OEM AUTOMATIC

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DATASENSING

DATASENSING VISION SENSOR
DATAVS2 AOR

DATAVS2-16DEAOR
Vision Sensor, 16mm lens, ADV Object recognition,
Red LED

- 360º pattern recognition
- 8 different controls
- Memory for up to 20 different inspections
- 4 outputs

PRODUCT DESCRIPTION

DataVS2 is a series of Vision sensors for flexible solutions for machine applications.
The sensor is complete with optics, red LED lighting and electronics in a compact housing. The parameters in the sensor are set via PC through Ethernet communication. The software comes with the sensor and is developed to lead the user step by step through parameter setting. DataVS2 is available in three different versions with different control instruments.
Advanced Object recognition AOR - Has a control instrument for 360º pattern recognition.
.Logic functions for that are connected between different control instruments and outputs such as: AND, OR, NOT, NAND, NOR etc.

TECHNICAL DATA

Digital interface	Ethernet 10/100 Mbs (4-pole M12 -connector)
Electrical connection	M12 4-pole D-coded, M12 8-pin connector
Frame rate	60
IP class	IP50
Lens material	ABS plastic
Material protection	Aluminium
Optics	16mm integrated lens
Output	4xPNP
Output current max	0.1 A
Power consumption max	0.1 A
Resolution	640x480 (VGA)
Temperature operational max	50 °C
Temperature operational min	-10 °C

Voltage dc max	24 V
Voltage dc min	24 V
Voltage tolerance	10%

The Advanced Object Recognition (AOR) models integrate new important functionalities, including:

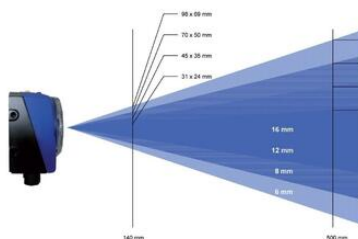**360° Pattern Match Locator**
Object detection independent from rototranslations.

Logical tools
Possibility to combine the results of the single tools through boolean operator (AND, OR, NOT, etc.)
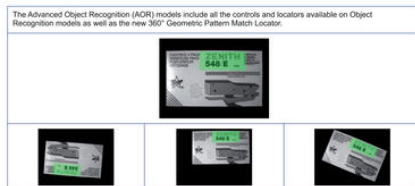
Advanced Ethernet
Current inspection results available also on Ethernet communication.

Speed-up
High execution speed thanks to the management of reduced resolution and TURBO mode.

360° Pattern match

The Advanced Object Recognition (AOR) models include all the controls and locators available on Object Recognition models as well as the new 360° Geometric Pattern Match Locator.

Step 1: Image Setup
The first step consists in connecting the sensor and configuring the image-quality parameters. When the desired results are obtained, the user can memorise the image that will be used as a template during sensor functioning.

Step 2: Teach
The second step establishes the acceptance criteria to distinguish objects from wastes. One or more controls can be selected according to the task to carry-out.

Step 3: Run
The third step configures the sensor digital outputs, simulates sensor functioning on the PC to verify the controls chosen and activates the operating phase on the sensor using the PC only to control the diagnostics.
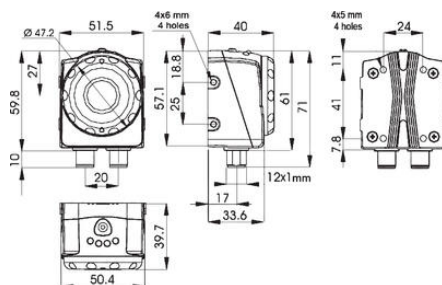
M12 4-pole Ethernet

PIN 1 = white/orange = RX+
PIN 2 = white/green = TX+
PIN 3 = orange = RX-
PIN 4 = green = TX-

M12 8-pole (power supply and I/O)

PIN 1 = white = digital input 1
PIN 2 = brown = 24 Vdc
PIN 3 = green = STROBE for external illuminator
PIN 4 = yellow = output 1
PIN 5 = grey = output 2
PIN 6 = pink = output 3
PIN 7 = blue = GND
PIN 8 = red = external trigger

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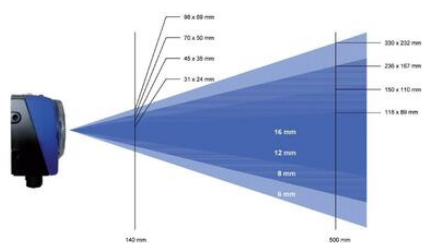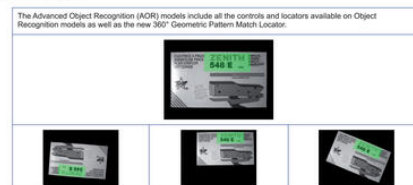
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Ø 47.2   51.5   4x6 mm
4 holes   40   4x5 mm
4 holes   24

27   59.8   18.8   57.1   25   61   71   11   41   7.8

10   20   12x1mm

17   33.6

39.7

50.4