

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		Electrical data	
Resolution	1600 × 1200 px	Digital inputs	5 inputs trigger job selection external teach-in encoders (CH-A, CH-B) 500 kHz
Sensor type	1/1.8" CCD, monochrome	Outputs	PNP $I_{peak} = 100 \text{ mA}$ and $I_{eff} = 50 \text{ mA}$ (short-circuit proof)
Illumination	external, available as accessory	Digital outputs	5 outputs Pass / Fail Flash Sync Alarm Camera Ready Output Enable
Illumination connection	direct (integrated VeriFlash® flash controller)	Initial setup	Ethernet (10BASE-T / 100BASE-TX)
High-resolution mode	max. 21 inspections per second	Process interface	PROFINET (CC-A) EtherNet/IP™ TCP/UDP (Ethernet) Universal Robot Mode
High-speed mode (limited resolution)	max. 35 inspections per second	Visualization	configurable web interface with <i>MultiViewer</i> function
Number of jobs (products)	≤ 255	Mechanical data	
Features per job	32	Width	53 mm (without lens/tube)
Signal processing	Baumer FEX® 4.0	Height	99.5 mm (without lens/tube)
Defect image memory	4	Depth	49.8 mm (without lens/tube)
Lens	C-mount	Weight	≤ 300 g (without lens/tube)
Electrical data		Material	housing: aluminum cover glass XC tube: PMMA
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)		

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

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
Identification	pattern comparison
	find object positions
	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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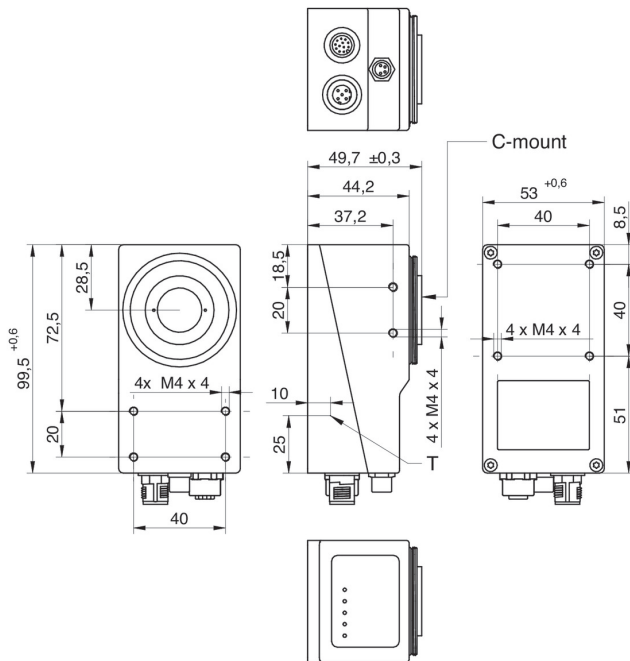
Electrical connection



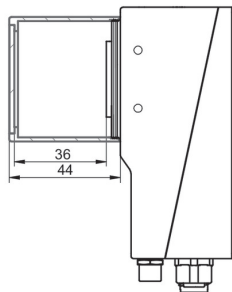
1:	+24 V or +48 V Flash	3:	Ground
2:	+12 V or +24 V Flash	4:	Flash Sync

voltage outputs configurable by software

Dimension drawing



C-mount support



XC Tube, XC Tube Module

