

# VISOR® V20 Allround Color

Advanced vision sensor for complex inspection tasks, C-mount

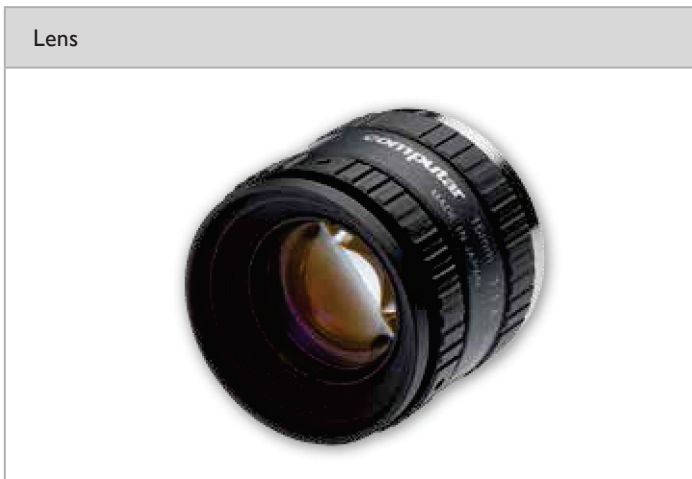
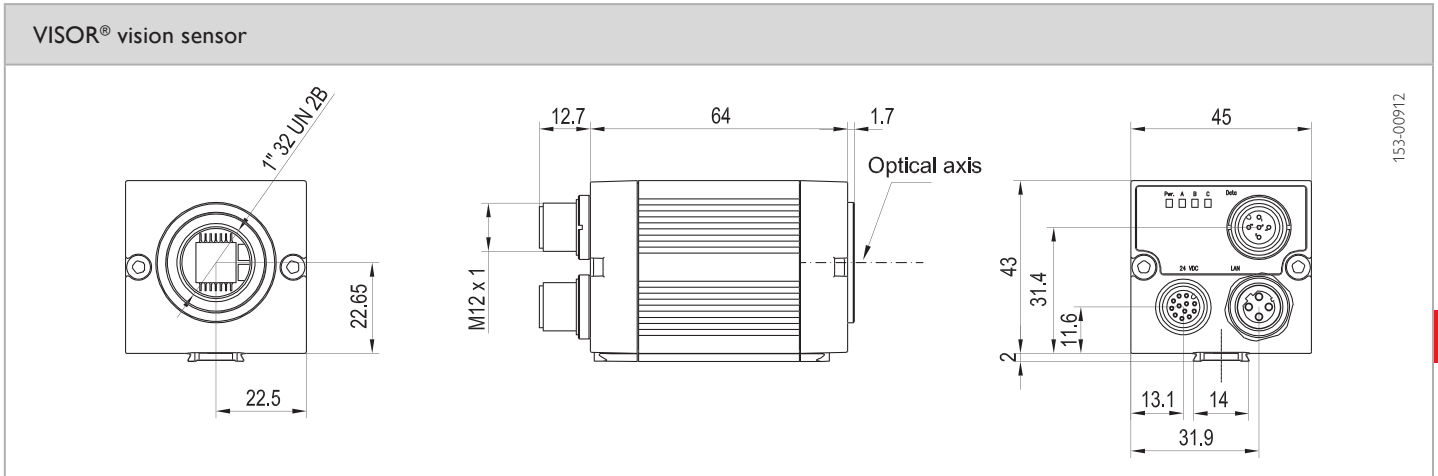


## PRODUCT HIGHLIGHTS

- All evaluations ("Detectors") of object sensor and code reader united in one device
- Highly accurate evaluation via 1.3 mega-pixel colour chip
- Real-world engineering units and robot coordinates at a mouse click
- Precise position determination: X/Y-position and orientation
- Can be used for all common 2D-Codes (ECC 200-Data-matrix) and common 1D-bar codes
- User-friendly configuration and viewer software with graded user rights and online help

Optical data		Functions	
Resolution	1280 x 1024 pixels	Number of jobs / detectors	max. 255 / max. 255
CMOS	1/1.8"; colour	Detectors	Contour; pattern comparison, calliper; BLOB, contrast, brightness, grey level, data code, bar code, OCR, colour list, colour area, colour value
Integrated lens, focal length	C-Mount	Properties	Position tracking: X/Y and orientation; pattern comparison / contour: teach-in and detection of patterns and contours; calliper: distance between edges; BLOB; grey threshold, brightness: evaluation of brightness; contrast: evaluation of contrast; colour value: output of colour values; colour area: two-dimensional colour inspection with adjustable tolerance; colour list: detecting the most similar colours; bar code: 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; data code: reading 2D codes: ECC200, QR code, PDF 417; OCR
Adjustment range	Dependent on lens	Typical cycle times <sup>2</sup>	Typ. 20 ms pattern comparison; typ. 30 ms contour; typ. 8 ms calliper; typ. 30 ms BLOB; typ. 2 ms brightness; typ. 2 ms contrast; typ. 2 ms grey threshold; typ. 2 ms colour value; typ. 30 ms colour area; typ. 2 ms colour list; typ. 30 ms bar code; typ. 40 ms data code; typ. 15 ms per character OCR
Integrated illumination	None		
Minimum field of view, X x Y	Dependent on lens		
Electrical data		Mechanical data	
Operating voltage, +U <sub>B</sub>	18 ... 26.4 V DC <sup>1</sup>	Dimensions	65 x 45 x 45 mm (without plug)
Current consumption (without illumination and I/O)	≤ 120 mA	Enclosure rating	IP 65 <sup>3</sup>
Current consumption (without I/O)	≤ 200 mA	Material, housing	Aluminium, plastic
Protective circuits	Reverse-polarity protection, U <sub>B</sub> / short-circuit protection of all outputs	Material, front screen	Plastic
Power On Delay	Ca. 13 s after Power on	Ambient temperature: operation	0 ... +50 °C <sup>4</sup>
Outputs	PNP / NPN (switchable)	Ambient temperature: storage	-20 ... +60 °C <sup>4</sup>
Max. output current (per output)	50 mA, 100 mA (pin 12)	Weight	Ca. 160 g
Inputs	PNP/NPN High > U <sub>B</sub> -1 V, Low < 3 V	Plug connections	Supply and I/O M12, 12-pin Ethernet M12, 4-pin Data M12, 5-pin
Input resistance	> 20 kOhm	Vibration and impact resistance	EN 60947-5-2
Encoder input	High > 4 V		
Interfaces	Ethernet (LAN), RS422, RS232, EtherNet/IP, PROFINET, SensoWeb		
Inputs/outputs	2 inputs, 4 outputs, 4 selectable inputs/outputs		

<sup>1</sup> Max. ripple < 5V<sub>SS</sub>    <sup>2</sup> With VGA-resolution (640 x 480 Pixel)    <sup>3</sup> With LPT45 C-mount protective casing    <sup>4</sup> 80 % air humidity, non-condensing



	LO C 8	LO C 12	LO C 16	LO C 25	LO C 35	LO C 50	LO C 75
<b>Focal length</b>	8 mm	12 mm	16 mm	25 mm	35 mm	50 mm	75 mm
<b>Article number</b>	526-51513	526-51514	526-51515	526-51516	526-51525	526-51113	526-51116

Part number	Article number
V20C-ALL -A2-C	536-91037

Accessories	
Connection cables	From Page A-38
Illumination	From Page A-30
Lenses	From Page A-27
Brackets	From Page A-14
Interface accessories	From Page A-42