


VISOR® V20 Allround Professional, wide field of view

Combines VISOR® Object Color, Code Reader and Robotic

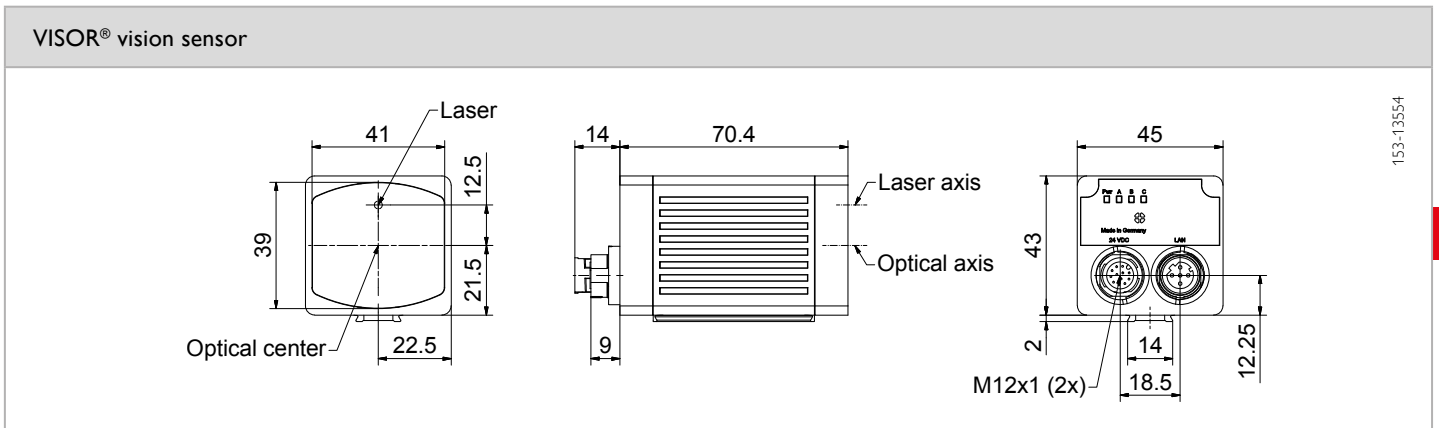


PRODUCT HIGHLIGHTS

- All evaluations ("Detectors") of object sensor and code reader united in one device
- Highly accurate evaluation via 5 megapixel chip
- Real-world engineering units and robot coordinates at a mouse click
- Precise position determination: X/Y-position and orientation
- Detection of differences in height in the pseudo height image with multishot technology
- User-friendly configuration and viewer software with graded user rights and online help

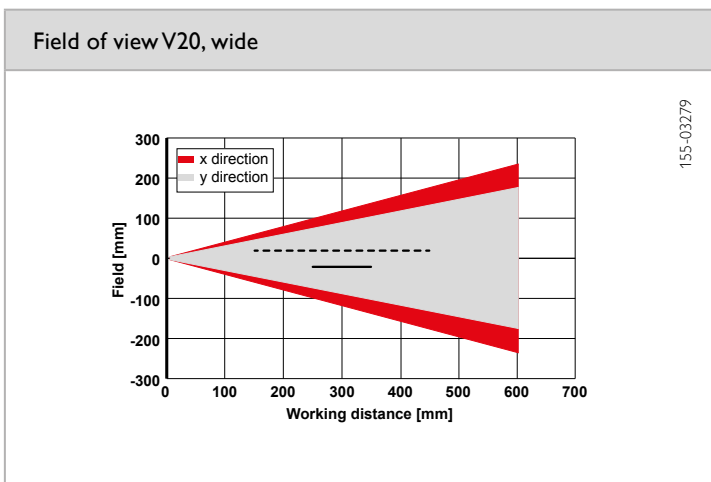
| Optical data | | Functions | |
|--|---|--------------------------------|---|
| Resolution | 1440 x 1080 pixels | Number of jobs / detectors | max. 255 / max. 255 |
| Imaging chip CMOS | 1/2.9", monochrome / color | Detectors | Position tracking; X/Y and orientation; Pattern matching, contour, 3D contour : teach-in and detection of patterns and contours; Calliper : distance between edges; BLOB, grey threshold, brightness : evaluation of brightness; Contrast : evaluation of contrast; Color value ² : output of color values; Color field ² : area inspection of colors, with selectable tolerance; Color list ² : finding the most similar colors; Barcode : reading 1D bar codes, EAN, UPC, RSS, 2/5 Interleaved, 2/5 Industrial, code 32, code 39, code 93, code 128, GS1, pharm code, codabar; Datacode : reading 2D codes: ECC200, QR code, GS1, PDF 417; OCR : reading of fonts; Result processing: Text, Math : checking and calculating with results from detectors |
| Integrated lens, focal length [mm] | 6.5 (wide) | | |
| Pixel size | 3.45 µm x 3.45 µm | | |
| Focus | Motorized | | |
| Adjustment range | 10 mm to infinity | | |
| Integrated illumination | White (5000 K), red (635 nm) ¹ , infrared (850 nm) ¹ LEDs | | |
| Minimum field of view, X x Y | 6 x 4 mm | | |
| Target laser | Laser: red (635 nm) class 1  (IEC 60825-1) | | |
| | | | |
| Electrical data | | Mechanical data | |
| Operating voltage, +U _B | 18 ... 30 DC ³ | Dimensions | 70.4 x 45 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 -1 V, Low < 3 V | 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



153-13554

3



155-03279

- Increased depth of field
- Normal depth of field



155-02565

| Illumination | Part number | Article number |
|--------------|----------------------|----------------|
| White | LM 100 WWK-24Q4-2L12 | 532-51096 |
| Red | LM 100 RWK-24Q4-2L12 | 532-51097 |
| - | LM 100 W DF | 532-51098 |

| Illumination | Part number | Article number | Accessories | |
|--------------|----------------------|----------------|-----------------------|----------------|
| White | V20-ALL-P3-W-W-M2-L | 632-91012 | Connection cables | From Page A-38 |
| Red | V20-ALL-P3-R-W-M2-L | 632-91010 | Illumination | From Page A-27 |
| Infrared | V20-ALL-P3-I-W-M2-L | 632-91007 | Brackets | From Page A-4 |
| White | V20C-ALL-P3-W-W-M2-L | 632-91016 | Interface accessories | From Page A-38 |