different sizes: as 400 V three-phase AC motor, 115 V and 230 V AC motor and as frequency-controlled three-phase AC motor with 36 V DC supply.

Features

- Integrated limit switches (approx. 60° – 300°)
- South reference switch (180°)
- Signal detection for position control with Hall sensors (Hall IC)

Your benefits

- Battery backup (36 V)
- High traversing accuracy
- Smooth start and stop in the event of adjustments
- One stop shopping for the entire system

Technical data (low-profile gearbox)		
	Small	Large
Internal diameter	40 mm	60 mm
Torque (dynamic)	400 Nm	400 – 600 Nm
Torque (static)	6,000 Nm	6,000 Nm
Load (axial, radial)	25,000 N	50,000 N
Gear backlash	up to 0.3°	up to 0.3°
Speed (4/2-pole)	0.35 / 0.70 rev/min	
Speed (frequency controlled)	0 – 1 rev/min	



Possible tilting drive SL 95

Various **tilting drives** are available to meet our customers' requirements.

Available tilting drives		
Type	Tension, pressure and breaking load (static)	Tension, pressure and breaking load (dynamic)
SL 95	50,000 N	15,000 N
SL 80	20,000 N	12,000 N
SHI 120	75,000 N	30,000 N

HANNING **solar controls** can monitor and control up to eight solar tracking systems. It is also possible to build up a network by using a router. The system is controlled via CAN bus and remote monitoring is possible from any location using a PC connected to an ISDN line. The system is also equipped with a storm protection which in strong winds automatically moves the solar panels into a position where they are least exposed. In addition the system offers a freely programmable night position which ensures that the panels do not move during the night and start operating again in the morning.



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The matching solution for every task

HANNING offers a wide range of electrical and electronic drive components such as three-phase and AC motors, linear actuators, radial blowers, drain and circulation pumps and frequency inverters.

The individual designs of all components as well as HANNING's comprehensive engineering know-how ensure best solutions for drive requirements.

Contact voor Benelux:

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