

DATASENSING VISION SENSOR DATAVS2 AOR

DATAVS2-06DEAOR

Vision Sensor, 6mm lens, ADV Object recognition, Red LED

- 360° 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 360° 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 | 6mm 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 robotranslations.



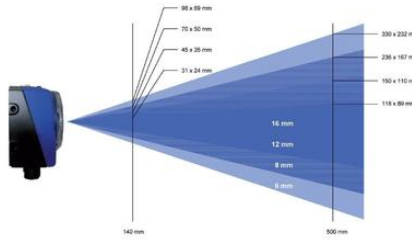
Logical tools
Possibility to combine the results of the single tools through logical operator (AND, OR, NOT, etc.)



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



- 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 contours 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 = gray = output 2
PIN 6 = pink = output 3
PIN 7 = blue = GND
PIN 8 = red = external trigger

