


VISOR® V10 Object AI, Advanced, medium field of view

Vision sensor for object detection, presence and completeness checking, Position control and measurement tasks with robust AI technology for easy set-up



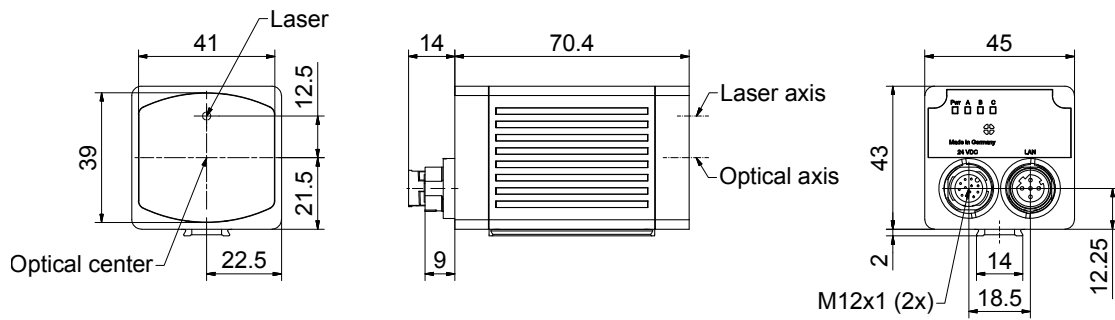
PRODUCT HIGHLIGHTS

- All function of the VISOR® Object Advanced
- "Classification (AI)" detector for user-friendly, robust classification and inspection tasks

| Optical data | | Functions | |
|--|---|--|--|
| Resolution | 800 x 600 pixels | Number of jobs / detectors | Max. 255 / max. 255 |
| Imaging chip CMOS | 1/3.6", monochrome / color | Detectors | Position tracking: X/Y and orientation; |
| Integrated lens, focal length [mm] | 9.6 (medium) | | Pattern matching, contour: teach-in and detection of patterns and contours; |
| Pixel size | 4.8 µm x 4.8 µm | | Calliper: distance between edges; |
| Focus | Motorized | | BLOB, grey threshold, brightness: evaluation of brightness; |
| Adjustment range | 12 mm to infinity | | Contrast: evaluation of contrast; |
| Integrated illumination | White (5000 K), red (635 nm) ¹ , infrared (850 nm) ¹ LEDs | | Color value ² : output of color values; |
| Minimum field of view, X x Y | 7 mm x 3 mm | | Color area ² : area inspection of colors, with selectable tolerance; |
| Target laser | Laser: red (635 nm) class 1  (IEC 60825-1) | | Color list ² : finding the most similar colors; |
| | | | Result processing: |
| | | | - Math: checking and calculating with results from detectors |
| | | - Classification (AI): classification of objects with AI technology | |
| Electrical data | | Mechanical data | |
| Operating voltage, +U _B | 18 ... 30 DC ³ | Dimensions | 70.4 mm x 45 mm x 45 mm (without plug) |
| Current consumption (without I/O) | ≤ 300 mA | Enclosure rating | IP 67 & IP 65 |
| Protective circuits | Reverse-polarity protection, U _B / short-circuit protection of all outputs | Material, housing | Aluminium, die-cast, RoHS compliant |
| Power On Delay | Approx. 13 s after Power on | Material, front screen | Plastic |
| Outputs | PNP/NPN (switchable) | Ambient temperature: operation | 0 ... +50 °C ⁴ |
| Max. output current (per output) | 50 mA, 100 mA (pin 12) | Ambient temperature: storage | -20 ... +60 °C ⁴ |
| Switching threshold inputs incl. encoder | PNP/NPN High > U _B -1V / Low < 3V | Weight | Approx. 200 g |
| Input resistance | > 20 kΩ | Plug connections | Supply and I/O M12, 12-pin, Ethernet M12, 4-pin |
| Interfaces | Ethernet (LAN), EtherNet/IP, PROFINET, SensoWeb, Service Port | Vibration resistance | EN 60068-2-6 |
| Inputs/outputs | 2 inputs, 2 outputs, 6 selectable inputs/outputs | Shock resistance | EN 60068-2-27 |
| Encoder | ✓ | | |

¹ Not color hardware ² Color hardware ³ Max. ripple < 5V_{SS} ⁴ 80 % air humidity, noncondensing

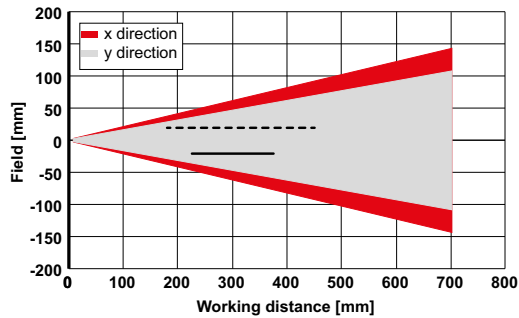
VISOR® vision sensor



153-13554

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Field of view V10, medium



155-03100

----- Increased depth of field
 _____ Normal depth of field

| Illumination | Part number | Article number | Accessories |
|--------------|----------------------|----------------|--|
| White | V10-OAI-A3-W-M-M2-L | 631-91147 | Connection cables Illumination Brackets Interface accessories www.sensopart.com/en/accessories |
| Red | V10-OAI-A3-R-M-M2-L | 631-91145 | |
| Infrared | V10-OAI-A3-I-M-M2-L | 631-91152 | |
| White | V10C-OAI-A3-W-M-M2-L | 631-91156 | |