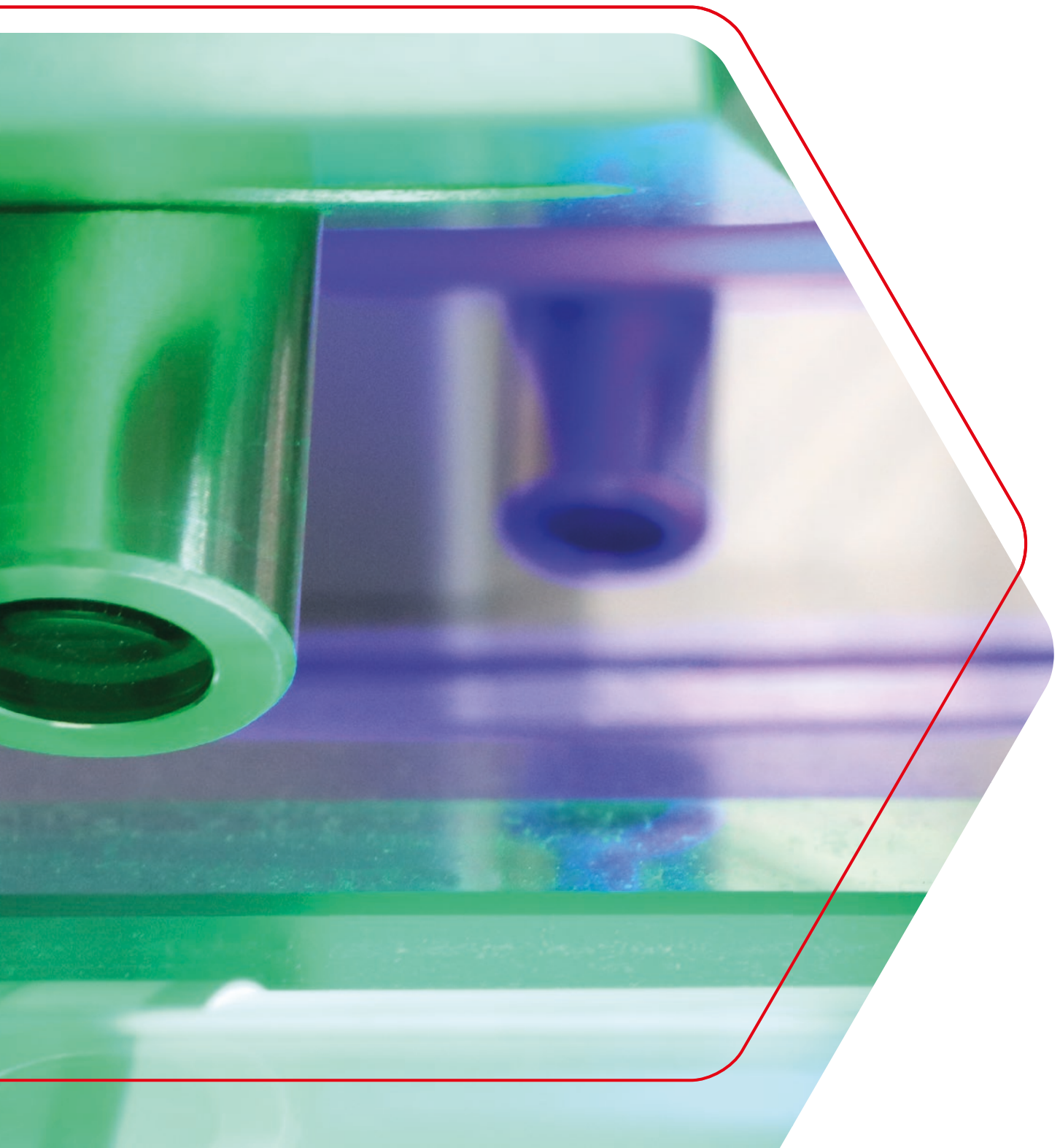Highest register precision.
First-class quality.

eltromat TWINStar

eltromat TWINStar

Innovative register control

Competition in the printing industry is tough and the requirements are constantly increasing. Precise control of the print image is the key to excellent print products.

Precision from experience

As a leading manufacturer of quality assurance systems for the web processing industries, BST has completed more than 200,000 installations in over 100 countries worldwide and can look back on more than 60 years experience in the field of register control.

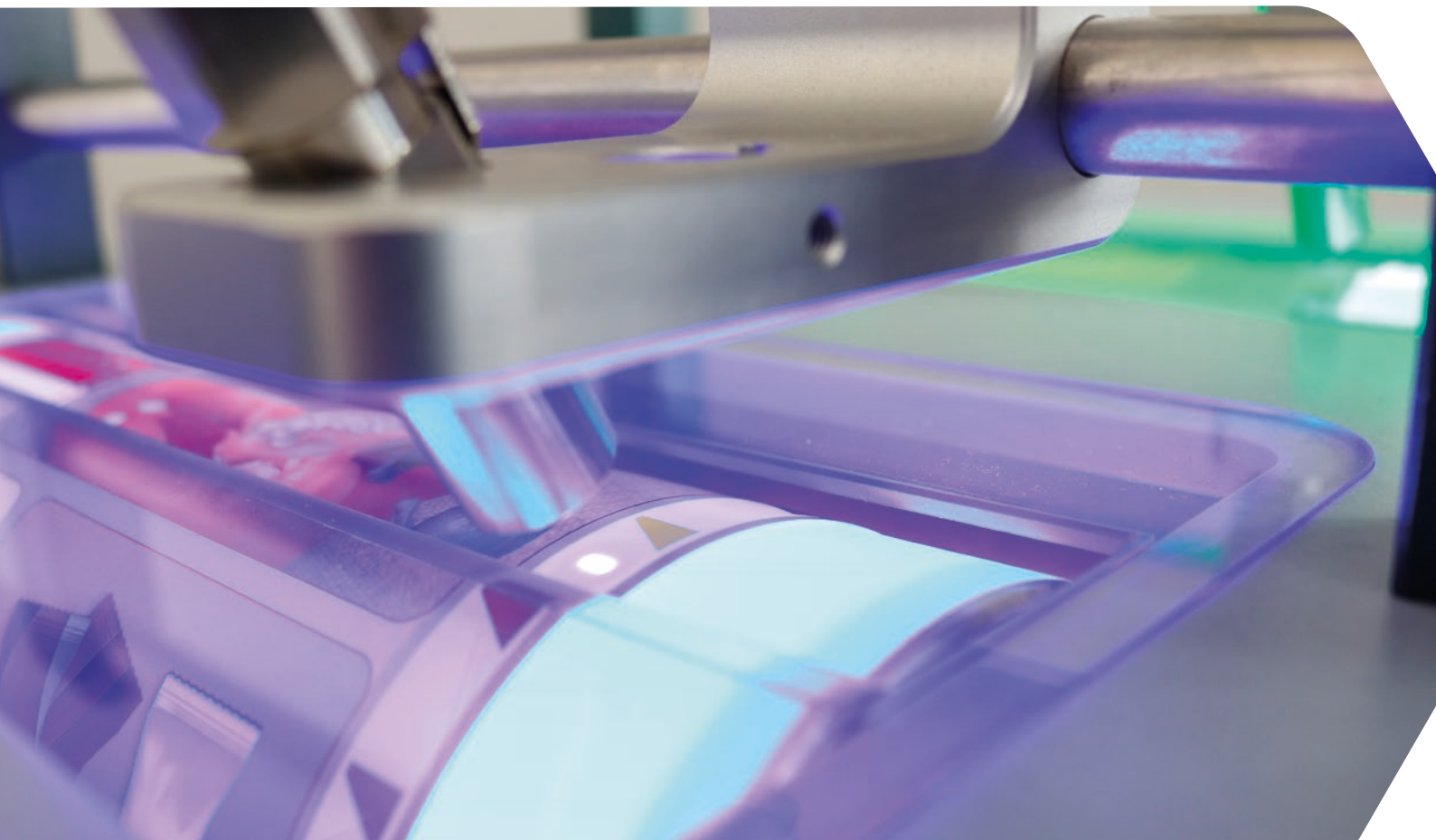## TWINStar is our response to new challenges

The new eltromat TWINStar is a compact register control system for control of up to two control stations.

With its extensive scope of functions, it is the perfect solution for a wide range of applications. Typical areas of application are, for example, hybrid printing presses or converting machines in which different printing and converting processes are combined. **TWINStar** shows its class in the control of downstream printing units, of finishing or tooling stations or in the insetting of pre-printed materials.
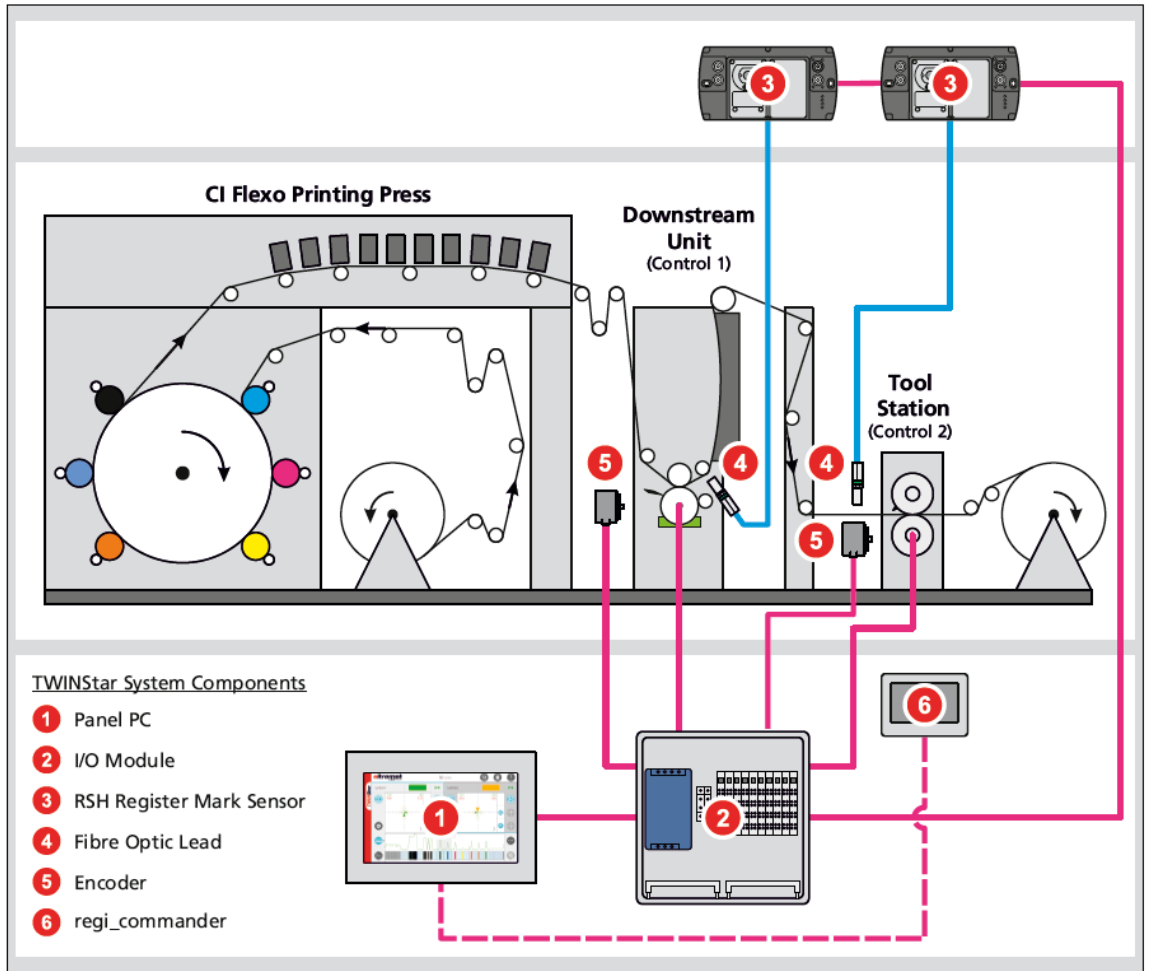
Thanks to its flexible system architecture, the modular system is suitable for use on new machines as well as for retrofits on existing ones.

TWINStar - Your benefits:

» minimum **waste**
» reduced **production costs**
» fast **set-up times**
» easy **handling**
» maximum **quality**
» increased **productivity**
» excellent **results**

Schematic system configuration

CI Flexo Printing Press

Downstream Unit (Control 1)

Tool Station (Control 2)

TWINStar System Components

1. Panel PC
2. I/O Module
3. RSH Register Mark Sensor
4. Fibre Optic Lead
5. Encoder
6. regi_commander

System configuration

The schematic illustration shows a typical system configuration of the **TWINStar** register control system for use on a CI-flexo printing press with two control stations for controlling a downstream printing unit and a tool station.

Do you have special requirements?
Just get in touch with us.
We will be happy to advise you.

Your direct contact on our website:
bst.elexis.group/en/contact

Convincing technology

First-class register control

The system features of the TWINStar have been perfectly matched to printing applications with the highest requirements in terms of quality, flexibility and performance.

Standard features in the basic system

Even the basic configuration offers you a wide range of intelligent functions for effective register control.

Reliable mark detection

Waste reduction under all production conditions

The adaptive **RSH** fiber optic register mark sensor of the **TWINStar** is capable of detecting a wide range of even extremely low-contrast and metallized colors as well as numerous almost transparent coatings.

With its fully automatic, optimal scanning technology, **TWINStar** supports both the eltromat single-head and the standard dual-head measuring method. By using the different measuring methods web-web and web-cylinder in any combination and the highly dynamic control modules specially optimized for the respective application, a maximum of waste and cost reduction can be achieved.

## One view, one click

Simple, intuitive operation

The newly designed operating concept provides all important information at a glance at all times. All necessary functions are reachable with just one click. The modern touchscreen user interface offers efficient handling of the register control system. The clearly structured concept provides the operator with a maximum of comfort.

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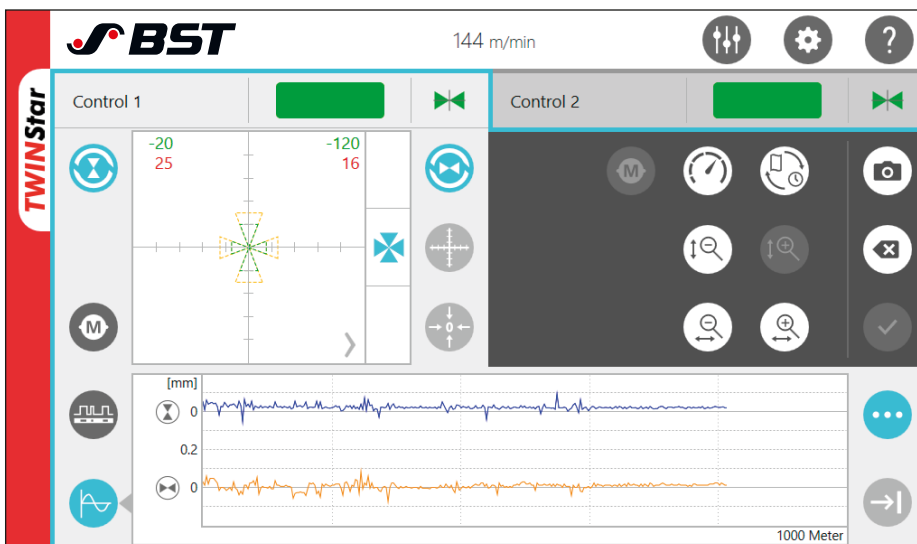
Convincing usability

Everything under control
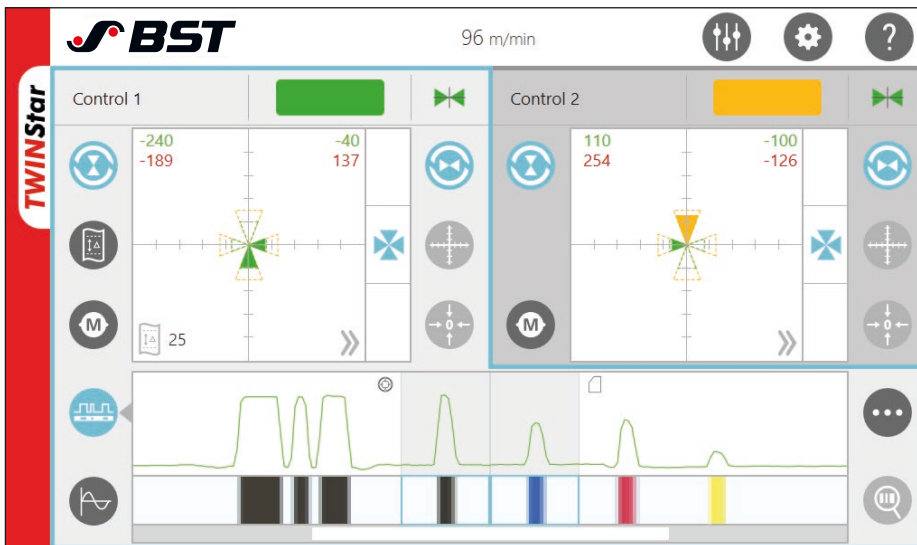
Live image of the register marks

The colored display of the live image of the detected register marks and the recorded mark signal (oscilloscope view) on the user interface allows the operator to clearly assign even low contrast register marks.

RegiChart - Register trend display

RegiChart visualizes the register trends of all control stations clearly over time or distance. **RegiChart** supports the operator during the running production to recognize deviation trends. In this way waste is avoided in advance.

Options

RegiTouch – semi-automatic register presetting

The **RegiTouch** function allows to bring selected register marks quickly and easily into the measuring gate.

Insetter control

For register-true insetting of pre-printed webs and for electronic transmission adjustment of tools, insetter modules are available.

Remote maintenance module

With the help of the remote maintenance module the system can be maintained easily and quickly by remote diagnosis via the Internet.

Chart outputs for recording

Special analog chart recording outputs can be used for external recording and analyzation of register deviations.

Determining the printing cylinder positions

The printing cylinder positions of all printing units are required for the make-ready process of the press. The register mark sensors determine and provide this information.

Integration interfaces for process data

For the exchange of relevant process data and status information with the machine control system, PROFINET integration interfaces are available.
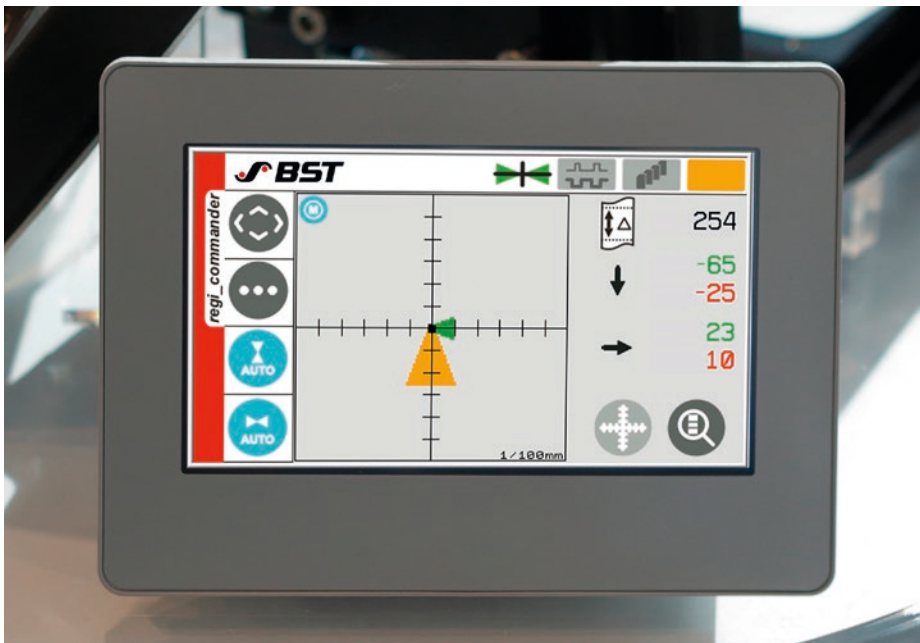
regi_commander control panel

With the compact **regi_commander** operating panel, register deviations can be corrected directly at the printing unit or at the tool station.

eltromat TWINStar
Technical data

System performance

Number of printing units	1 or 2
Maximum web speed	1,200 m/min
Format length	50 – 6,000 mm
Applications	Gravure printing, flexo printing, offset printing, screen printing, hybrid machines, processing units
Measurement methods	web-web 1, web-web 2, web-cylinder
Control algorithms	Gravure, Offset, Insetter

Sensors

Variations	RSH fiber optics, 1- and 2-channel
Measuring resolution	max. ± 5 µm
Measuring frequency	max. 30 Hz
Register marks	Wedge marks, block marks, special printing features
Materials	Paper, foil, metallized substrates (opaque, transparent, reflective)
ATEX approval (only RSH fiber optic sensor)	<Ex> II 2 G [Ex op is T4 Gb] IIB

System

Operation	Panel PC (installation version) with 10.1" TFT touchscreen; 1,024 x 600 pixels Dimensions: 275 mm x 190 mm
Interfaces	Ethernet for remote maintenance and data exchange, PROFINET for machine integration
Digital input signals	24 V according to EN 61131-2, Type 3
Digital output signals	24 V, 0.5 A, short-circuit resistant
Power supply	100 – 240 V AC / 50–60 Hz, 4 A
Ambient temperature	Panel PC: 0 - 55 °C (32 - 131 °F), PLC: 0 - 40 °C (32 - 104 °F), Sensor: 0 - 50 °C (32 - 122 °F)

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