PLOC2D-8512

PLOC2D

ROBOT GUIDANCE SYSTEMS

SICK
Sensor Intelligence.

PLOC2D-8512 | PLOC2D
ROBOT GUIDANCE SYSTEMS

Ordering information

Type	part no.
PLOC2D-8512	1147105

Other models and accessories ➜ www.sick.com/PLOC2D

CE   UK CA

Detailed technical data

Features

Product name	PLOC2D-FLEX0025
System features	Stand-alone sensor with easy teach, for localization of parts using 2D measurements
Example field of view	For details see field of view diagram
Light source	To be ordered separately as accessories
Optical focus	Adjustable focus (manually)
Localization principle	Shape comparison
Sensor resolution	4,096 px x 3,008 px (12 MP)
Lens	C-mount
Remark	To be ordered separately as accessories
Technology	2D snapshot, image analysis
Description	Very high resolution 2D localization of parts in a small field of view and at medium/large reading distances

Mechanics/electronics

Connection type	1 x M12, 17-pin male connector, A-coded (Power, I/O) 1 x M12, 5-pin female connector (external illumination) 1 x M12, 8-pin female connector, X-coded (Gigabit Ethernet) 2 x M12, 4-pin female connector, D-coded (fieldbus Ethernet)
Supply voltage	24 V DC, ± 20 %
Power consumption	24 W
Housing material	Aluminum die cast
Dimensions (L x W x H)	90 mm x 46 mm x 143 mm
Weight	640 g, without lens
Enclosure rating	IP65

Performance

Part localization time	140 ms for the first part in the image, < 60 ms for additional parts in the image (typical)
Localization accuracy	± 0.5 px, ± 0.1°
Output data	X, Y (mm), rotation around Z (degrees)

Interfaces

Ethernet	✓
Data transmission rate	100 Mbit/s
Protocol	TCP/IP XML and CSV (robot), TCP/IP (operator)
Electrical connection	M12 socket, 8-pin, X-coded
Supply voltage	
Electrical connection	Male connector M12, 17-pin
User interface	Web server
Data storage and retrieval	Image and data logging via microSD memory card and external FTP

Ambient data

Ambient temperature, operation	0 °C ... +50 °C, permissible relative humidity: 0% ... 90% (non-condensing), If the ambient operating temperature will be ≥ 45 °C, ensure adequate heat dissipation when mounting the device.
Ambient temperature, storage	–20 °C ... +70 °C [1]
Shock load	EN 60068-2-6:2007, EN 60068-2-64:2019
Vibration load	EN 60068-2-6:2008-02

[1] Permissible relative humidity: 0% ... 90% (non-condensing).

General notes

Items supplied	Camera housing with PLOC2D software app installed

Classifications

ECLASS 5.0	27381501
ECLASS 5.1.4	27381501
ECLASS 6.0	27381590
ECLASS 6.2	27381590
ECLASS 7.0	27381590
ECLASS 8.0	27381590
ECLASS 8.1	27381590
ECLASS 9.0	27381590
ECLASS 10.0	27381590
ECLASS 11.0	27381591
ECLASS 12.0	27381591

Certificates

EU declaration of conformity	✓
UK declaration of conformity	✓
ACMA declaration of conformity	✓
China RoHS	✓
Information according to Art. 3 of Data Act (Regulation EU 2023/2854)	✓

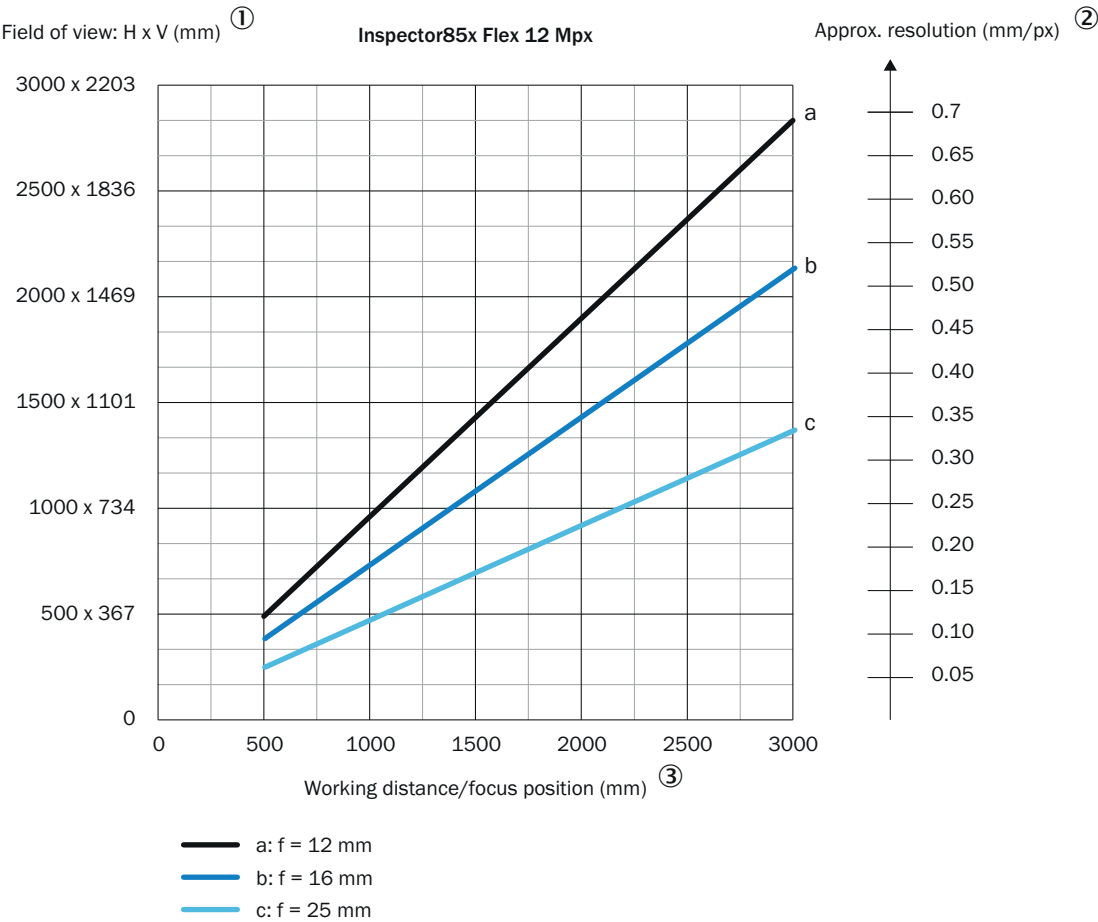## Dimensional drawing
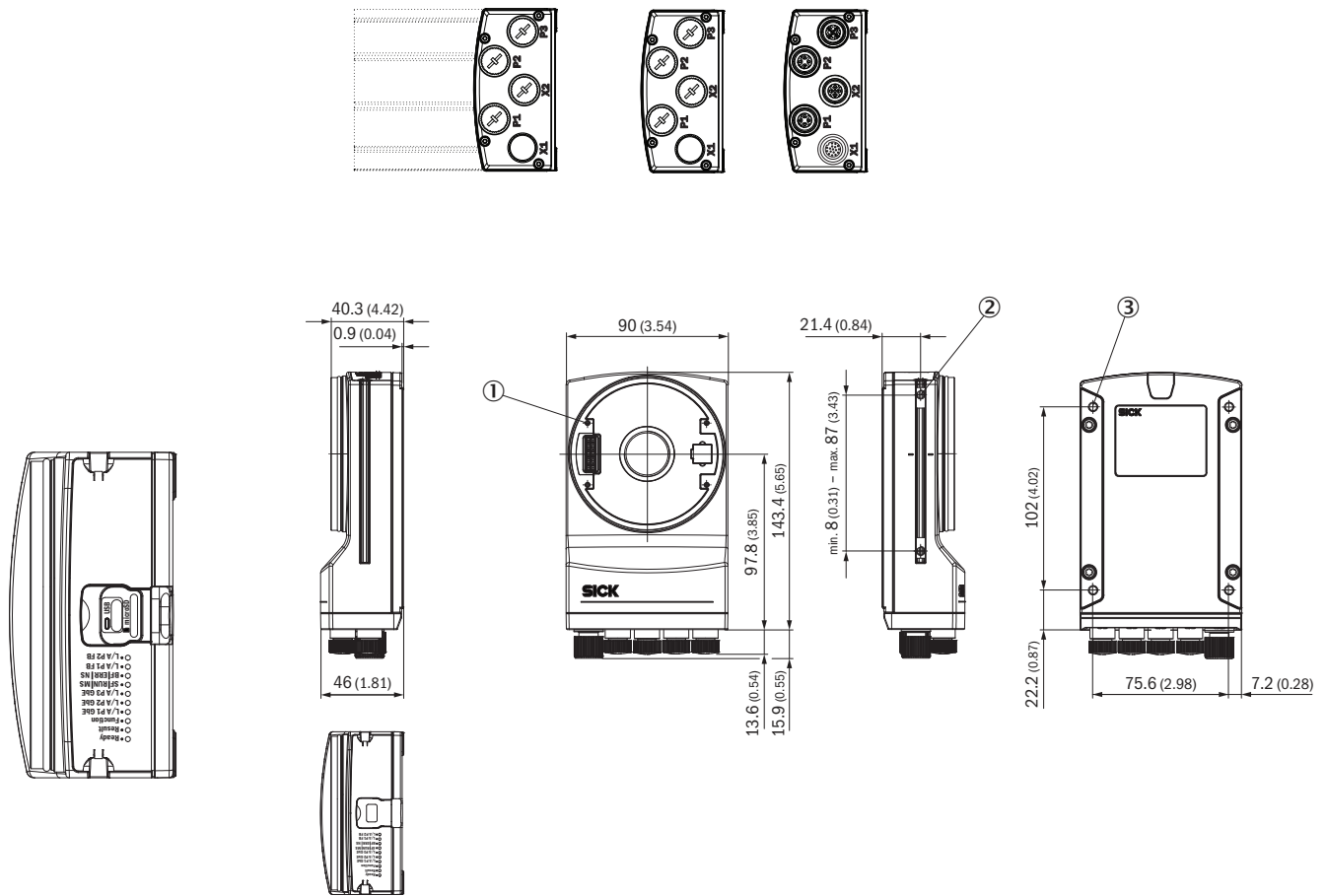
Dimensions in mm (inch)

① 4 tapped blind holes, M2.5, 5.5 mm deep, for mounting the spacer

② 2 M5 sliding nuts; 5.5 mm deep; pivoting; as an alternative method of mounting the product

③ 4 tapped blind holes, M5, 5.5 mm deep for mounting the product

Characteristic curve V2D8512P

Field of view: H x V (mm) ①

Inspector85x Flex 12 Mpx

Approx. resolution (mm/px) ②

▬▬▬	a: f = 12 mm
▬▬▬	b: f = 16 mm
▬▬▬	c: f = 25 mm

① Field of view: Horizontal x vertical in mm
② approximate resolution in mm/px
③ Working distance/Focus position in mm

Recommended accessories

Other models and accessories → www.sick.com/PLOC2D

Brief description	Type	part no.
Commissioning aids and test equipment		
• **Product:** Test equipment • **Description:** Target for alignment and calibration, A3-size	PLOC2D alignment and calibration target A3	4092645

SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is "Sensor Intelligence."

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