

SELEGUIDE10K

WEB-GUIDES



SELECTRA
RESEARCH & DEVELOPMENT

YOUR CHALLENGES OUR SOLUTIONS

APPLICATIONS



FLEXOGRAPHY



ROTOGRAVURE



**SLITTER
REWINDER**



EXTRUDERS



SELEGUIDE10K

Outstanding correction of both dynamic and static errors with the SELEGUIDE 10K web-guides, ideal for any kind of printing and converting machine. SELEGUIDE 10K web-guides correct the position of the web thanks to the appropriate movement of a correction frame.



Control panel

The system consists of a user-friendly operator panel with a LCD touch screen display, used for controlling a positioning frame. The correction signal guides an electrical linear actuator with end switches and servo center.



Outstanding precision

The system checks and controls the position of the edge of the material or a printed line, thus allowing a more precise alignment of the reels and avoiding waste of material. By providing a high degree of control granted by PID algorithms, the SELEGUIDE10K reacts in real time to errors.



Applications

- Printing presses
- Bag making machines
- Extruders
- Cardboard machines
- Converting machines
- Tissue machines
- Tire machines



CORRECTING FRAMES

The web control is obtained through the proper movement of a correcting frame.

SENSORS

The reading of the error is obtained through 5 different types of sensor with CANbus digital communication protocol:



- TLS 10K
- TSB
- TUS 10K
- TUS XS 10K
- TIR 10K



CONTROL PANEL

The system consists of a user-friendly operator panel with a LCD touch screen display, used for controlling a positioning frame.



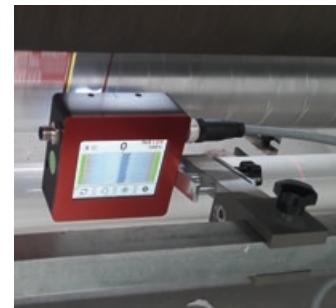
ACTUATORS

The correction signal is used for moving a linear actuator with internal limit end switches and servo centre sensors.



TECHNICAL INFORMATION

- Operating panel with LCD touch screen display
- Generating power supply: 24 V
- Digital driver to control the correcting motor
- RS485 communication
- Alarm output
- PID algorithms
- Networking up to 32 stations
- User friendly interface
- Servo centre at start-up
- Automatic motorization of sensors allowing the display of the web width
- Cost effective solution



SELE DATA SYNC

It is a powerful software tool for Industry 4.0 that enables real-time data exchange between Windows PCs and Selectra Control systems. It is specifically designed to support both TCP/IP and RS485/RTU Modbus protocol versions to communicate with field slave devices. SeleDataSync comes with a companion utility program called SeleDataReport, that enables users to easily convert log files into Excel-compatible CSV format.



The SELEGUIDE 10K is an automatic web guide system featuring the uncompromising design of new technologies. This system is setting new standards for a more precise alignment of the reels, avoiding waste of material and significantly improving the quality of the final product.



SENSORS



TUS 10K

Ultrasonic sensor for reading the edge of the material. The error is detected by the ultrasonic sensors. The auto-calibration procedure obtains the starting tension levels for the different materials. The zero is settable from the operator panel, to change the offset level. In the most advanced systems, the scanning head is motorized, and it is possible to activate the center control by using two motorized sensors. TUS sensors are also delivered with longer forks on request. The TUS 10K sensor works at extremely high frequencies in order to avoid environmental disturbances.



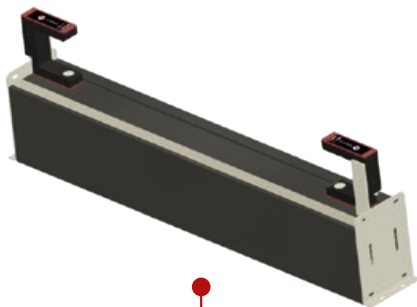
TUS XS 10K

Miniaturized ultrasonic sensor for reading the edge of the material. The error is detected by the ultrasonic sensors. The auto-calibration procedure obtains the starting tension levels for the different materials. The zero is settable from the operator panel, to change the offset level. In the most advanced systems, the scanning head is motorized and it is possible to activate the centre control by using two motorized sensors. The TUS 10K XS sensor works at extremely high frequencies in order to avoid environmental disturbances.



TIR 10K

Infrared sensor for reading the edge of the material. The error is detected by the infrared sensors. The auto-calibration procedure obtains the starting tension levels for the different materials. The zero can be set from the operator panel, to change the offset level. In the most advanced systems, the scanning head is motorized. TIR sensors are also delivered with longer forks and with a cleaning protection device with air flow on request.



MOTORIZED BAR

Automatic and manual movement of the sensors through stepper motors. Thanks to the digital management of the reading of the sensors it is possible to obtain an accurate measurement of the width of the material analysed. The movement board of the sensors communicates digitally with the control panel and moves the sensors until they reach the ideal position. The auto-tracking function of the sensors can be activated when needed during the job.



TLS 10K

Optical sensor for reading the printed line and the contrast, equipped with a LCD touch screen display through which the operator can easily perform all operations and the calibration procedure. The touch screen also allows the operator to control the reading of the material in real time. The sensor discriminates the line or the ideal contrast depending on the operator's choices. The consistency of the signal is further guaranteed by the new control algorithm, able to measure the width of lines and contrasts accurately. The new line scan array sensor ensures exceptional performances even with interrupted lines or any other lines near the selected one.



TECHNICAL INFORMATION

Standard actuators:

- Internal limit end switches and servo center
- Ball screw for high durability and precision
- Fast reaction: 25- 35 mm/sec
- Power supply: 24 V
- Standard cable: 5 mt

Hydraulic actuators:

- Driven by 24 V proportional valve
- Designed for a high actuating force
- Fields of application: heavy weights movement



Actuator 1000N – 50mm

Force	1000N
Stroke	50 mm
Speed	15 mm/s
Power	24Vdc – Ø 40 – 6000 rpm
Limit Switch	2 micro diode-wired + 1 micro not diode-wired
Screw	Trapezoidal screw
VRS	Ø 12 pitch 3



Actuator 2000N – 100mm

Force	2000N
Stroke	100 mm
Speed	38 mm/s
Power	24Vdc – Ø 59 – 4000 rpm
Limit Switch	3 microswitches diode-wired
Screw	Recirculating ball screw
VRS	Ø 14 pitch 4





Actuator 2000N – 200mm

Force	2000N
Stroke	200 mm
Speed	38 mm/s
Power	24Vdc – Ø 59 – 4000 rpm
Limit Switch	3 microswitches diode-wired
Screw	Recirculating ball screw
VRS	Ø 14 pitch 4



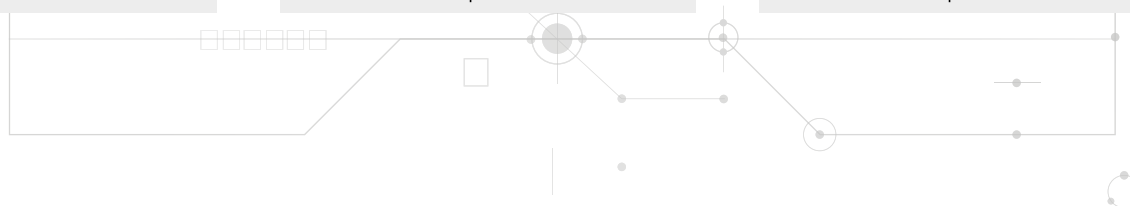
Actuator 7000N – 100mm

Force	7000N
Stroke	100 mm
Speed	25 mm/s
Power	24Vdc – Ø 76 – 4000 rpm
Limit Switch	3 XGG switches diode-wired
Screw	Recirculating ball screw
VRS	Ø 16 pitch 5



Actuator 7000N – 200mm

Force	7000N
Stroke	200 mm
Speed	25 mm/s
Power	24Vdc – Ø 76 – 4000 rpm
Limit Switch	3 XGG switches diode-wired
Screw	Recirculating ball screw
VRS	Ø 16 pitch 5



MECHANICAL



The correcting frames are divided into two categories: pivoting structure (OPG) and steering single-roller (KR).

The compact OPG model (up to 350 mm wide) uses an integrated logic control and is employed mainly in the packaging, non-woven fabric and label industry.

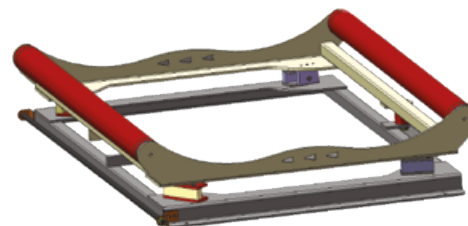
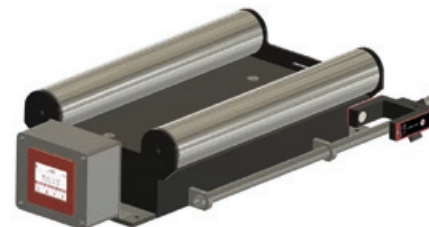
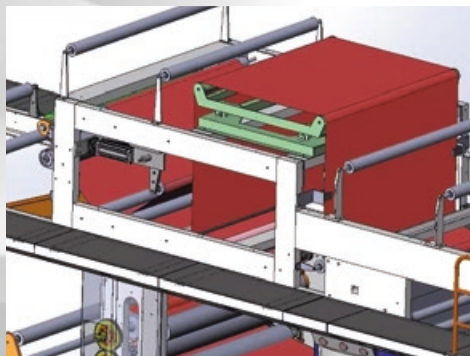
From 400 mm width, OPG mechanics are controlled by remote logic controls. The most common areas of application are reel printing and web alignment in converting. The KR model utilises a remote logic control and handles the alignment of the web on flexographic printing machines.





The web control is obtained through the proper movement of a correcting frame.

The pivoting frame is directly driven by a linear actuator. The output roll is covered with cork to increase the grip for a better correction. The choice of the correct mechanical frame depends mainly on the width of the material and the specific application of corrector.

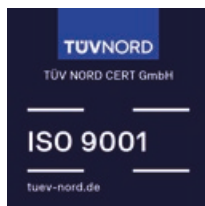




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