



## features

- User management
- Password protection
- Backup & Restore function
- Coordinate transformation
- flexible result conjunction



## general data

resolution	752 × 480 px
sensor type	1/3" CMOS, monochrome
LED class	free group (risk free, EN 62471:2008)
high-resolution mode	max. 50 inspections per second
high-speed mode (limited resolution)	max. 100 inspections per second
object distance min.	50 mm
number of jobs (products)	≤ 255
features per job	32
defect image memory	32
signal processing	Baumer FEX® 4.0
illumination	integrated, LED infrared (860 nm)
lens	10 mm

## electrical data

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

## mechanical data

width	53 mm
height	99,5 mm
depth	38 mm
material	housing: aluminum cover glass: PMMA, integrated daylight filter (780 nm)
weight	≤ 250 g

## 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
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

**code types**

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

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-

**dimension drawing**

