

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
- Download VeriSens Application Suite: www.baumer.com/vs-sw



technical data

general data		electrical data	
resolution	752 × 480 px	digital inputs	5 inputs trigger job selection external teach-in encoders (CH-A, CH-B) 500 kHz
sensor type	1/3" CMOS, monochrome	outputs	PNP $I_{peak} = 100 \text{ mA}$ and $I_{eff} = 50 \text{ mA}$ (short-circuit proof)
illumination	integrated, LED white	digital outputs	5 outputs Pass / Fail Flash Sync Alarm Camera Ready Output Enable
LED class	risk group 1 (low risk, EN 62471:2008)	initial setup	Ethernet (10BASE-T / 100BASE-TX)
high-resolution mode	max. 50 inspections per second	process interface	PROFINET (CC-A) EtherNet/IP™ TCP/UDP (Ethernet) Universal Robot Mode
high-speed mode (limited resolution)	max. 100 inspections per second	visualization	configurable web interface with <i>Mul-tiViewer</i> function
object distance min.	50 mm	mechanical data	
object distance max.	450 mm	width	53 mm
number of jobs (products)	≤ 255	height	99,5 mm
features per job	32	depth	38 mm
signal processing	Baumer FEX® 4.0	weight	≤ 250 g
defect image memory	32	material	housing: aluminum cover glass: PMMA
lens	12 mm		
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. 18 W (with I/O)		
inputs	8 ... 30 V (polarity protected)		

technical data

environmental conditions

operating temperature	+5 ... +60 °C @ T = measurement point
storage temperature	-20 ... +70 °C
humidity	0 ... 90 % (non-condensing)
protection class	IP 67
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
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

conformity

conformity	CE RoHS EAC UL KC (R-REI-BkRR-VeriSens-IP)
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non-volatile memory

flash memory size	2000 Mbit Flash S34ML02G100BHI0000
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Electrical connection



1: PWR (+18-30 V DC)	7: OUT3
2: Ground	8: IN3
3: IN1 (Trigger)	9: OUT4
4: OUT1	10: IN4
5: IN2	11: IN5
6: OUT2	12: OUT5



1: TD+	3: TD-
2: RD+	4: RD-

dimension drawing

