


VISOR® V20 Allround Professional, medium field of view

Combines VISOR® Object Color, Code Reader and Robotic

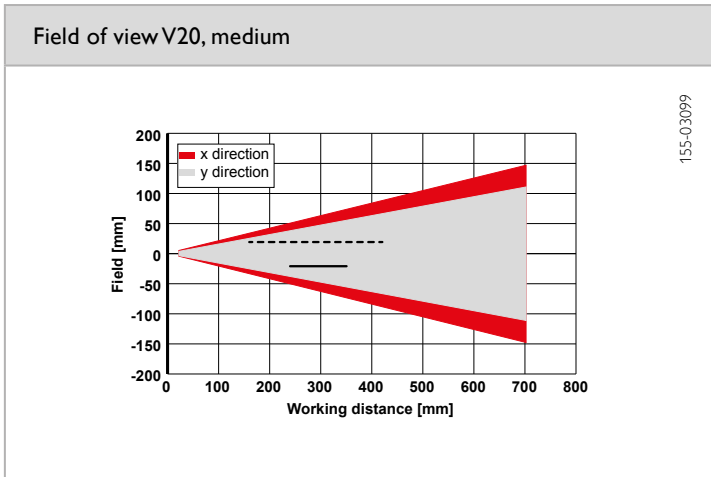
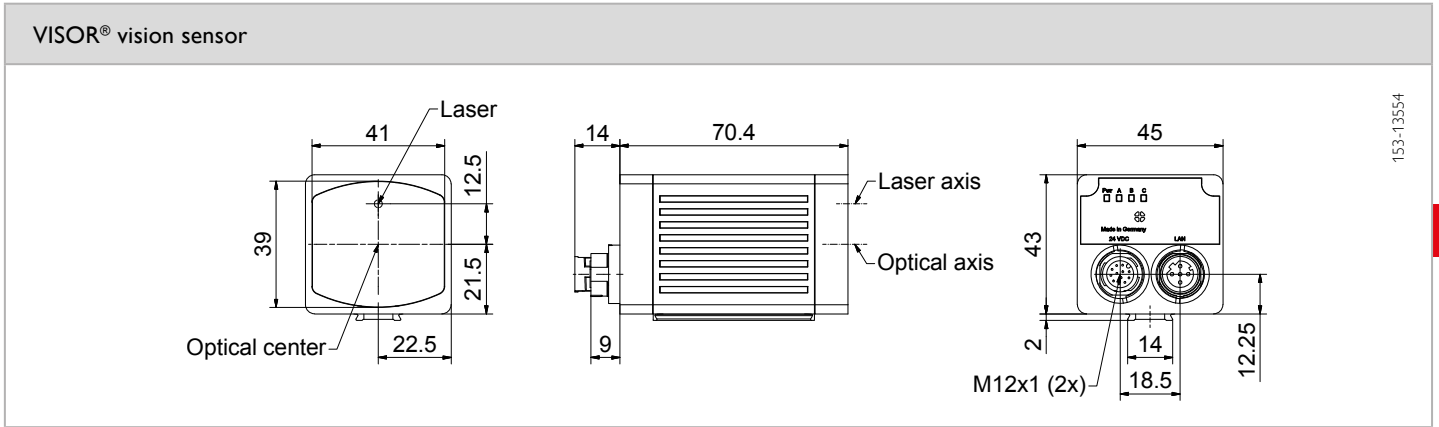


PRODUCT HIGHLIGHTS

- 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]	12 (medium)		
Pixel size	3.45 µm x 3.45 µm		
Focus	Motorized		
Adjustment range	25 mm to infinity		
Integrated illumination	White (5000 K), red (635 nm) ¹ , infrared (850 nm) ¹ LEDs		
Minimum field of view, X x Y	10 x 8 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



----- Increased depth of field
 ——— Normal depth of field



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-M-M2-L	632-91000	Connection cables
Red	V20-ALL-P3-R-M-M2-L	632-91008	Illumination
Infrared	V20-ALL-P3-I-M-M2-L	632-91005	Brackets
White	V20C-ALL-P3-W-M-M2-L	632-91014	Interface accessories