

## c $\epsilon$

## Model Number

## VOS410-BIS-60-WH

Sheet inspection sensor for monitoring print by comparing stored images or barcode evaluation, right angle version

## Features

- Reliable detection at object speeds up to $6 \mathrm{~m} / \mathrm{s}$
- Image and barcode recognition with $10 \mathrm{arcs} / \mathrm{s}$
- Automatic learning of the reference image
- Integrated error image memory
- Integrated illumination


## Function

The sheet identification sensor from Pepperl+Fuchs enables fast and simple monitoring of the correct sheet sequence in collating, folding and binding machines. Sheets can be monitored either by using the image comparison method or reading in barcodes printed on the sheets.
The device can be operated locally, as a stand-alone unit or in a network where several sensors are connected together. The sensor includes a camera, illumination unit and evaluating computer with digital input and output signals as well as a network interface.
Typical areas of application are:

- Printing machines
- Folding machines
- Tying machines


## Indicating / Operating means



| 1 | Socket Trigger |  |
| :--- | :--- | :--- |
| 2 | Socket LAN |  |
| 3 | Plug 24VDC + IO |  |
| 4 | Power | green |
| 5 | Result | green |
| 6 | Stobe | yellow |
| 7 | Teach | yellow |
| 8 | Trigger | yellow |

## Electrical connection

## TRIGGER

| Pin | Signal |
| :--- | :--- |
| 1 | 24 V supply trigger |
| 2 | n.c. |
| 3 | GND |
| 4 | Trigger signal (TRIG) |
| 5 | n.c. |

LAN


Transmit Data (+)
Receive Data (+)
Transmit Data (-) Receive Data (-)

| Technical data |  |  |
| :---: | :---: | :---: |
| General specifications |  |  |
| Light type |  | Integrated LED lightning (white) |
| Object size |  | $25 \mathrm{~mm} \times 25 \mathrm{~mm}$ |
| Read distance |  | 60 mm |
| Depth of focus |  | $\pm 5 \mathrm{~mm}$ |
| Reading field |  | $60 \mathrm{~mm} \times 40 \mathrm{~mm}$ |
| Evaluation frequency |  | 10 Hz |
| Target velocity |  | triggered $\leq 6 \mathrm{~m} / \mathrm{s}$ |
| Indicators/operating means |  |  |
| Operating display |  | LED green: Ready for operation ; |
| Electrical specifications |  |  |
| Operating voltage | $\mathrm{U}_{\mathrm{B}}$ | 24 V DC $\pm 20$ \% |
| No-load supply current | $\mathrm{I}_{0}$ | max. 250 mA |
| Power consumption | $\mathrm{P}_{0}$ | 6 W |
| Interface 1 |  |  |
| Interface type |  | Ethernet |
| Protocol |  | TCP/IP |
| Transfer rate |  | $100 \mathrm{MBit} / \mathrm{s}$ |
| Cable length |  | max. 30 m |
| Input |  |  |
| Input voltage |  | to be applied externally $24 \mathrm{~V} \pm 15 \%$ PELV |
| Number/Type |  | 1 trigger input |
| Cable length |  | max. 30 m |
| Output |  |  |
| Number/Type |  | 2 electronic outputs, PNP , optically decoupled optional up to 4 outputs |
| Switching type |  | PNP optically decoupled, short-circuit/overload protected |
| Switching voltage |  | 24 V |
| Switching current |  | max. 100 mA each output |
| Cable length |  | max. 30 m |
| Ambient conditions |  |  |
| Ambient temperature |  | 0 ... $45{ }^{\circ} \mathrm{C}$ (273 ... 318 K ) |
| Storage temperature |  | -20 ... $60^{\circ} \mathrm{C}$ (253 ... 333 K ) |
| Mechanical specifications |  |  |
| Protection degree |  | IP54 |
| Connection |  | $3 \times \mathrm{M} 12 \times 1$ connector |
| Material |  |  |
| Housing |  | powder coated diecast zinc |
| Optical face |  | glass pane |
| Installation |  | $4 \times \mathrm{M6}$ threading |
| Mass |  | approx. 730 g |
| Dimensions |  |  |



## Accessories

V1S-G
Non pre-wired cable connector
V1SD-G-2M-PUR-ABG-V45X-G
Connection cable
V1SD-G-2M-PUR-ABG-V45-G
Connection cable
V19-G-ABG-PG9
Field attachable female cordset
V15-G-2M-PUR-V15-G
Connection cable
V19-G-2M-PUR-ABG
Cable socket, shielded

