

D-C-S Digital Control System

ELGUIDER DRS 12

The new pivoting frame DR 12 was especially designed for guiding small webs. Due to its compact design it may be easily integrated into existing machine concepts. Its primary use is therefore in the label, packaging and hygiene industry.

Sensor

The position of the web edge is detected by a compact, opto-electronic edge sensor immediately behind the exit roller. As an alternative for films, an ultra-sonic sensor will detect even very clear webs reliably.

Controller

The digital controller is integrated into the pivoting frame. Adjusting the control parameters and thus optimizing the control loop is no problem thanks to the user-friendly control panel.

Networking

The standardized CAN-bus guarantees reliable and rapid data transfer and allows for an easy integration into any machine and control system with reduced wiring.



Interface

The system not only has the advantages of centralized operation of the controllers. It can also be connected without any problem to SPS controls and to various Bus-systems via a parallel interface (digital inputs and outputs).

Operation

Big emphasis was placed on the ergonomics of the control panel. The pictorial representation of the web, the applications-oriented set-up of the function groups as well as the diaphragm keypad with readily understood symbols and LED displays make sure that the system is easy to handle.

Function

When guided by a pivoting frame, the web changes direction a total of four times. As the web is moved both on the longitudinal and transverse axes when it is corrected, its elasticity potential can be utilized more fully than with a purely transverse offset. Due to an optimised pivotal center on the infeed path optimum web correction is achieved. Premature creasing is avoided.

Application

Given its excellent utilization of web elasticity, the pivoting frame is ideal for webs that are liable to tear. It is moreover recommended for use in confined space conditions.

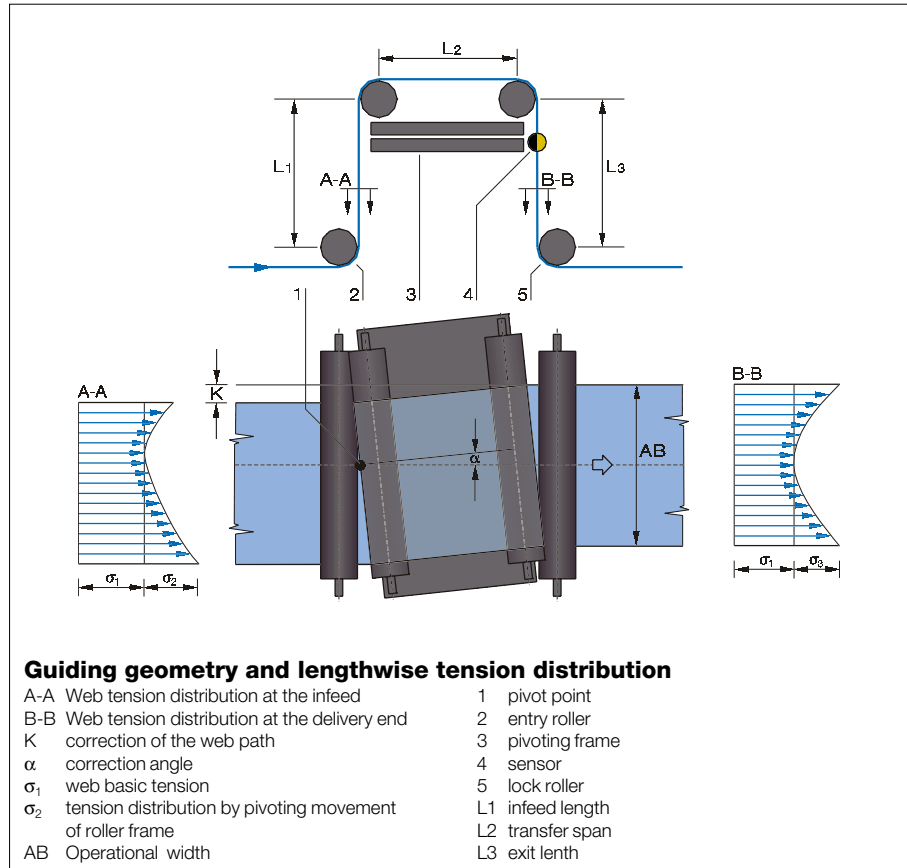
Design

Depending on the job, a pivoting frame system for tough webs is designed along the following basic rule: the infeed, transfer and delivery lengths should be identical and should be between 50% - 100% of the web width.

selection table

LÜ (mm)	
200	
180	
	NB (mm)
	160
	200
	250
	300

LÜ Transfer span
 NB Nominal width



Technical data DRS 12

Guider accuracy	< ± 0.1 mm (depending on material)
Nominal traverse	
LÜ 180 mm	max. ± 19 mm
LÜ 200 mm	max. ± 21 mm
Nominal positioning speed	
LÜ 180 mm	1 - 135 mm/s adjustable
LÜ 200 mm	1 - 120 mm/s adjustable
Force	max. 300 N
Roller face width NB	160/200/250/300 mm
Transfer span LÜ	180/200 mm
Roller diameter D	40/60 mm
Ambient temperature	10 to 50° C
Operational voltage	
Nominal value	24 V DC
Nominal range	20 - 30 V DC
Nominal range with power supply	100 - 240 V, 50/60 HZ
Power consumption	max. 2.5 A DC
Protection class	IP 54
Measuring range	
edge sensor FR 45	± 3 mm
ultra-sonic sensor FX 45	± 3 mm
line sensor FE 50	± 10 mm

Subject to technical modifications without notice