DATALOGIC - VISION SENSOR DATAVS2 OBJ

DATAVS2-16DEOBJ
Vision Sensor, 16mm 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.
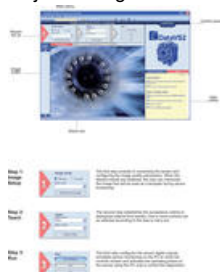
Technical data
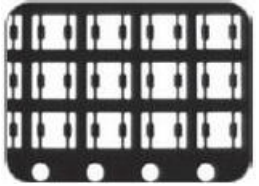
Supply voltage	24 V DC ±10 %
Ripple	1Vpp max. with lighting 2Vpp without lighting
Current consumption	100 mA at 24 VDC (without lighting)
Output type	4 PNP
Output current	100 mA max.
Resolution	640x480 (VGA)
Network interface	M12 4-pole Ethernet 10/100 Mbs
Interface external lighting	Strobe signal (24 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 M12 4-pole D-coded
IP-class	IP50
Encapsulation material	Aluminium alloy/ABS
Weight	125 g
Working temperature	-10 to +50 ºC
Storage temperature	-25 to +70 ºC

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 • Installation: product-orientation • Automation of post: stamp control	
Contour Match	Control of form	• Metal working: integrity check • Foodstuffs: control of form	
Position	Control of limit position of the object	• Bottling: level control • Foodstuffs: control of label position	
Width	Measures the object's width	• Installation: control of plastic parts • Woodworking industry: measurement of branch thickness	
Counting	Counts number of objects along a line	• Electronics: counting components • Pharmaceutical industry: Counting units	

| Contrast	Calculation of contrast	• Foodstuffs: checking presence of date and consignment label • Metal working: Check of laser marking	
Brightness	Calculation of luminance	• Bottling: checking presence of cap • 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
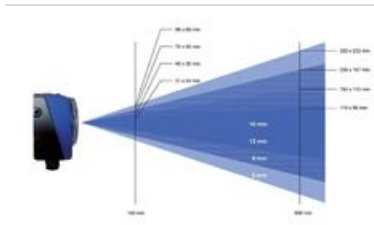
Dimensions
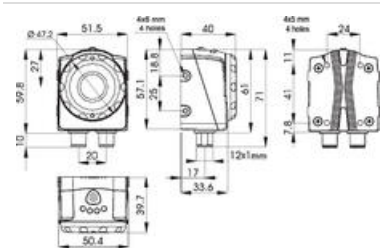
Connection
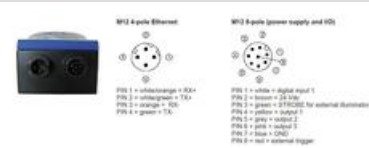
Order number

| 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	16mm integrated lens

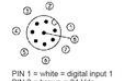|	
Output	4xPNP
Output current max	0.1
Power consumption max	0.1
Resolution	640x480 (VGA)
Temperature range from	-10
Temperature range to	50
Type	object detection
Type of lens	16mm
Voltage DC max	24
Voltage DC min	24
Voltage Tolerance	10%
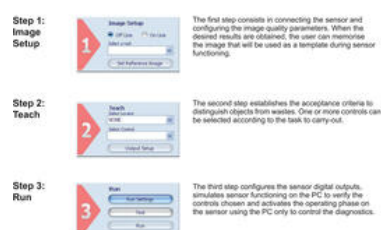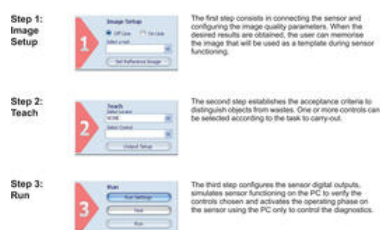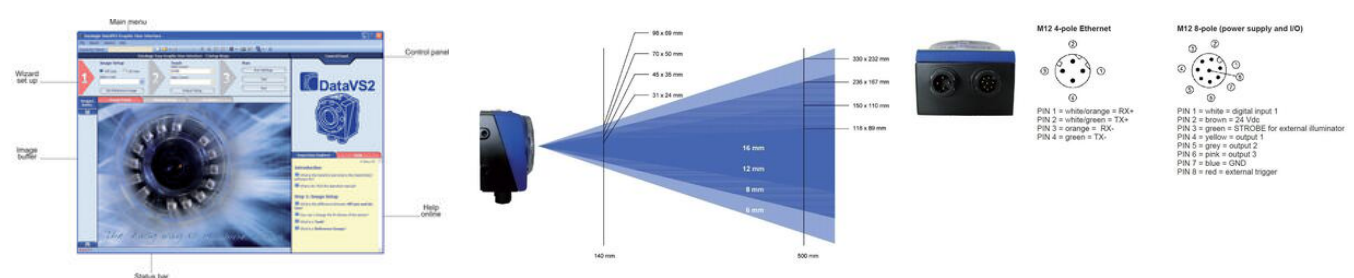
M12 4-pole Ethernet

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

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

27   18.8   57.1   25   61   71   11   41

59.8   10   20   17   33.6   12x1mm   7.8

39.7   50.4