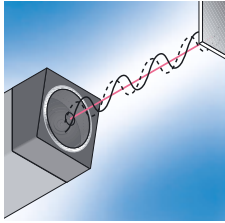


# Linear Encoders: Unerring Connection

Wire-actuated transducers, L'A'S Laser Absolute System.  
without Deviations.



The phase shift of the laser light provides absolute and exact to a millimetre values for long measured distances.

## Laser Distance Measurement

The L'A'S System from SIKO is used in places where large distances are to be controlled absolutely and in short measuring cycles. Contactless, wear-free and millimetre exact, this laser distance measuring system determines positions that are required for storage shelf service equipment, process carriages, elevators or also transfer machines.

Together with a reflected light barrier, the measuring system offers simple installation and high reliability. Via a serial interface, control

units have direct access to built-in evaluation electronics, a basic requirement for the utilization of the precise laser values.



### Technical Data L'A'S

Maximum measuring length 100 m
Resolution 1 mm
Wear-free and contactless
Absolute Position detection
Interfaces: SSI, Profi-Bus, Inter-Bus-S

## Wire-Actuated Transducers

With SIKO wire-actuated transducers, linear movements are converted to rotational movement and activate mechanical counters, incremental encoders, angle encoders or potentiometers depending on the customer's requirements. The measurement signals can be forwarded to controllers to be utilized there.

An advantage for this measuring method is that no additional guiding system is necessary since the wire is simply attached to the measured object. The mounting effort is, therefore, very low, also for long distances. As a result of the flexibility of the wire, linear displacements can be detected even in inaccessible places where conventional systems could not be mounted. Economy and functionality are combined in SIKO's wire-actuated systems to a special degree.



### Wire-Actuated Transducers

Measuring length 0 – 40,000 mm
Mechanical with number roll or optionally adaption of: potentiometer, incremental or absolute encoders
Wire material: steel, steel/plastic, paraline
Accessory: guide roller

Within the stacking unit, the exact height is regulated by a wire-actuated transducer. Along the longitudinal axis, the L'A'S system without wire controls the advancement.



In use: The absolute measuring SGW wire-actuated transducer in a horizontal circular saw.



Wire-actuated transducers from SIKO are solidly constructed and have a very long service life as a result of the cable type used. On lifts and stackers, they perform reliably even without additional mechanical protection. In the metal processing industry for the stop adjustment of cut-off saws, the dimensions of the workpieces are also measured by wire-actuated transducers. For the illustrated application examples of the wood processing industry, e. g., on panel saws, wire-actuated transducers perform the various measuring tasks.

Distance measuring without cables and completely scale-free is the special area of application for laser technology. The L'A'S system from SIKO dispenses with cable ducts or drag chains, an economical alternative for application in the area of large storage systems and for conveyor engineering.

Measuring systems based on the "wire-actuated" principle are advantageous in handling since the uncomplicated attachment of the cable on the positioning unit can be made quickly and inexpensively.

The incremental as well as the absolute or potentiometer measurement principle is optional for all wire-actuated transducers. Compact construction from miniature format to cable lengths of 40 m cover the major portion of industrial applications.



The correct determination of the workpiece dimensions provides the basic value for the exact cutting and feeding speeds on this cut-off saw.



By retrofitting with a wire-actuated transducer, height and stroke can be directly controlled as the specified value.