

Basic features

Application	Code analysis Code reading
Approval/Conformity	CE UKCA FCC WEEE
Scope of delivery	Vision Sensor BVS
Secondary features	Basic Statistics Boot Cycle Counter Device Discovery Extreme Environment Status Identification Operating Hours Counter Signal Quality Monitoring Storage Usage Monitoring Variant Configuration Voltage and Current Monitoring
Secondary features for condition monitoring	Inclination monitoring and installation aid Internal humidity detection Internal temperature monitoring Vibration monitoring

Electrical data

No-load current I_0 max. at U_e	300 mA
Operating voltage U_b	18...30 VDC
Output current max.	1.2 A Observe voltage supply
Ripple max. (% of U_e)	5 %

Environmental conditions

Ambient temperature	0...55 °C
EN 60068-2-27, Shock	30 g, 11 ms 100 g, 6 ms
EN 60068-2-6, Vibration	10-500Hz / 15g / 5h
IP rating	IP67
Relative humidity	80 % at ambient temperature up to 31 °C, decreasing linearly up to 50% at 40 °C
Storage temperature	-25...70 °C

Display/Operation

Adjuster	button
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Electrical connection

Connection 1	M12x1-Male, 4-pin, A-coded
Connection 2	M12x1-Female, 8-pin, X-coded
Connection 3	M12x1-Female, 5-pin, A-coded
Polarity reversal protected	yes
Short-circuit protection	yes

Functional Characteristics

2D codes	Aztec Code Data Matrix ECC 200 DotCode GS1 Aztec Code GS1 Data Matrix GS1 DotCode GS1 QR Code Micro QR Code PDF 417 QR code
Barcodes	2/5 Industrial 2/5 Interleaved Codabar Code 128 Code 39 Code 93 EAN-13 EAN-8 GS1 DataBar GS1-128 PharmaCode UPC-A UPC-E MSI

Functional safety

MTTF (40 °C)	28.3 a
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Interface

Digital inputs	Trigger
Interface	IO-Link 1.1 TCP/UDP IIoT (Gigabit Ethernet)
Switching output	Push-pull NV Push-pull Overall result Push-pull external illumination Configurable by software

Material

Housing material	Aluminium, Die casting, Painted
Material sensing surface	Luxacryl/2h

Mechanical data

Dimension	56 x 56 x 59 mm
Mounting part	Screw M4
Weight	240 g

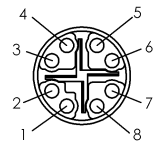
Optical features

Field of view max.	305 x 230 mm
Field of view min.	30 x 23 mm
Focal length	9.6 mm
Image resolution	1.2 MP(1280 x 960 pixels)
LED group per IEC 62471	Risk group 1
Light type	LED
Light type aiming device	LED red
Light type illumination	LED white LED infrared
Sensor type Vision	CMOS 1/3" monochrome global shutter

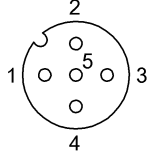
Range/Distance

Operating Distance	50...600 mm
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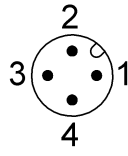
Connector Drawings



PIN 1: BI_DA+
 PIN 2: BI_DA-
 PIN 3: BI_DB+
 PIN 4: BI_DB-
 PIN 5: BI_DD+
 PIN 6: BI_DD-
 PIN 7: BI_DC-
 PIN 8: BI_DC+

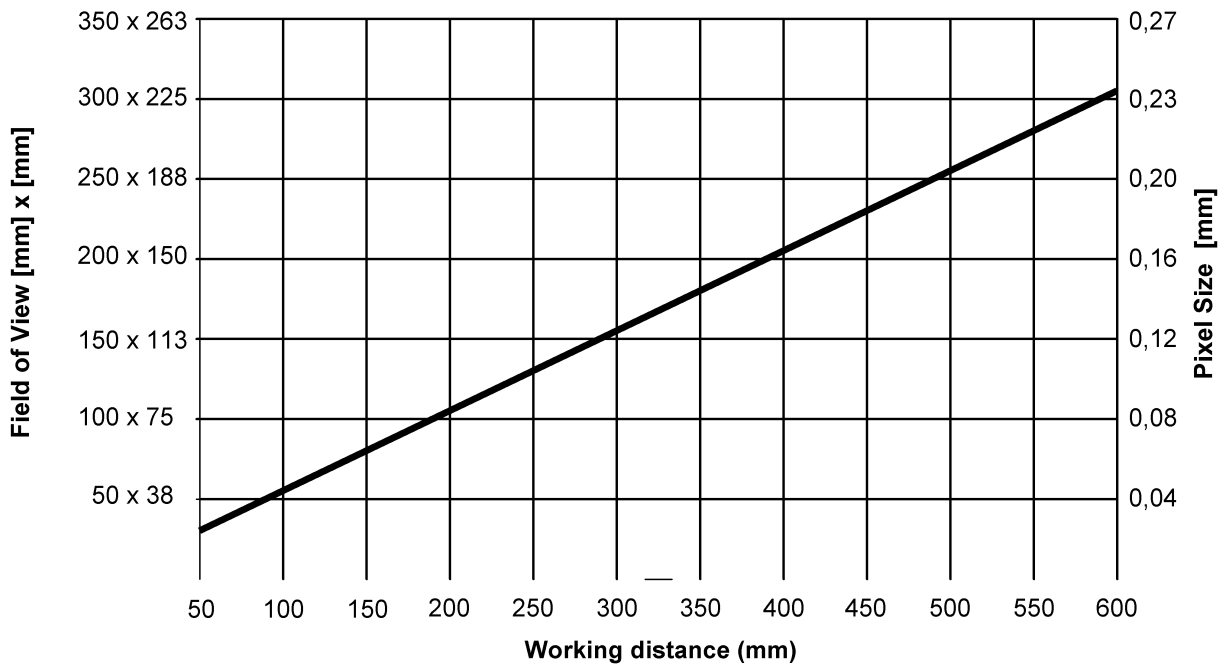


PIN 1: +24 V Out
 PIN 2: Boost/Out
 PIN 3: GND
 PIN 4: Light/Out
 PIN 5: Not connected



PIN 1: +24V
 PIN 2: Trigger In
 PIN 3: GND
 PIN 4: IO-Link/SIO

Technical Drawings



Recommendation: - Barcode: min. 3 pixel / module
 - 2D codes: min. 4 pixel / module