



Vision sensors Inspector, Inspector I-series, Inspector I40

VSPI-4F2111



Model Name > [VSPI-4F2111](#)
Part No. > [1047913](#)



At a glance

- High-speed part inspection in VGA resolution
- Robust pattern match algorithm to locate parts independent of position, rotation and scale
- Powerful part inspection tool set with pattern inspection
- 32 reference objects
- Unlimited image storing to FTP
- PLC communication control using EtherNet/IP
- High flexibility through wide range of accessories
- Easy-to-use step configuration in PC, including emulator

Your benefits

- High-speed part inspection ensures high resolution quality without production overhead
- The excellent pattern match algorithm in combination with the inspection tool kit enables part inspection at smart camera performance levels but with vision sensor ease-of-use
- EtherNet/IP and image storing to FTP provides excellent support for production control
- The large selection of adjustments and accessories makes the Inspector an excellent choice for production plants for a variety of applications
- The unique dome and filter accessories enable excellent performance on glossy or colored objects with a simple exchange



Features

Task:	Inspection
Technology:	2D Image analysis Snapshot
Toolset:	Object locator, Contour Pattern Pixel count, Edge pixel count
Sensor:	CMOS matrix sensor, gray scale values
Focus:	Manually adjustable focus
Working distance:	≥ 50 mm
Working distance internal illumination:	50 mm ... 200 mm
Field of view internal illumination:	22 mm x 15 mm ... 79 mm x 58 mm
Light source:	White
Spectral range:	Ca. 400 nm ... 750 nm
LED class:	Risk group 1 (low risk, IEC62471 : 2006)

Offline support:

Emulator

Performance

Resolution:	640 px x 480 px
Maximum performance:	250 fps
Typical performance:	40 fps
Number of inspections:	32
Reference images:	32 objects

Interfaces

Operator interfaces:	Inspector Viewer
Configuration software:	SOPAS
Data store and retrieve:	Record images on PC Store images to FTP 30 images device log
Communication interfaces:	100 MBit/s Ethernet
Ethernet communication:	EtherNet/IP
Digital inputs:	4 inputs (24 V)
Configurable inputs:	Reference object selection Encoder input External trigger External teach
Digital outputs:	3 outputs, 24 V (B-type)
Configurable outputs:	Output by logical expressions, Store images to FTP overflow
Output current:	100 mA
Default outputs:	All pass Any fail No object detected
Maximum encoder frequency:	40 kHz
Control of external illumination:	5 V TTL
I/O Box extension:	16 outputs 5 x inputs for object selection

Mechanics/electronics

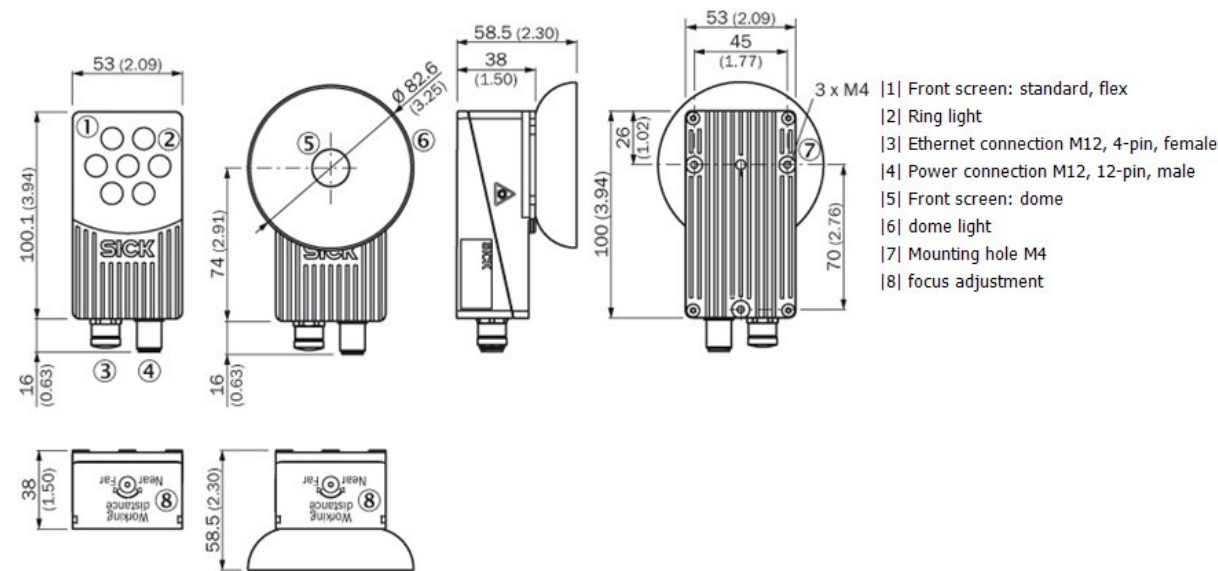
Connectors:	M12, 12-pin male connector M12, 4-pin female connector
Supply voltage:	24 V DC $\pm$ 20 %
Power consumption:	< 450 mA Without output load
Ripple:	< 5 Vpp
Enclosure rating:	IP 67 (with front window mounted)
Housing material:	Aluminum
Window material:	PMMA
Weight:	350 g
Dimensions (L x W x H):	100 mm x 53 mm x 38 mm
Optics:	Exchangeable (M12-mount)

Ambient data

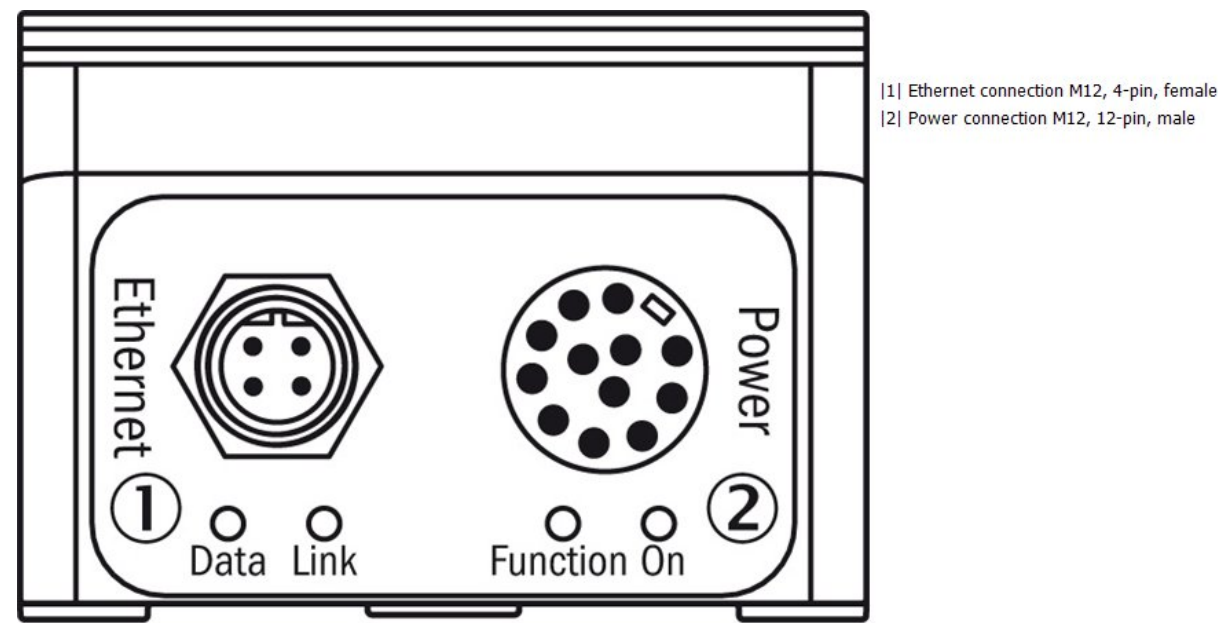
Shock load:	EN 60068-2-27
Vibration load:	IEC 60068-2-6
Ambient operating temperature ¹⁾ :	0 °C ... 45 °C
Ambient storage temperature ²⁾ :	-20 °C ... 70 °C

^{1) 2)} Relative humidity: 35 % ... 85 %, 95 % at operation

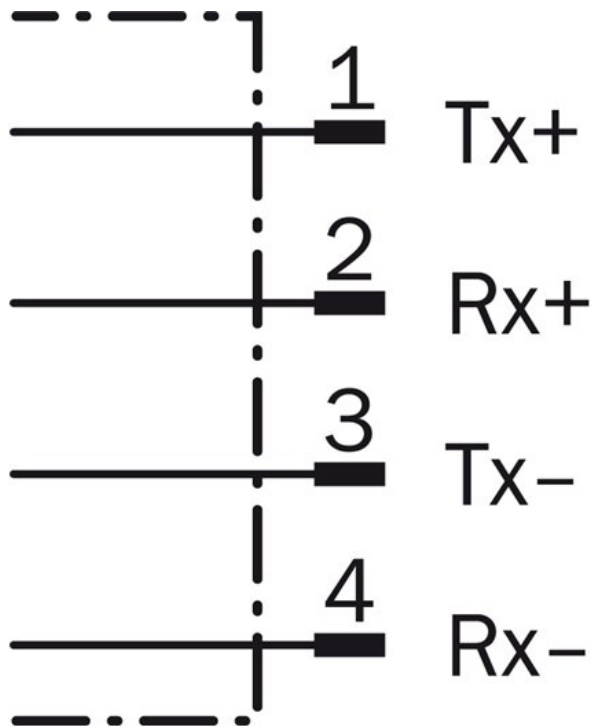
Dimensional drawing



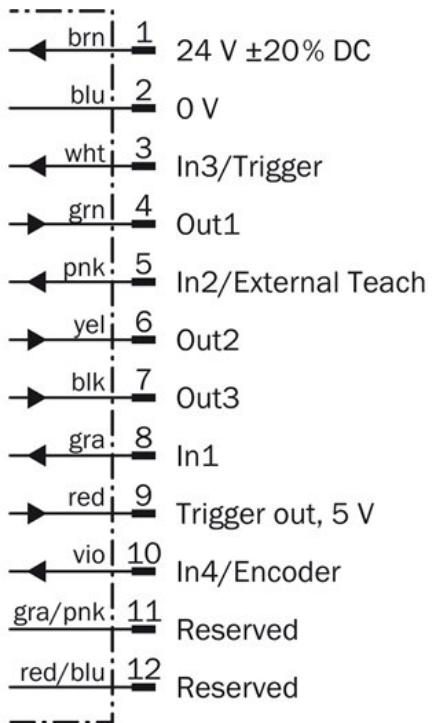
Connection type



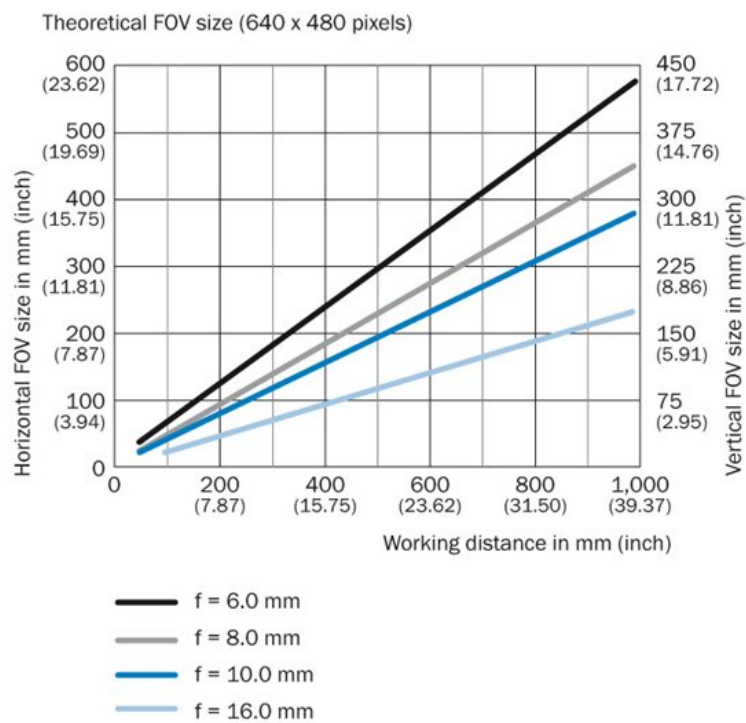
Connection diagram Ethernet



Connection diagram M12, 12-pin



Field of view



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