

Overview

- Universal Robots+ Certified (UR+) for UR3e, UR5e, UR10e, UR16e
- PROFINET and EtherNet/IP interface integrated
- FEX image processor
- FEXLoc 360° part location
- Flexible result conjunction
- VeriFlash flash controller integrated
- VeriSens XC Tube included in delivery
- Download VeriSens Application Suite: www.baumer.com/vs-sw



Picture similar



Technical data

General data

Resolution	640 × 480 px
Sensor type	1/4" CCD, monochrome
Illumination	external, available as accessory
Illumination connection	direct (integrated VeriFlash® flash controller)
High-resolution mode	max. 118 inspections per second
High-speed mode (limited resolution)	max. 144 inspections per second
Number of jobs (products)	≤ 255
Features per job	32
Signal processing	Baumer FEX® 4.0
Defect image memory	32
Lens	C-mount

Electrical data

Nominal voltage power supply	24 V ±25 %
Nominal voltage power supply (add-on)	Class 2 according to NEC / protection class III
Nominal voltage power supply (info)	The device is intended for supply from an isolated limited power source according to UL61010-1, 3rd ed cl. 9.4 or a limited energy source according to UL60950-1 or Class 2 according to NEC.
Power consumption	Max. 42 W (with I/O and lighting)
Inputs	8 ... 30 V (polarity protected)

Electrical data

Digital inputs	5 inputs trigger job selection external teach-in encoders (CH-A, CH-B) 500 kHz
Outputs	PNP $I_{peak} = 100 \text{ mA}$ and $I_{eff} = 50 \text{ mA}$ (short-circuit proof)
Digital outputs	5 outputs Pass / Fail Flash Sync Alarm Camera Ready Output Enable
Initial setup	Ethernet (10BASE-T / 100BASE-TX)
Process interface	PROFINET (CC-A) EtherNet/IP™ TCP/UDP (Ethernet) Universal Robot Mode
Visualization	configurable web interface with <i>Mul-tiViewer</i> function

Mechanical data

Width	53 mm (without lens/tube)
Height	99.5 mm (without lens/tube)
Depth	49.8 mm (without lens/tube)
Weight	≤ 300 g (without lens/tube)
Material	housing: aluminum cover glass XC tube: PMMA

Technical data

Environmental conditions

Operating temperature	+5 ... +55 °C @ T = measurement point
Storage temperature	-20 ... +70 °C
Humidity	0 ... 90 % (non-condensing)
Protection class	IP 67 (with tube)
Vibration load	IEC 60068-2-6 IEC 60068-2-64

Mechanical shock resistance

EN 60068-2-27

Code types

Barcode	2/5 Industrial
	2/5 Interleaved
	Codabar
	Code 39
	Code 93
	Code 128
	PharmaCode
	EAN 8
	EAN 13
	UPC-A
	UPC-E
	GS1 DataBar
	GS1 128
Matrix code	DataMatrix (ECC 200)
	GS1-DataMatrix
	QR-Code
	PDF417
Font	many font styles (recommended: sans serif, proportional)
	Dot Matrix
	characters: A-Z a-z 0-9 + - . : / ()

Feature checks

Part location	part location on contours part location on edges part location on circle part location on text line
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Feature checks

Geometry	Distance circle angle count edges point position edge characteristics
Feature comparison	count contour points contour comparison brightness contrast area size count areas pattern comparison find object positions
Identification	Barcode Matrix code text

Integrated flash controller

Voltage	12 V DC or 24 V DC (permanent) 24 V DC or 48 V DC (pulsed)
Current	$I_{\max} = 800 \text{ mA}$ at 24 V DC (permanent) ($\pm 10 \%$, at least $\pm 100 \text{ mA}$, at 25 °C) $I_{\max} = 4 \text{ A}$ at 48 V DC (pulsed) (+10/-20 % , at least $\pm 100 \text{ mA}$, at 25 °C)
Flash time	max. 1 ms (Duty Cycle max. 1:10)

Conformity

Conformity	CE RoHS UL recognized KC (R-R-BkR-VeriSens-XC-IP)
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Non-volatile memory

Flash memory size	2000 Mbit Flash S34ML02G100BHI0000
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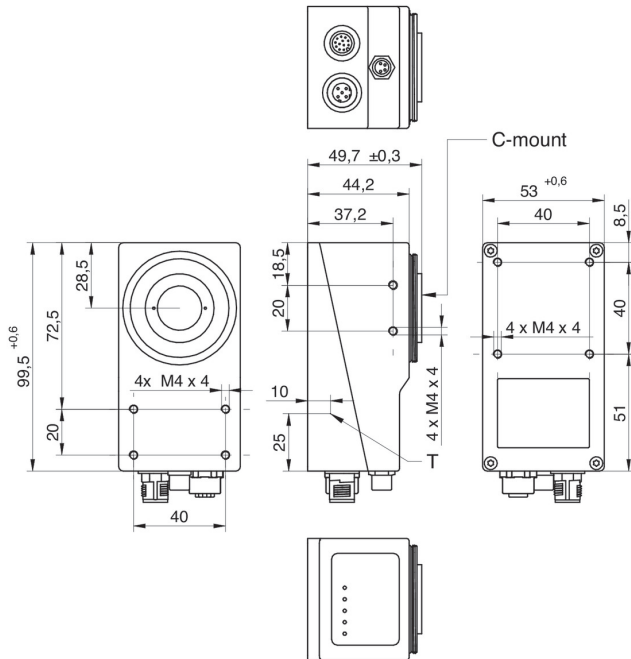
Electrical connection



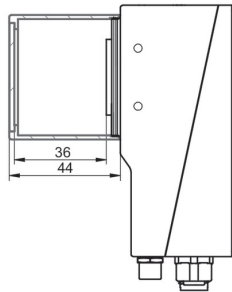
1:	+24 V or +48 V Flash	3:	Ground
2:	+12 V or +24 V Flash	4:	Flash Sync

voltage outputs configurable by software

Dimension drawing



C-mount support



XC Tube, XC Tube Module

