$C\!\!\in$

Model Number

VOS412-BIS-60-WH-F119

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

Features

- Automatic learning of the reference image
- Automatic search for optimum image section
- Integrated error image memory
- Integrated illumination
- Reliable detection at object speeds up to 4 m/s

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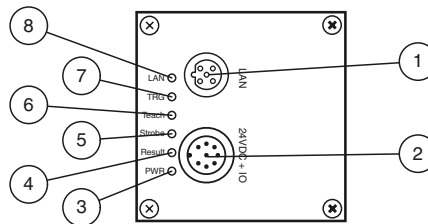
1	Socket LAN	
2	Plug 24VDC + IO	
3	Power	green
4	Result	green
5	Stobe	yellow
6	Teach	yellow
7	Trigger	yellow
8	LAN	yellow

Electrical connection

LAN

Pin	Signal
1	TX+ Ethernet
2	RX+ Ethernet
3	TX- Ethernet
4	RX- Ethernet

24 V DC + I/O
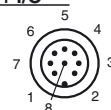
Pin	Signal
1	IN Encoder
2	+UB
3	OUT Result
4	OUT Strobe
5	IN Teach
6	IN TRG
7	GND
8	OUT Mode

Technical data

General specifications

Light type	Integrated LED lightning (white)
Object size	25 mm x 25 mm
Read distance	60 mm
Depth of focus	± 5 mm
Reading field	75 mm x 45 mm
Evaluation frequency	7 Hz
Target velocity	triggered ≤ 3 m/s

Indicators/operating means

Operating display	LED green: Ready for operation

Electrical specifications

Operating voltage	U_B	24 V DC ± 20 %
No-load supply current	I_0	max. 250 mA
Power consumption	P_0	6 W

Interface 1

Interface type	Ethernet
Protocol	TCP/IP
Transfer rate	100 MBit/s
Cable length	max. 30 m

Input

Input voltage	to be applied externally 24 V ± 15% PELV
Number/Type	2
Input current	approx. 3.5 mA at 24 V DC
Cable length	max. 30 m

Output

Number/Type	3 electronic outputs, PNP optically decoupled
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 °C (32 ... 113 °F)
Storage temperature	-20 ... 60 °C (-4 ... 140 °F)

Mechanical specifications

Protection degree	IP65
Connection	M12 connector, 8-pin , 4-pin M12 socket
Material	
Housing	powder coated diecast zinc
Optical face	glass pane
Installation	2 x Threading M5
Mass	approx. 730 g

Compliance with standards and directives

Standard conformity	
Standards	EN 61326-1

Dimensions
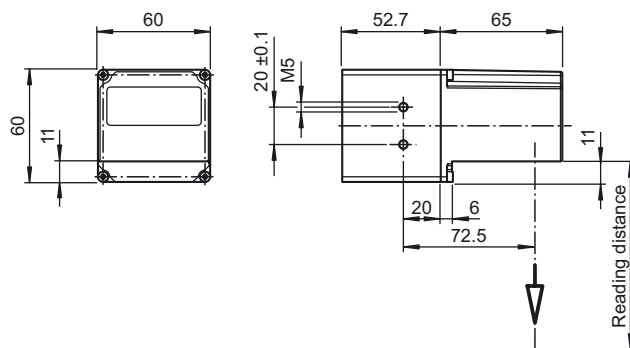
Accessories

V1S-G
Male cordset, M12, 4-pin, field attachable

V1SD-G-2M-PUR-ABG-V45X-G
Connection cable, M12 to RJ-45, PUR cable 4-pin, CAT5e

V1SD-G-2M-PUR-ABG-V45-G
Connection cable, M12 to RJ-45, PUR cable 4-pin, CAT5e

V19-G-ABG-PG9
Cable socket, M12, 8-pin, shielded, non pre-wired

V19-G-2M-PUR-ABG
Cable socket, M12, 8-pin, shielded, PUR cable

BIS-VISUALIZER
User-Interface "BIS Visualiser" for image display and basic parameters of the BIS devices

Other suitable accessories can be found at www.pepperl-fuchs.com