New Intelligent Actuator Lowers Investments in and Operational Costs of your Solar Tracker

The new LA36 actuator from LINAK with embedded Modbus communication lowers costs by reducing the use of signal cables and interface boxes.

November 13, 2010 — LINAK actuators enhance the energy generation of solar panels by adjusting them so that they follow the sun during the day.

LINAK is embedding Modbus for transferring data, directly in the LA36 actuator.

Embedded Modbus communication has three benefits:

- Lower investments
- Lower operational/maintenance costs
- Longer lifetime

**Lower investments:** Embedded Modbus in the actuator ensures that several trackers can be connected by a single data line, thereby eliminating the need for many signal cables so that only two cables are needed – one for Modbus and one for power. Furthermore, the system is less complex, needing only one central controller to program and control a string. By controlling all solar trackers from a central point it is possible to save the cost of interface boxes.

**Lower operational/maintenance costs:** Modbus communication reduces the resources needed for operation and maintenance. Due to a standard communication language it is easier to program your solar applications and it takes less time to install Modbus.

The actuator is equipped with standard M12 connectors for easy interfacing with standard bus cables. The LA36 actuator with embedded Modbus communication can be adjusted according to speed (10-100%) and stroke length. This makes it possible to improve the functionality of the final applications.

Preventive maintenance such as temperature readings or current measurement inside the actuator can predict if something is wrong with the actuator or the processor. It is also possible to remotely monitor the installation using Ethernet-BUS gateway.

**Longer lifetime:** The LA36 actuator with embedded Modbus communication has a longer lifetime because of its electronic overload protection and lower speed that reduces wear of mechanical parts. Additionally, it has a non-contact potentiometer and an adjustable current limiter.

The LA36 actuator is a solid and powerful actuator designed to operate under extreme conditions. The actuator has a maximum thrust of up to 10,000 Newtons. It is the obvious choice for large solar panels, because of its high self-locking ability. Visit the LINAK website for a complete list of linear actuators.

**LINAK** is the world leader in designing and manufacturing electric actuators and electronic controls for a variety of applications such as hospital beds, patient lifts, office desks, leisure beds, harvesters and many other applications in the industry.

LINAK is a global company with subsidiaries all over the world and production facilities in Denmark, the USA, Slovakia and China. LINAK employs approximately 1500 employees and has a turnover of around DKK 1.8 billion

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