ELTROTEC Sensor GmbH
Heinkelstrasse 2
D-73066 Uhingen
Telefon: 07161 / 98872-300
Telefax: 07161 / 98872-303
Internet:www.Eltrotec.com
e-mail: Info@Eltrotec.com

Compact Vision Sensor

Series PAV 3000

- **Complete image processing**
- **Control of presence, form and edges**
- **Dot-Matrix-Code, OCR- / OCV-reading**

Basic features:

- 640x480 pixel
- Easy to use PC-programming with ELWin-BV software
- Stand-alone system
- RS232 / 115 kbaud
- 4 SPS outputs (24 VDC)
- 2 SPS inputs (24VDC)
- With C-/CS-Mount objective-adapter variable in observed surface and working distance, also with telecentrical lenses
- Flexible in usage, without integrated illumination
- Trigger and asynchronous flashing

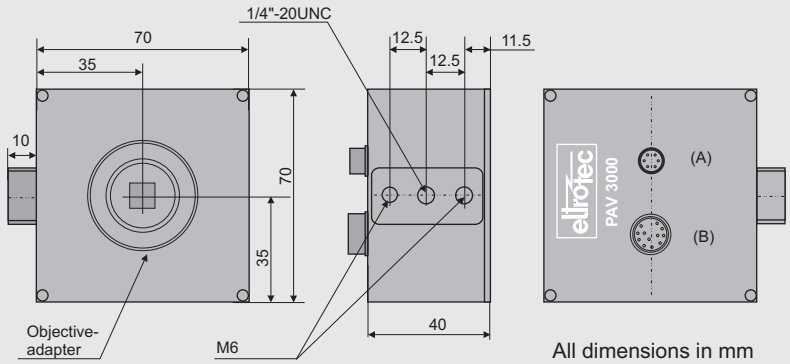
Typical applications:

- Check or measuring of form and contour
- Counting tasks and presence control
- Distinguishing different objects
- Reading of text and Dot Matrix Code E220
- Position and allocation monitoring

Functions:

- 15 diff. scanning processes
- Preliminary filter function into scanning process
- Search and detect of pattern
- Orientation control
- Counting functions
- Blob analysis, pixel evaluation, ...

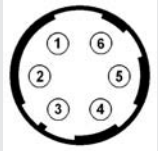
Dimensions



All dimensions in mm

Connections

RS232-plug (A)



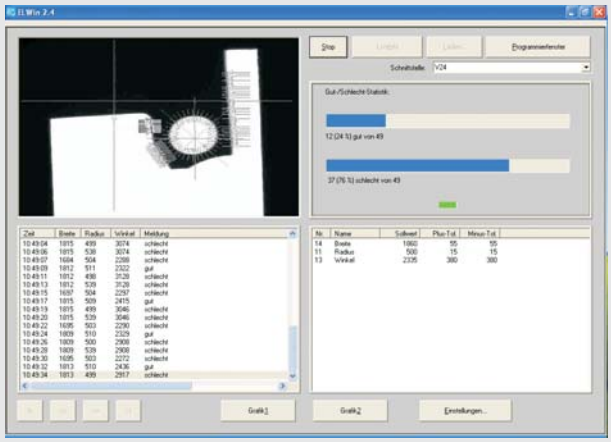
Pin	Signal
1	N.C.
2	V24 TxD
3	V24 GND
4	N.C.
5	N.C.
6	V24 RxD

Power/SPS-plug (B)

Frontside view

Pin	Colour	Signal
1	red	N.C.
2	red/blue	VCC (+) 24VDC
3	black	GND
4	pink	PLC Input (IN 1)
5	yellow	PLC Output (OUT3)
6	green	PLC Output (OUT2)
7	brown	PLC Output (OUT1)
8	white	PLC Output (OUT0)
9	grey/pink	N.C.
10	violet	N.C.
11	grey	N.C
12	blue	PLC Input 0 (IN 0)

Software*



* For using ELWin software, see user manual

Technical Data

Electrical Data	Supply voltage	24 VDC (9 - 30 VDC), ± 10% res. ripple
	Current consumption	max. 160 mA (~ 1,5W) without digital I/Os additionally max. 1600 mA (38W), (max 400 mA /output when using the digital I/Os) reverse voltage and short circuit protected
	EPROM	2 MB Flash-Eprom for programs and data
Camera	Effective pixel	640 (H) x 480 (V)
	Chip size	4.6 mm (H) x 3.97 mm (V), CCD chip
	Shutter	800 µs to 400 ms
	Picture grabbing	without delay, program controlled or external triggerd, Full-Frame
	Picture rate	25 fps (frames per second) at VGA resolution
	Display	JPEG transfer to host PC via serial interface (RS232)
In- / Outputs	Input	2, digital, 24 VDC - PNP/NPN
	Output	4, digital, max. 400 mA at 24 V / output thermical and overload protection from 0.5 to 2.0 A Hirose plug, DC IN, PLC, 12 pin
	Interface for Parametrisation and Data transfer	Standard RS232 (V.24), max. 115200 baud Hirose plug RS232. 6-pol. See User Manual PAV 3000
Data on ambience conditions	Opperating temperature	- 5 °C to + 45 °C, not condensing
	Protection	IP 54

Ordering information

Compact Vision Sensor PAV	Form, Presence Completeness	DOT Matrix Code OCR/OCV reading	**Our service:**
Parametrisation by user not available	**PAV 3000** Part No. 11012827	**PAV 3200** Part No. 11012831	• Machine integration • Complete solutions for 2D-measurements and code reading • Multiple Camera systems with up to 8 cameras on one evaluation unit • Objectives and lighting systems
Parametrisation by user possible incl. software	**PAV 3050** Part No. 11012828	**PAV 3250** Part No. 11012832	

PAV hardware can be delivered without software ELWIN (on request)
- User realizes programming by itself -

		Part No.
ELWIN Software	Parametrisation software incl. user manual for series PAV 3000 as single licence (is included in versions 3050, 3250)	11292837
RS cable A	Serial cable (is always needed for parametrisation with a PC/Notebook)	11292845
SPS cable B	SPS, Power cable (is always needed for power supply and SPS communication)	11292846
Service	Daily rate for installation, software adaptation and parametrisation on enquiry	19992230