



## Features

- Integrated flash controller
- User management
- Password protection
- Backup & Restore function
- Coordinate transformation
- Flexible result conjunction



## general data

resolution	1600 × 1200 px
sensor type	1/1.8" CCD, monochrome
illumination	direct connection (integrated flash controller)
external illumination	as accessory
high-resolution mode	max. 7 inspections per second
high-speed mode (limited resolution)	max. 15 inspections per second
lens	C-mount
number of jobs (products)	≤ 255
features per job	32
defect image memory	4
signal processing	Baumer FEX® 4.0

## electrical data

voltage supply range +Vs	18 ... 30 V DC
power consumption	typical 5 W ( $I_{max} = 1.5$ A at 24 V)
inputs	8 ... 30 V
outputs	PNP 100 mA
digital inputs	trigger job selection external teach-in encoders (CH-A, CH-B) 500 kHz
digital outputs	Pass / Fail 1-5 Flash Sync Alarm Camera Ready Output Enable
initial setup	Ethernet (10BASE-T / 100BASE-TX)
process interface	TCP UDP (Ethernet)
visualization	web interface

## integrated flash controller

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

## mechanical data

width	53 mm (without lens/tube)
height	99,5 mm (without lens/tube)
depth	49,8 mm (without lens/tube)
material	housing: aluminum cover glass tube: PMMA
weight	≤ 300 g (without lens/tube)

## environmental conditions

operating temperature	+5 ... +50 °C
storage temperature	-20 ... +70 °C
case temperature	max. +50 °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
geometry	distance
	circle
	angle
	count edges
	point position
feature comparison	count contour points
	contour comparison
	brightness
	contrast
	area size
	count areas
pattern comparison	pattern comparison
identification	barcode
	matrix code
	text

**electrical connection M12 / 12-pin (on device)**



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

**Ethernet connection M12 / 4-pin (on device)**



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

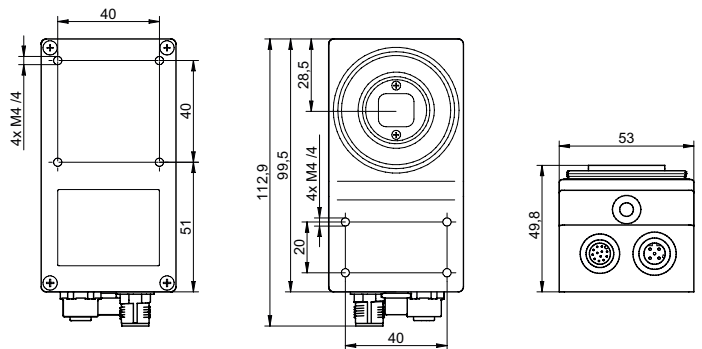
**electrical connection illumination M8 / 4-pin (on device)**



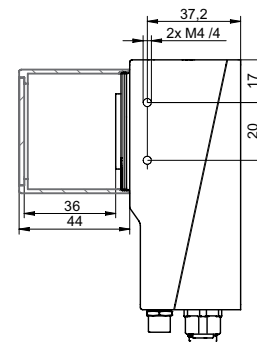
1: +24 V or +48 V Flash	3: Ground
2: +12 V or +24 V Flash	4: Flash Sync

voltage outputs configurable by software

**dimension drawing**



**C-mount support**



**XC Tube, XC Tube Module**

