# DATALOGIC - VISION SENSOR DATAVS2 OBJ

DATAVS2-08DEOBJ
Vision Sensor, 8mm lens, Object recognition, Red LED


- 7 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 four different versions with different control instruments.
Object Recognition OBJ - Is the base model and compares parts against a basic image. It has 7 different control instruments to work with.

## Technical data

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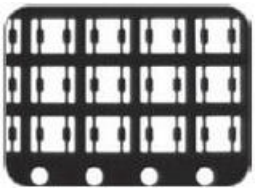
|---|---|
| **Supply voltage** | 24 V DC ±10 % |
| **Ripple** | 1Vpp max. with lighting<br>2Vpp without lighting |
| **Current consumption** | 100 mA at 24 VDC (without lighting) |
| **Output type** | 4 PNP |
| **Output current** | 100 mA max. |
| **Resolution** | 640x480 (VGA) |
| **Network interface** | M12 4-pole Ethernet 10/100 Mbs |
| **Interface external lighting** | Strobe signal (24 V PNP N.O) |
| **Frame rate** | 60 fps |
| **optics** | integrated (6 mm/8 mm/12 mm/16 mm) |

| | |
|---|---|
| **Indication** | 4 LED |
| **Connection** | M12 8-pole A-coded<br>M12 4-pole D-coded |
| **IP-class** | IP50 |
| **Encapsulation material** | Aluminium alloy/ABS |
| **Weight** | 125 g |
| **Working temperature** | -10 to +50 °C |
| **Storage temperature** | -25 to +70 °C |

## Control instruments

**Object recognition**

**Seven different controls cover most applications**

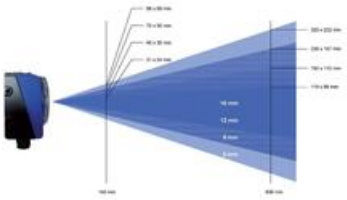
| Control | Function | Applications | Image |
|---|---|---|---|
| **Pattern Match** | Search for a sample within a specified range | • Packaging: check of logo<br>• Installation: product-orientation<br>• Automation of post: stamp control |  |
| **Contour Match** | Control of form | • Metal working: integrity check<br>• Foodstuffs: control of form |  |
| **Position** | Control of limit position of the object | • Bottling: level control<br>• Foodstuffs: control of label position |  |
| **Width** | Measures the object's width | • Installation: control of plastic parts<br>• Woodworking industry: measurement of branch thickness |  |
| **Counting** | Counts number of objects along a line | • Electronics: counting components<br>• Pharmaceutical industry: Counting units |  |

| | | | |
|---|---|---|---|
| **Contrast** | Calculation of contrast | • Foodstuffs: checking presence of date and consignment label<br>• Metal working: Check of laser marking |  |
| **Brightness** | Calculation of luminance | • Bottling: checking presence of cap<br>• Packaging: counting objects |  |

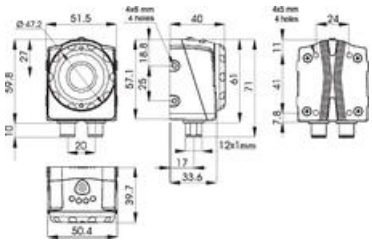
## Read field

**Read field**

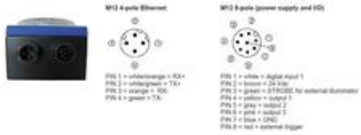
| **Working distance (mm)** | **Read field (Width x Height) in mm** | | | |
|---|---|---|---|---|
| | **DATAVS2-16-DE-xxx** | **DATAVS2-12-DE-xxx** | **DATAVS2-08-DE-xxx** | **DATAVS2-06-DE-xxx** |
| **50** | - | 17 x 12 | 25 x 20 | 42 x 30 |
| **80** | - | 25 x 20 | 40 x 30 | 60 x 41 |
| **110** | - | 33 x 25 | 55 x 40 | 80 x 55 |
| **140** | 31 x 24 | 45 x 35 | 70 x 50 | 98 x 69 |
| **170** | 39 x 29 | 53 x 38 | 85 x 60 | 118 x 83 |
| **200** | 46 x 34 | 60 x 50 | 100 x 70 | 138 x 92 |
| **300** | 70 x 53 | 90 x 65 | 145 x 103 | 201 x 140 |
| **400** | 94 x 71 | 121 x 82 | 186 x 132 | 265 x 189 |
| **500** | 118 x 89 | 150 x 110 | 236 x 167 | 330 x 232 |
| **600** | 143 x 107 | 185 x 130 | 282 x 232 | 385 x 270 |



## Dimensions



## Connection



## Order number

| Order number | Description | Output |
|---|---|---|
| DATAVS2-06DEOBJ | 6 mm lens, OBJ | 4 outputs |
| DATAVS2-08DEOBJ | 8 mm lens, OBJ | 4 outputs |
| DATAVS2-12DEOBJ | 12 mm lens, OBJ | 4 outputs |
| DATAVS2-16DEOBJ | 16 mm lens, OBJ | 4 outputs |
| DATAVSCVRJ45D03 | Ethernet cable 3m | |

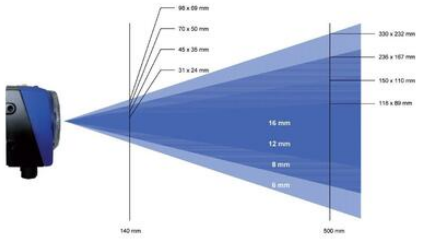
## Download

| | |
|---|---|
| **Data sheet** | Download |
| **Manual** | Download |

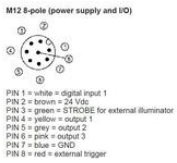
Specifications

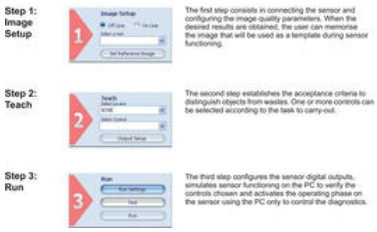
| | |
|---|---|
| **Electrical connection** | M12 4-pole D-coded, M12 8-pin connector |
| **Frame Rate** | 60 |
| **Interface** | Ethernet 10/100 Mbs (4-pole M12 -connector) |
| **IP Class** | IP50 |
| **Lens material** | ABS plastic |
| **Material Protection** | Aluminium |
| **Optics** | 8mm integrated lens |

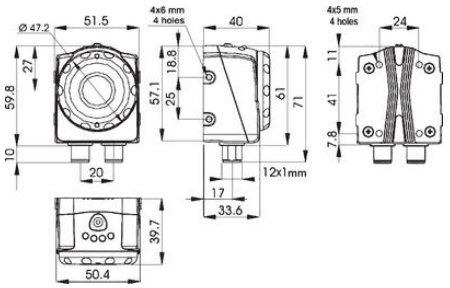
| | |
|---|---|
| **Output** | 4xPNP |
| **Output current max** | 0.1 |
| **Power consumption max** | 0.1 |
| **Resolution** | 640x480 (VGA) |
| **Temperature range from** | -10 |
| **Temperature range to** | 50 |
| **Voltage DC max** | 24 |
| **Voltage DC min** | 24 |
| **Voltage Tolerance** | 10% |

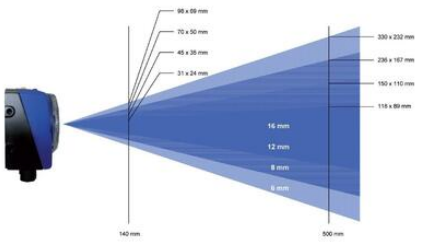


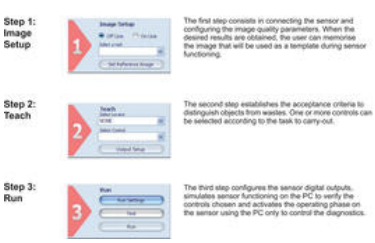


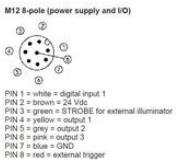



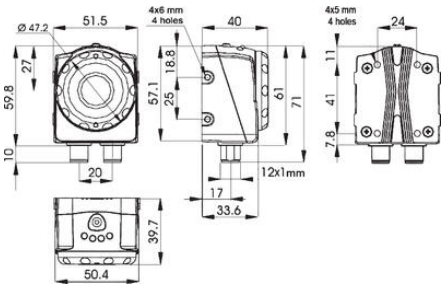









Ø 47.2
51.5
4x6 mm
4 holes
40
4x5 mm
4 holes
24
27
59.8
10
20
18.8
57.1
25
61
71
11
41
7.8
12x1 mm
17
33.6
39.7
50.4