



Czujniki wizyjne  
Inspector I40-IR Flex, Inspector, I-series

VSPI-4F2411



Nazwa modelu > **VSPI-4F2411**

Numer cz ci > **1054705**

#### At a glance

- Integrated IR light
- Optional visible block filter
- High-speed part inspection in VGA resolution
- Advanced object locator tool to locate parts independent of position, rotation and scale
- Powerful part inspection tool kit with quantitative data and pattern recognition
- Networking, including image storing to FTP and EtherNet/IP
- Flexible housing supports optional lenses, filters and dome accessory

#### Your benefits

- The IR light reduces color dependency in inspections, decreasing the need for reprogramming on line changes by using the same configuration
- The invisible IR light reduces eye strain for operators
- The IR version, in combination with the optional visible block filter, is the easiest and most cost-effective method to gain immunity to changes in environmental lighting
- EtherNet/IP and image storing to FTP provide excellent support for production control
- The advanced object locator in combination with the inspection tool kit enables part inspection at smart camera performance levels but with vision sensor ease of use



#### Cechy

Technologia:	2D Image analysis Snapshot
Toolset:	Object locator, Contour Pixel count, Edge pixel count Pattern
Working distance:	50 mm $\infty$
Working distance internal illumination (min. ... max.):	50 mm ... 200 mm
Field of view internal illumination:	22 mm x 15 mm ... 79 mm x 58 mm
Nadajnik światła:	IR ring light, 850 nm
Offline support:	Emulation
Zadanie:	Detecting
LED class:	Risk group 0 (exempt risk, IEC62471 : 2006)
Spectral range:	Approx. $\pm$ 370 nm ... $\pm$ 900 nm

## Wydajno

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Typical performance:	40 fps
Number of inspections:	32
Reference images:	32 objects
Rozdzielczość:	640 px x 480 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, Store images to FTP overflow
Control of external illumination:	5 V TTL
Communication interface:	100 MBit/s Ethernet
Data store and retrieve:	Record images on PC Store images to FTP 30 images device log
I/O Box extension:	16 outputs 5x inputs for object selection
Ethernet communication:	EtherNet/IP (result, device control)

## 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

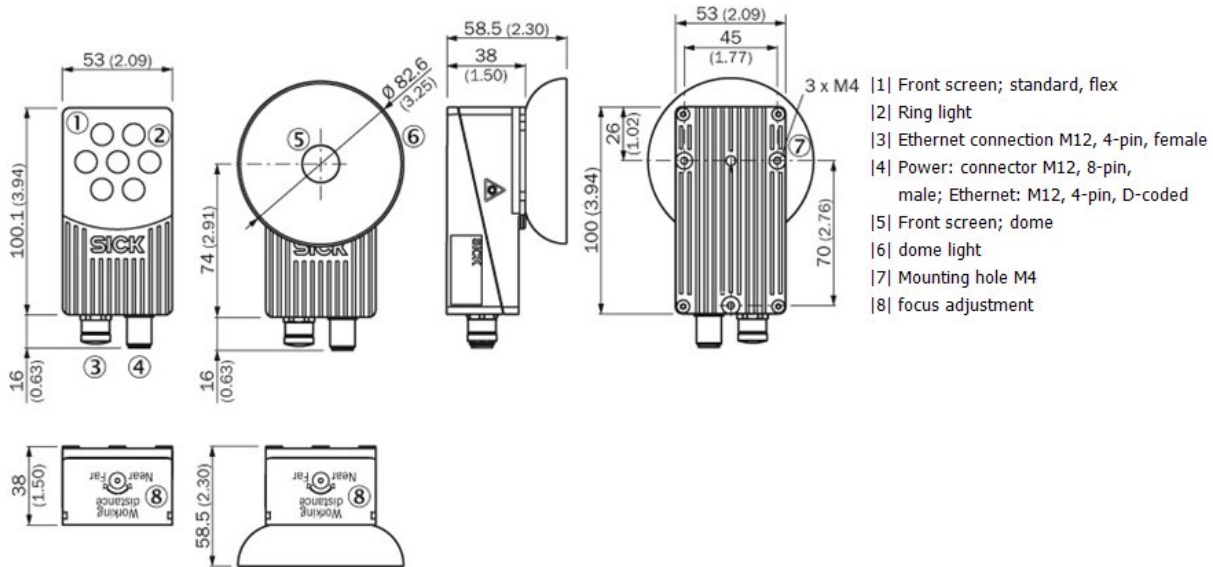
## Dane otoczenia

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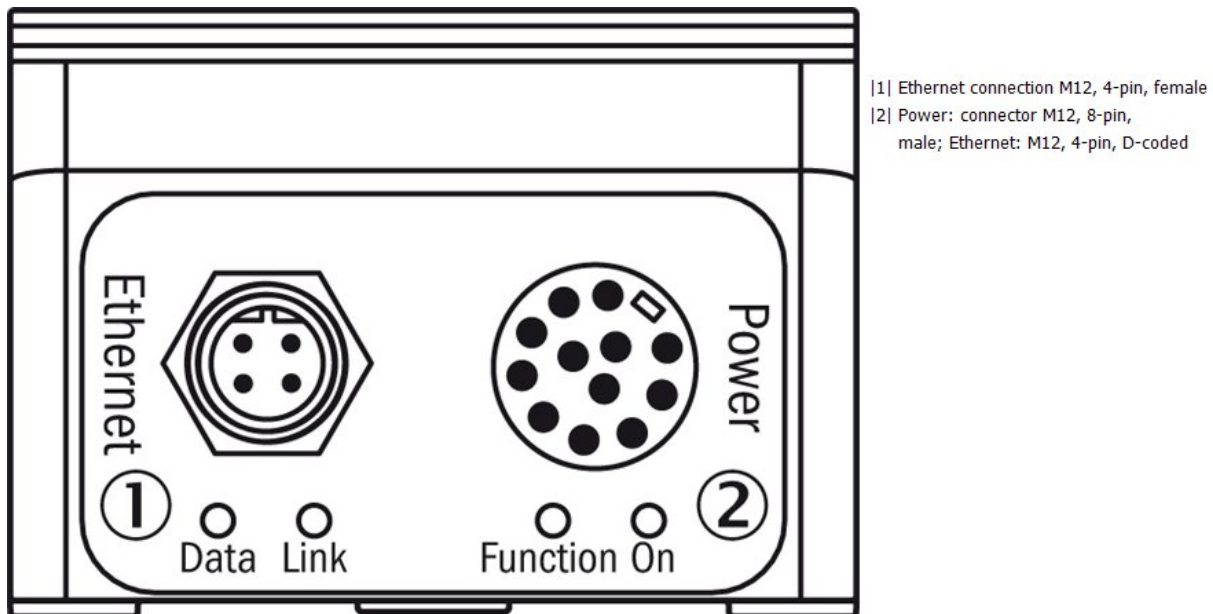
Ambient operating temperature <sup>1)</sup> :	0 °C ... 45 °C
Ambient storage temperature <sup>2)</sup> :	-20 °C ... 70 °C
Odporność na drgania:	IEC 60068-2-6
Mechanical shock load:	EN 60068-2-27

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

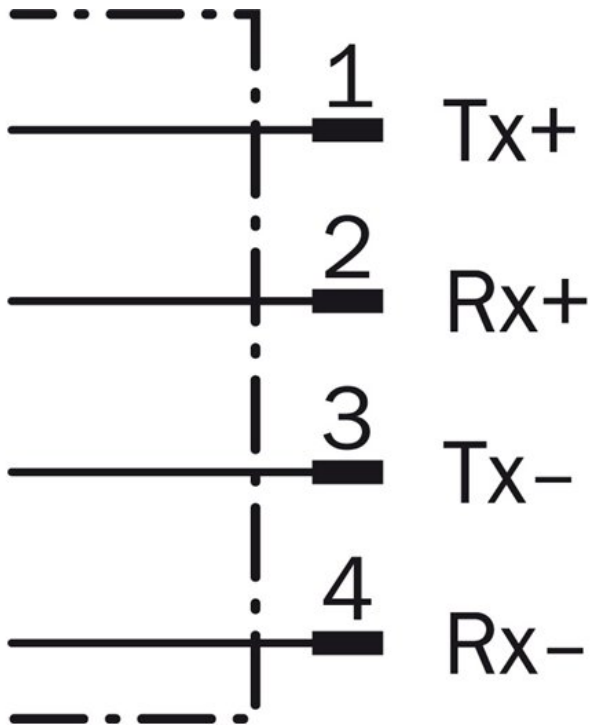
## Dimensional drawing



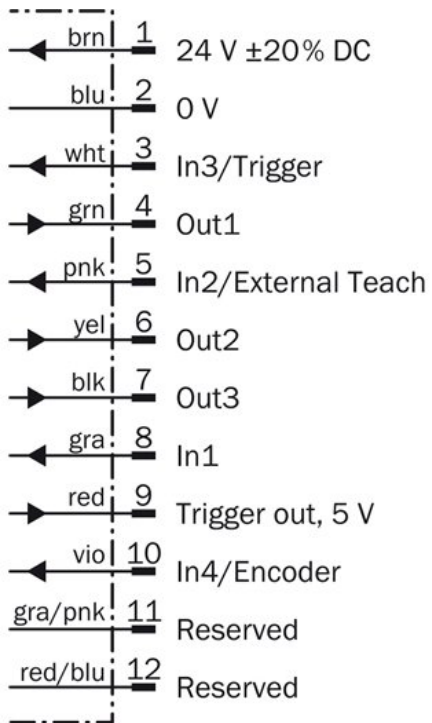
## Connection type



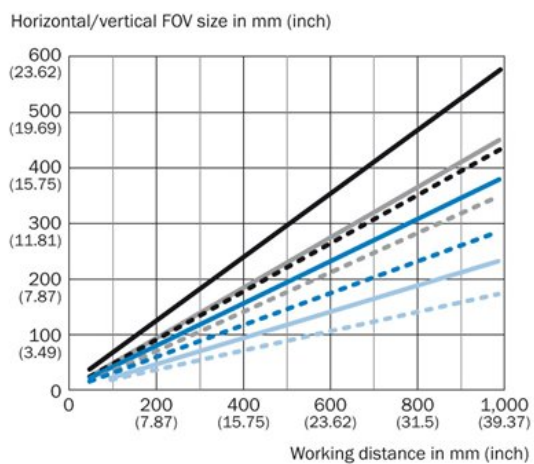
Connection diagram EtherNet



Connection diagram M12, 12-pin



## Field of view diagram



- f = 6.0 mm horizontal
- - - f = 6.0 mm vertical
- f = 8.0 mm horizontal
- - - f = 8.0 mm vertical
- f = 10.0 mm horizontal
- - - f = 10.0 mm vertical
- f = 16.0 mm horizontal
- - - f = 16.0 mm vertical

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