



## Czujniki wizyjne Inspector I20 Flex, Inspector, I-series

VSPI-2F111



Nazwa modelu > **VSPI-2F111**

Numer cz ci > **1046732**

#### At a glance

- High-speed part inspection
- Robust pattern match algorithm to locate parts independent of position, rotation and scale
- Unique, even dome illumination or high-power white or UV ring light
- Easy-to-use step configuration in PC, including emulator
- Log, statistics and record
- Exchangeable lens
- Input and output extensions via I/O box
- Configurable outputs by logical expressions

#### Your benefits

- High-speed part inspection ensures quality without production overhead
- The robust pattern match algorithm locates parts independent of position, rotation and scale and guarantees high-quality results even in your toughest production conditions
- Unique UV illumination provides a quick return on investment in solar cell manufacturing by detecting broken wafers
- The compact, IP 67-rated exchangeable lens optimizes performance on different object sizes and working distances and is designed for the best price/performance ratio
- The increased I/O support via the I/O extension box gives you an easy solution for extended production control
- Configurable outputs by logical expression enables reduced cost of additional logical equipment in your production



#### Cechy

Technologia:	2D Image analysis Snapshot
Toolset:	Object locator, Contour Pixel count, Edge pixel count
Working distance:	50 mm $\infty$
Working distance internal illumination (min. ... max.):	50 mm ... 200 mm
Field of view internal illumination:	20 mm x 20 mm ... 72 mm x 72 mm
Nadajnik światła:	White ring light
Offline support:	Emulation
Zadanie:	Detecting
LED class:	Risk group 1 (low risk, IEC62471 : 2006)
Spectral range:	Approx. $\pm$ 400 nm ... $\pm$ 750 nm

## Wydajno

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Typical performance:	40 fps
Number of inspections:	32
Reference images:	16 objects
Rozdzielczość:	384 px x 384 px
Maximum performance:	250 fps

## Interfejsy

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Operator interfaces:	SOPAS, Inspector Viewer
User interface:	SOPAS for configuration
Wejścia cyfrowe:	4 inputs (24 V)
Configurable inputs:	Reference object selection Encoder input External trigger External teach
Maximum encoder frequency:	40 kHz
Wyjścia cyfrowe:	3 outputs, 24 V (B-type)
Prąd wyjściowy:	100 mA
Default outputs:	All pass Any fail No object detected
Configurable outputs:	Output by logical expressions
Control of external illumination:	5 V TTL
Communication interface:	100 MBit/s Ethernet
Data store and retrieve:	Record images on PC 30 images device log
I/O Box extension:	16 outputs 4x inputs for object selection

## Mechanika/elektronika

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Optyka:	Exchangeable
Napięcie zasilania:	24 V DC, $\pm 20\%$
Pobór prądu:	< 450 mA, with no output load
Tętnienia resztkowe:	< 5 Vss
Wymiary (dł. x szer. x wys.):	100 mm x 53 mm x 38 mm
Connectors:	M12, 12-pin male M12, 4-pin female
Materiał, obudowa:	Aluminium
Window material:	PMMA
Ciężar:	350 g
Rodzaj zabezpieczenia:	IP 67
Standards:	CE

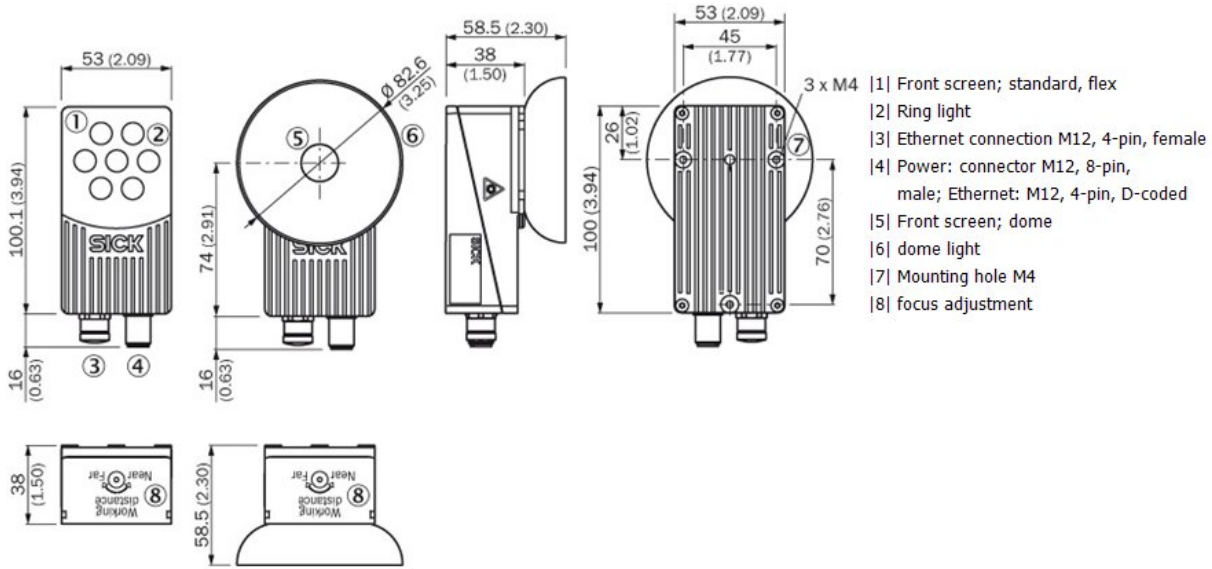
## Dane otoczenia

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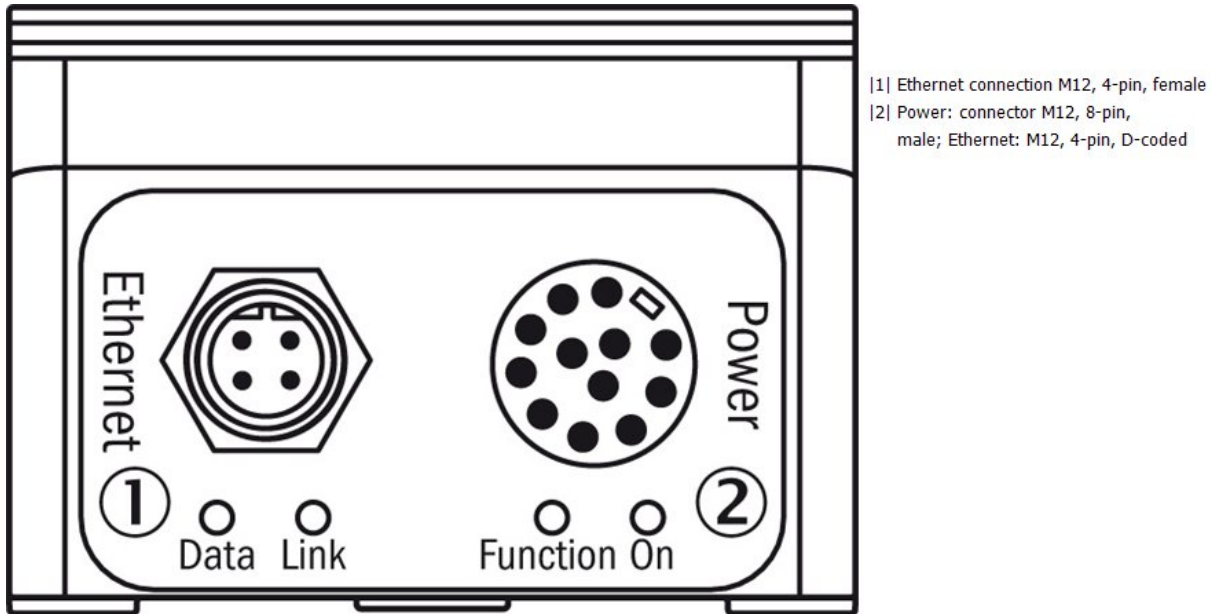
Ambient operating temperature <sup>1)</sup> :	0 °C ... 45 °C
Ambient storage temperature <sup>2)</sup> :	-20 °C ... 70 °C
Odporność na drgania:	IEC 60068-2-6
Mechanical shock load:	EN 60068-2-27

<sup>1) 2)</sup> Rel. humidity: 35 % ... 85 %, 95 % at operation

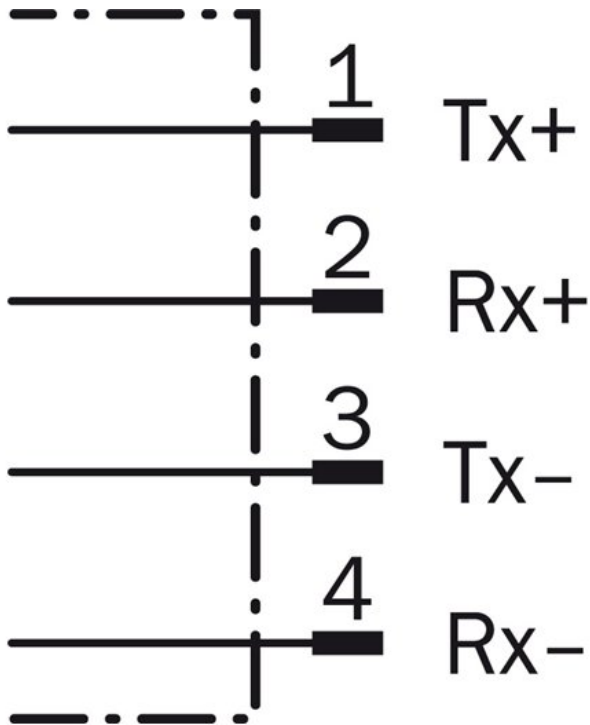
## Dimensional drawing



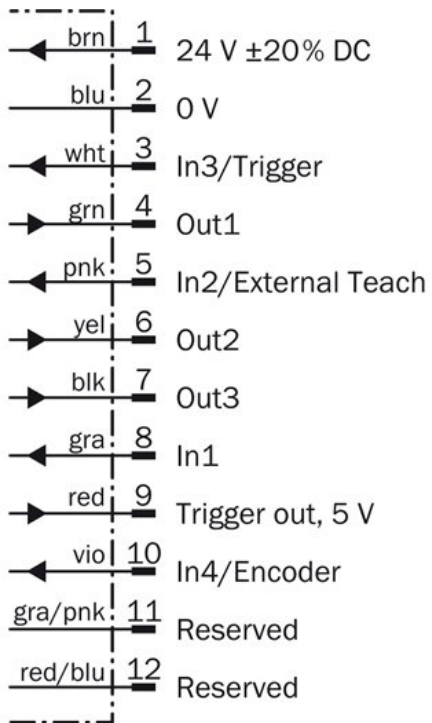
## Connection type



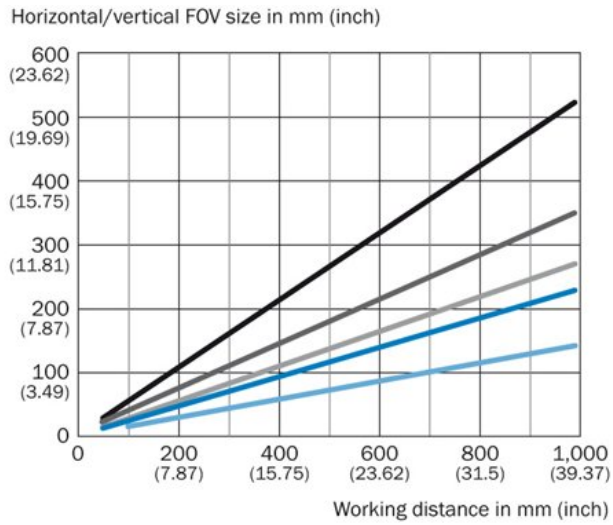
Connection diagram EtherNet



Connection diagram M12, 12-pin



## Field of view diagram



- f = 4.3 mm
- f = 6.0 mm
- f = 8.0 mm
- f = 10.0 mm
- f = 16.0 mm

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