

CZUJNIK WIZYJNY DATAVS2 AOR

DATAVS2-06DEAOR

Czujnik wizyjny, 6mm obiektyw, AOR, Czerwone LED

- Dopasowanie wzorca w obrębie 360°
- 8 różnych typów kontroli
- Pamięć na 20 inspekcji
- Funkcje logiczne, 4 wyjścia



OPIS PRODUKTU

DataVS2 firmy Datalogic to seria czujników wizyjnych przeznaczonych do zastosowania w aplikacjach maszynowych. Czujniki wyposażone w optykę, diodę LED i elektronikę są zamknięte w kompaktowej obudowie. Parametry pomiaru są ustawiane za pomocą komputera poprzez złącze Ethernet. Oprogramowanie jest dołączone wraz z sensorem a proces ustawiania parametrów jest prosty i intuicyjny. Seria DataVS2 jest dostępna w 4 różnych wersjach z różnymi typami kontroli.

Zawansowany system rozpoznania obiektu AOR - Posiada typ kontroli rozpoznania obiektu w 360°.

Funkcje logiczne łączące różne typy kontroli i wyjścia takie jak: AND, OR, NOT, NAND, NOR itp..



DANE TECHNICZNE



| | |
|-----------------------------------|---|
| Napięcie zasilania | 24 V DC $\pm 10\%$ |
| Tętnienia | 1Vpp maks. z iluminatorem 2Vpp bez iluminatora |
| Pobór prądu | 100 mA at 24 VDC (bez iluminatora) |
| Wyjście | 4 PNP |
| Prąd wyjściowy | 100 mA maks. |
| Rozdzielczość | 640x480 (VGA) |
| Interfejs sieciowy | Złącze M12 4-pinowe Ethernet 10/100 Mbs |
| Interfejs zewnętrzny iluminatora | Sygnal strobulujący(24 V PNP N.O) |
| Częstotliwość wyświetlania klatek | 60 fps |
| Obiektyw | Zintegrowany (6 mm/8 mm/12 mm/16 mm) |

| | |
|-----------------------------------|--|
| Wskazanie | 4 LED |
| Połączenie | Złącze M12 8-pinowe A-kodowane Złącze M12 4-pinowe D-kodowane |
| Stopień ochrony | IP50 |
| Materiał obudowy | Stop aluminium/ABS |
| Masa | 125 g |
| Temperatura pracy | od -10 do +50 °C |
| Temperatura przechowywania | od -25 do +70 °C |

TYPY KONTROLI



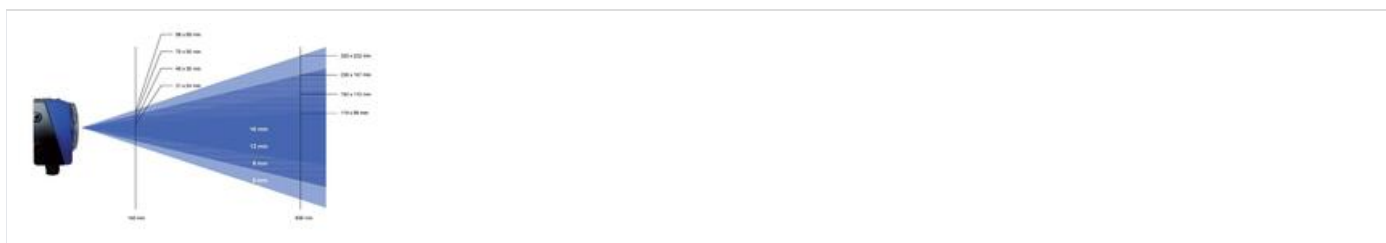
| Control | Function | Applications | Image |
|----------------------|--|--|-------|
| Pattern Match | Search for a sample within a specified range | <ul style="list-style-type: none"> • Packaging: check of logo • Installation: product-orientation • Automation of post: stamp control | |
| Contour Match | Control of form | <ul style="list-style-type: none"> • Metal working: integrity check • Foodstuffs: control of form | |
| Position | Control of limit position of the object | <ul style="list-style-type: none"> • Bottling: level control • Foodstuffs: control of label position | |
| Width | Measures the object's width | <ul style="list-style-type: none"> • Installation: control of plastic parts • Woodworking industry: measurement of branch thickness | |
| Counting | Counts number of objects along a line | <ul style="list-style-type: none"> • Electronics: counting components • Pharmaceutical industry: Counting units | |

| | | | |
|-------------------|--------------------------|--|---|
| Contrast | Calculation of contrast | <ul style="list-style-type: none"> • Foodstuffs: checking presence of date and consignment label • Metal working: Check of laser marking |  |
| Brightness | Calculation of luminance | <ul style="list-style-type: none"> • Bottling: checking presence of cap • Packaging: counting objects |  |

ZAKRES POMIAROWY

Obszar pomiaru

| Odległość (mm) | Obszar pomiaru (Szerokość x Wysokość) w 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 |



WYMIARY

| | |
|--------------------------------|--|
| Min. temperatura pracy | -10 °C |
| Pobór mocy (max) | 0,1 A |
| Podłączenie elektryczne | Złącze M12 4-pinowe kodowanie D, Złącze M12 8-pinowe |
| Prąd wyjściowy max. | 0,1 A |
| Stopień ochrony IP | IP50 |
| Tolerancja napięcia | 10% |
| Wyjście | 4x PNP |

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



360° Pattern Match Locator
Object detection independent from rotations.



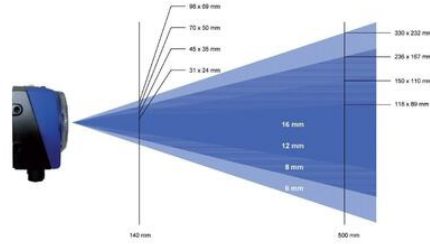
Logical tools
Possibility to combine the results of the single tools through boolean operator (AND, OR, NOT, etc.)



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 memorize 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.

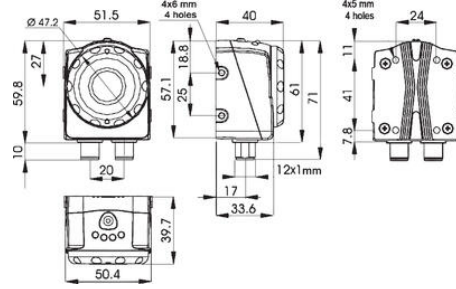


M12 4-pole Ethernet

- 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



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



360° Pattern Match Locator
Object detection independent from rotations.



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



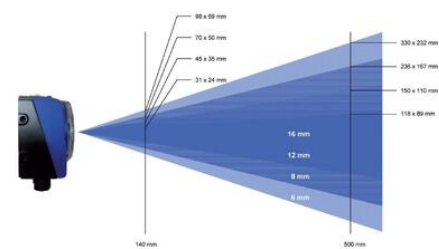
Advanced Ethernet
Current inspection results available also on Ethernet communication.



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 actualises the operating phase on the sensor using the PC only to control the diagnostics.

