

Figure CLS CAM 200 Line and Contrast Sensor



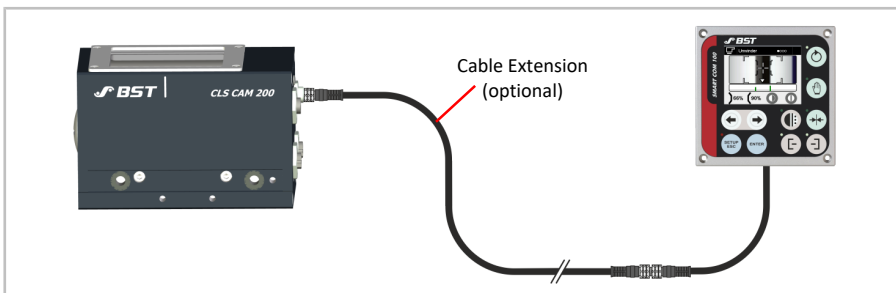
Performance Characteristics

- Precise scanning of lines, printed edges or web edges using a colour sensor
- Automatically controlled LED lighting for perfect guiding results even in case of poor contrasts
- Special lens with high photosensitivity for outstanding dependability even at highest web speeds
- Convenient operation and intuitive user guidance
- Laser projection guided positioning
- Convenient selection of the printed line, printed edge or web edge using a colour display of contrast transitions
- Differentiated user administration

Functions

Scanning Functions	<ul style="list-style-type: none"> • Scanning of continuous or broken print lines • Scanning of continuous or broken print edges • Scanning of web edges
Display Functions	<ul style="list-style-type: none"> • Display of identified edges or contrasts • Colour display of contrast view (extended contrast view) • Colour display of contrast profile (contrast profile view)
Quick Menu	<ul style="list-style-type: none"> • Fast access to frequently used parameters
User Administration	<ul style="list-style-type: none"> • Four user levels (Operator, Supervisor, Maintenance, Admin)
Job Administration	<ul style="list-style-type: none"> • Saving and loading of material and/or job specific parameter sets • Factory-made pre-configured jobs for standard applications
USB Interface	<ul style="list-style-type: none"> • Saving of parameters or stored jobs on an external medium (e.g. PC) • Transmission of system configurations to other line and contrast sensors

Removable Control Panel



Intended Use

The CLS CAM 200 sensor is a microprocessor-controlled line and contrast sensor with optional detachable keypad. It can be used for web edge guiding as well as guiding to continuous or broken printed lines or printed edges. The line and contrast sensor is intended for the installation in another machine or for the merge with other machines to a machine in accordance with Council Directive 2006/42/EC (Machinery Directive).

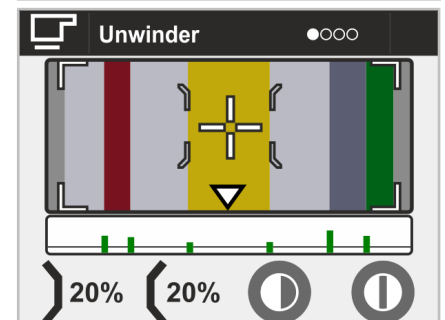
Note: For installation, commissioning and operation, please refer to the separate installation and operating manual.

Interfaces

In addition to the Ethernet and CAN bus interface, the CLS CAM 200 sensor offers an analogue control output (0 ... 10 V_{DC}) and a digital blocking signal. This makes it easy to realise typical control tasks:

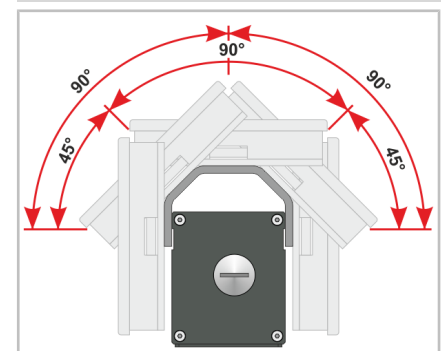
- Logging of the line and contrast information
- Stand-alone applications (use with a third party controller/ signal evaluation)

Touch Colour Graphic Display

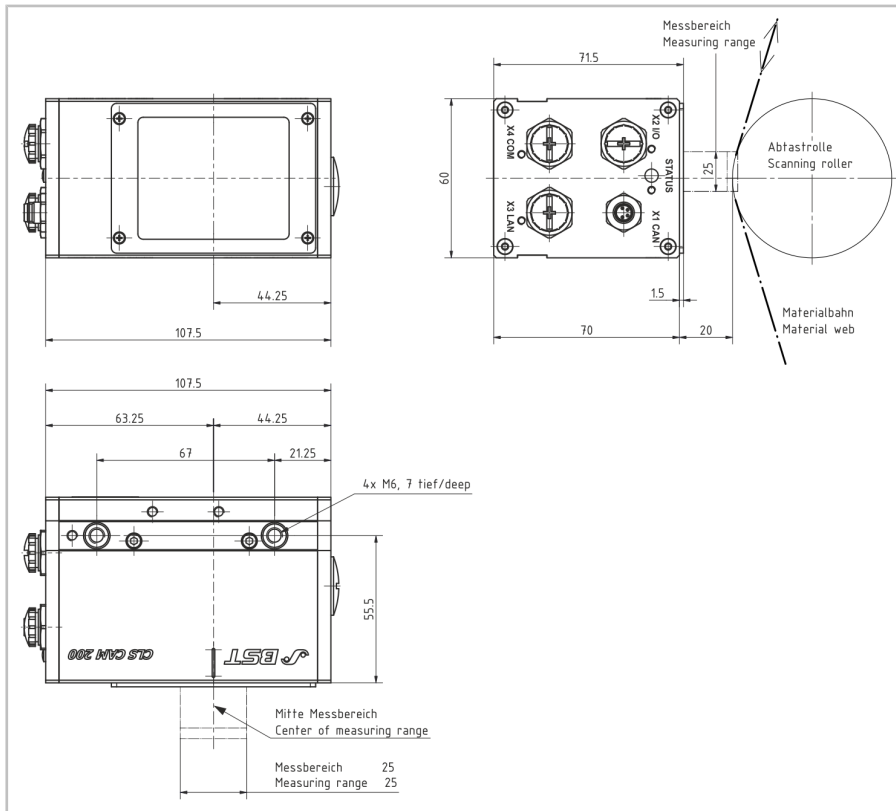


- Clearly arranged backlit colour display
- Colour display of contrast transitions
- Convenient selection of the printed line, printed edge or web edge to be scanned

Optional Control Panel



Dimensional drawing (in mm)



Electrical data

Supply voltage	24 V \pm 10 %
Current consumption	300 mA

Sensor

Sensor Type	High-resolution CMOS colour sensor
Sensor Resolution	0,00345 mm
Measuring Range / Distance	25 mm / 20 mm
Lighting	Integrated controlled LED lighting for dark/bright field
Centre position marker in setup mode	LED projection line

Inputs/outputs

Digital inputs	• 2x digital input for path clock/reset
Digital outputs	• Error output • External lighting, trigger output
Analog outputs	• Analog output 0 ... 10 V \pm , 5 mA

Capacitive touch color display

Resolution	320 x 240 pixels (true color)
Illumination	LED backlighting

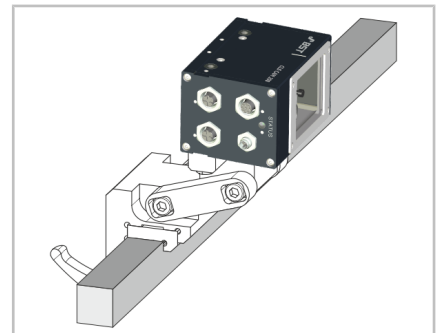
Sensor weight

Sensor	approx. 0.62 kg
Control keypad	approx. 0.26 kg

Operating conditions

Operating temperature	-10 ... +55 °C (+14 ... 131 °F)
Temperature during storage	-10 ... +70 °C (+14 ... +158 °F)
Air humidity	5 ... 90 % (non-condensing)
Place of use	Closed, dry building, altitude above sea level < 2000 m
Protection class	IP 54

Sensor Attachment



The optional holder allows to attach the sensor to a square bar steel with the following sizes:
25 x 25 mm or 35 x 35 mm

Control Panel Attachment

Wall Mounting:

Control panel installation on a level surface.

Console Installation:

Control panel installation in an operator panel or a control station.

Accessories required:
Installation kit (3COBL133459)

Magnet Attachment:

Control panel installation on a ferro-magnetic surface.

Accessories required:
Magnet installation kit (3BGSO148887)

Order data

Line and contrast sensor

CLS CAM 200 sensor	3SENS465288
CLS CAM 200 Bracket for square bar	3BGBE139305
SMART COM 100 keypad with mounting kit	3MECH465291

Mounting for keypad

Mounting kit	3COBL133459
Mounting magnet set	3BGSO148887

Cable extensions CAN BUS

Length 2 m	1ELKB131993
Length 5 m	1ELKB131994
Length 10 m	1ELKB131995

Connection to machine control unit

Analog connection box	3EBAS138748
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RoHS conformity

This product complies with EU Directive 2011/65 (so-called RoHS* Directive). This product does not exceed the limit values specified there for hazardous substances in electrical and electronic equipment.

* Abbreviation for Restriction of Hazardous Substances