LASER SENSORS

PHOTOELECTRIC **SENSORS** AREA SENSORS SAFETY LIGHT CURTAINS / SAFETY COMPONENTS PRESSURE / FLOW SENSORS INDUCTIVE PROXIMITY **SENSORS** PARTICUI AR USE SENSORS SENSOR OPTIONS SIMPLE WIRE-SAVING UNITS WIRE-SAVING SYSTEMS MEASUREMENT SENSORS

> STATIC CONTROL DEVICES

LASER MARKERS

HUMAN MACHINE INTERFACES

MANAGEMENT SOLUTIONS

FA COMPONENTS

MACHINE VISION SYSTEMS

UV CURING SYSTEMS

PLC

FNFRGY

MICRO

Compact Multi-voltage Photoelectric Sensor Power Supply Built-in

NX5 SERIES

FIBER SENSORS Related Information

■ General terms and conditions......F-3

■ Glossary of terms / General precautions......P.1549~ / P.1552~

((





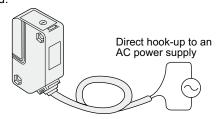
*5 m 16.4041 ft cable length type: Certified (for sales in China only)



Multi-voltage photoelectric sensor usable worldwide

Multi-voltage

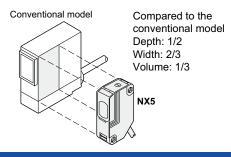
The **NX5** series can operate at 24 to 240 V AC or 12 to 240 V DC, which is suitable for supply voltages around the world.



No need to arrange a DC power supply.

Compact size

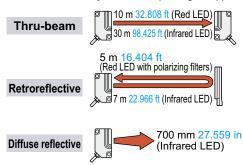
Despite of being multi-voltage, it has a depth of just 35 mm 1.378 in. (W18 \times H62 \times D35 mm W0.709 \times H2.441 \times D1.378 in)



BASIC PERFORMANCE

Long sensing range

It is most suitable for conveyor lines and parking lot applications.



High reliability

It has an IP66 protection. Moderate dust or water splashes will not affect the sensor.

The hermetically sealed output relay significantly increases its reliability.



FUNCTIONS / MOUNTING

Easy alignment

The 10 m 32.808 ft thru-beam type sensor and the 5 m 16.404 ft retroreflective type sensor incorporate a red LED beam source. Beam alignment can be attained by checking the emitted beam visually.

Interference prevention

Two sensors can operate normally even if mounted close together.

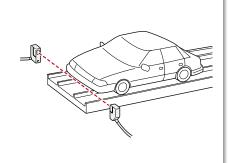
(Excluding the 30 m 98.425 ft thru-beam type sensor)

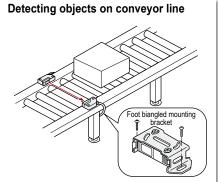
Selection Guide Amplifier Built-in Power Supply Built-in Amplifierseparated

NX5

APPLICATIONS

Detecting car position at parking garage



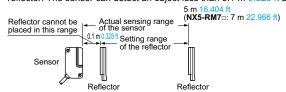


ORDER GUIDE

| _ | | | | | | | |
|-----------------|-------------------------|--------------|------------|-------------------------------|--------------------------|------------------|------------------|
| Туре | | Э | Appearance | Sensing range | Model No. (Note 2, 3) | Emitting element | Output |
| Thru-beam | | Light- ON | | 10 m 32.808 ft | NX5-M10RA | חייו | Relay contact 1c |
| | sensing | Dark- ON | | 10 III 32.000 It | NX5-M10RB | Red LED | |
| | | Light- ON | | 30 m | NX5-M30A | 1.611.50 | |
| | Long se | Dark- ON | | 98.425 ft | NX5-M30B | Infrared LED | |
| Retroreflective | larizing | Light- ON | | 0.1 to 5 m 0.328 to 16.404 ft | NX5-PRVM5A | 5 1155 | |
| | With polarizing filters | Dark- ON | | (Note 1) | NX5-PRVM5B | Red LED | |
| | sensing | Light- ON | | 0.1 to 7 m 0.328 to 22.966 ft | NX5-RM7A | 1.611.50 | |
| | Long se | Dark- ON | | (Note 1) | NX5-RM7B | Infrared LED | |
| | ctive | Light- ON | | 700 mm 27.559 in | NX5-D700A | Infrared I FD | |
| Diffuse | refle | Dark- ON | | 700 111111 27.559 111 | NX5-D700B | Infrared LED | |

NOTE: Mounting bracket is not supplied with the sensor. Please select from the range of optional sensor mounting brackets (three types).

Notes: 1) The sensing range of the retroreflective type sensor is specified for the RF-230 reflector. Further, the sensing range is the possible setting range for the reflector. The sensor can detect an object less than 0.1 m 0.328 ft away.



- 2) The model No. with "P" shown on the label affixed to the thru-beam type sensor is the emitter, "D" shown on the label is the receiver.
- 3) Light-ON type sensor (model No. with suffix "A") and Dark-ON type sensor (model No. with suffix "B") are available in the NX5 series. For the following models, in case of power off, the output relay condition is the same as when an object is detected. (In case of power supply line disconnection, the output operation is the same as when an object is detected.) Refer to "I/O CIRCUIT DIAGRAM AND OUTPUT OPERATION (p.371)" for the output operation of each model.

| Thru-beam type | Retroreflective type | Diffuse reflective type | | |
|---|--|-------------------------|--|--|
| NX5-M10RA and NX5-M30A (Light-ON) | NX5-PRVM5A and NX5-RM7A (Light-ON) | NX5-D700B (Dark-ON) | | |

5 m 16.404 ft cable length type

5 m 16.404 ft cable length type (standard: 2 m 6.562 ft) is also available. When ordering this type, suffix "-C5" to the model No.

(e.g.) 5 m 16.404 ft cable length type of NX5-M10RA is "NX5-M10RA-C5"

Accessory

• RF-230 (Reflector)



LASER SENSORS

SAFETY LIGHT CURTAINS / SAFETY COMPONENTS PRESSURE / FLOW SENSORS

PARTICULAR USE SENSORS

SENSOR OPTIONS

WIRE-SAVING SYSTEMS

MEASURE-MENT SENSORS STATIC CONTROL DEVICES

LASER MARKERS

PLC

HUMAN MACHINE INTERFACES

FA COMPONENTS

MACHINE VISION SYSTEMS

Amplifier Built-in

Amplifier-separate

FIBER SENSORS

LASER SENSORS

AREA SENSORS COMPONENTS

PRESSURE / FLOW SENSORS INDUCTIVE PROXIMITY SENSORS

PARTICULAR USE SENSORS SENSOR OPTIONS

SIMPLE WIRE-SAVING UNITS

MEASURE-MENT SENSORS

STATIC CONTROL DEVICES

LASER MARKERS PLC

HUMAN MACHINE INTERFACES ENERGY MANAGEMENT SOLUTIONS

FA COMPONENTS

MACHINE VISION SYSTEMS

CURING SYSTEMS

Amplifier Built-in Amplifier-separated

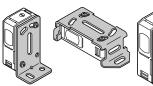
OPTIONS

| Designation | Model No. | Description | | | | | |
|---------------------------------|---|--|--|--|--|--|--|
| | MS-NX5-1 | Foot angled mounting bracket (The thru-beam type sensor needs two brackets.) | | | | | |
| Sensor mounting bracket | MS-NX5-2 | Foot biangled mounting bracket (sensor protection bracket (The thru-beam type sensor needs two brackets.) | | | | | |
| | MS-NX5-3 | Back angled mounting bracket (The thru-beam type sensor needs two brackets.) | | | | | |
| Slit mask For thru-beam | OS-NX5-3×6 | • Sensing range: 3 m 9.843 ft [NX5-M10R□] 16 m 52.493 ft [NX5-M30□] • Min. sensing object: ø10 mm ø0.394 in [NX5-M10R□] ø20 mm ø0.787 in [NX5-M30□] | | | | | |
| type sensor only | (Slit size 3 × 6 mm 0.118 × 0.236 in | Sensing range: 1 m 3.281 ft [NX5-M10R□] 6 m 19.685 ft [NX5-M30□] Min. sensing object: 3 × 6 mm 0.118 × 0.236 in | | | | | |
| Interference prevention filter | PF-NX5-V (Vertical,Silver) | Same type of filters on both sides • Sensing range: 5 m 16.404 ft • Min. sensing object: ø20 mm ø0.787 in (One set consists of 2 pcs. of interference prevention filters.) | | | | | |
| For NX5-M10RA or NX5-M10RB only | PF-NX5-H (Horizontal, Light brown) | | | | | | |
| Reflector | RF-210 | Sensing range: 0.1 to 1.5 m 0.328 to 4.921 ft [NX5-PRVM5□] 0.1 to 2.5 m 0.328 to 8.202 ft [NX5-RM7□] Min. sensing object: Ø30 mm Ø1.181 in | | | | | |
| flective type sensor only | RF-220 | Sensing range: 0.1 to 3.5 m 0.328 to 11.483 ft [NX5-PRVM5□ 0.1 to 5 m 0.328 to 16.404 ft [NX5-RM7□] Min. sensing object: ø35 mm ø1.378 in | | | | | |
| Reflector mounting | MS-RF21-1 | Protective mounting bracket for RF-210 It protects the reflector from damage and maintains alignment | | | | | |
| bracket | MS-RF22 | For RF-220 | | | | | |
| | MS-RF23 | For RF-230 | | | | | |
| Reflective tape | RF-11 | Ambient temperature: -25 to +50 °C -13 to +122 °F Ambient humidity: 35 to 85 % RH Notes Keep the tape free from stress. | Sensing range: 0.1 to 0.8 m 0.328 to 2.625 ft [NX5-PRVM5□] 0.1 to 1 m 0.328 to 3.281 ft [NX5-RM7□] | | | | |
| flective type sensor only | RF-12 | If it is pressed too much, its capability may deteriorate. Do not cut the tape. It will deteriorate the sensing performance. | Sensing range: 0.1 to 1 m 0.328 to 3.281 ft [NX5-PRVM5□] 0.1 to 1.5 m 0.328 to 4.921 ft [NX5-RM7□] | | | | |
| Sensor checker (Note) | CHX-SC2 | It is useful for beam alignment of the optimum receiver position is gwell as an audio signal. | | | | | |

Note: Refer to p.959~ for the sensor checker CHX-SC2.

Sensor mounting bracket

• MS-NX5-1 • MS-NX5-2 • MS-NX5-3





Two M4 (length 25 mm nuts are attached.

Two M4 (length 25 mm 0.984 in) screws with washers and two M4 nuts are attached.

Two M4 (length 25 mm 0.984 in) screws with nuts are attached.

Slit mask

• OS-NX5-3×6

Fitted on the front face of the sensor with one touch.

Interference prevention filter (For NX5-M10R□ only)

- PF-NX5-V(Vertical, Silver color)
- PF-NX5-H(Horizontal, Light brown)

Two sets of thru-beam type sensors (Red LED type) can be mounted close together.







Reflector



Reflector mounting bracket

• MS-RF23

• MS-RF22

• MS-RF21-1









Two M4 (length 10 mm 0.394 in screws with washers are attached.

Two M3 (length 8 mm 0.315 in) screws with washers are attached.

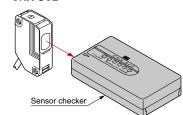
Two M3 (length 12 mm 0.472 in) screws with washers are attached.

Reflective tape



Sensor checker

• CHX-SC2



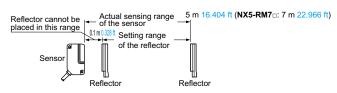
SPECIFICATIONS

| | | Туре | Thru-beam | | | Retroreflective | | | D:(()) | | | | | | |
|---|--|---|--|-------------------------------------|--|---|---|--|---------------------|---|---|--|--|--|--|
| | | | | | Long sensing range | | With polarizing filters | | Long sensing range | | Diffuse reflective | | | | |
| Item | , \ | Model No. | NX5-M10RA | NX5-M10RB | NX5-M30A | NX5-M30B | NX5-PRVM5A | NX5-PRVM5B | NX5-RM7A | NX5-RM7B | NX5-D700A | NX5-D700B | | | |
| CE m | CE marking directive compliance Low Voltage Directive, EMC Directive, RoHS Directive | | | | | | | | | | | | | | |
| Sensing range | | | 10 m 32.808 ft 30 m 98.425 ft | | | | 0.1 to 5 m 0.328 to | 16.404 ft (Note 2) | 0.1 to 7 m 0.328 to | 22.966 ft (Note 2) | 700 mm 27.559 in (Note 3) | | | | |
| Sensing object | | | ø20 mm ø0.7 opaque objec | 87 in or more t (Note 4) | | ø20 mm ø0.787 in or more opaque object (Completely beam interrupted object) (Note 4) | | ø50 mm ø1.969 in or more opaque, translucent or specular object (Note 2, 5) | | ø50 mm ø1.969 in or more opaque or translucent object (Note 2, 5) | | Opaque, translucent or transparent object (Note 5) | | | |
| Hysteresis | | | | | | | | | | | 15 % or less of operation distance (Note 3) | | | | |
| Repeatability (perpendicular to sensing axis) | | | 0.1 mm 0.00 | 04 in or less | | | 0.2 mm 0.0 | 08 in or less | | | 0.3 mm 0.012 in or less | | | | |
| Supp | oly voltage | | 24-240 V AC ⁺¹⁰ ₋₁₅ % or 12 to 240 V DC ⁺¹⁰ ₋₁₅ % Ripple P-P 10 % or less | | | | | | | | | | | | |
| Powe | er consumpt | ion | Emitter: 1 V Receiver: 2 | | Emitter: 1.5 Receiver: 2 | VA or less VA or less | | | 2 VA (| or less | | | | | |
| Output | | Relay contact 1 c • Switching capacity: 250 V AC 1 A (resistive load) 30 V DC 2 A (resistive load) • Electrical life: 500,000 or more switching operations (switching frequency 3,600 operations/hour) 100,000 or more switching operations (switching frequency 3,600 operations/hour) • Mechanical life: 100 million or more switching operations (switching frequency 36,000 operations/hour) | | | | | | | | | | | | | |
| | Output ope | ration | Light-ON | Dark-ON | Light-ON | Dark-ON | Light-ON | Dark-ON | Light-ON | Dark-ON | N Light-ON Dark-ON | | | | |
| Response time | | | 10 ms or less | | | | | | | | | | | | |
| Oper | ration indicat | tor | Red LED (lights up when the output is ON) | | | | | | | | | | | | |
| Stab | ility indicator | • | Green LED (lights up under stable light received condition or stable dark condition) | | | | | | | | | | | | |
| Power indicator | | | | | Red LED (lights up when the power is ON) | | | | | | | | | | |
| Sens | sitivity adjust | er | Continuously va | ariable adjuster | | | Continuously variable adjuster ——— | | | | Continuously variable adjuster | | | | |
| Automatic interference prevention function | | | Use optional prevention file | ptional interference ntion filters | | | Incorporated (Two units of sensors can be mounted close together.) | | | | | | | | |
| | Pollution de | egree | 3 (Industrial environment) | | | | | | | | | | | | |
| e | Protection | | IP66 (IEC) | | | | | | | | | | | | |
| stanc | Ambient temperature | | -20 to +55 °C - 4 to +131 °F (No dew condensation or icing allowed) (Note 6), Storage: -30 to +70 °C -22 to +158 °F | | | | | | | | | | | | |
| Environmental resistance | Ambient hu | midity | 35 to 85 % RH, Storage: 35 to 85 % RH | | | | | | | | | | | | |
| ental | Ambient illu | ıminance | Incandescent light: 3,500 & or less at the light-receiving face | | | | | | | | | | | | |
| onme | Voltage wit | hstandability | 1,500 V AC | for one min. | between pov | ver supply ar | and output terminals, 1,000 V AC for one min. between relay contact terminals | | | | | | | | |
| Envir | Insulation r | esistance | 20 MΩ, or more, with 500 V DC megger between power supply and output terminals, and between relay contact terminals | | | | | | | | terminals | | | | |
| ш | Vibration re | sistance | 10 to 55 Hz frequency, 1.5 mm 0.059 in double amplitude in X, Y and Z directions for two hours of | | | | | | | hours each | | | | | |
| | Shock resis | stance | 500 m/s² (50 G approx.) in X, Y and Z directions three times each | | | | | | | | | | | | |
| Emit | ting element | | Red LED (modulated) Infrared LED | | (modulated) | Red LED (modulated) Infrared LE | | Infrared LED | ED (modulated) | | | | | | |
| | Peak emission wavelength | | 660 nm 0.026 mil 880 nm 0.035 mil 660 nm 0.026 mil 880 nm | | | | | | 880 nm | n 0.035 mil | | | | | |
| Material | | | Enclosure: Polycarbonate, Lens: Polycarbonate, Cover: Polycarbonate, Front cover (retroreflective type sensor only): Acrylic | | | | | | | | | | | | |
| Cable | | 0.3 mm² 5-core (thru-beam type emitter: 2-core) cabtyre cable, 2 m 6.562 ft long | | | | | | | | | | | | | |
| Cable extension | | Extension up to total 100 m 328.084 ft is possible with 0.3 mm², or more, cable (thru-beam type: both emitter and receive | | | | | | receiver). | | | | | | | |
| Net weight | | | Emitter: 100 Receiver: 14 | g approx. 10 g approx. | Emitter: 125 Receiver: 14 | g approx. 40 g approx. | | | 140 g a | approx. | | | | | |
| Acce | essories | measurement c | Adjusting scre | · | | _ | Adjusting scre | ewdriver: 1 pc. | , | | RF-230 (Reflector): 1 pc. Adjusting screwdriver: 1 pc. RF-230 (Reflector): 1 pc. Adjusting screwdriver: 1 pc. | | | | |

Notes: 1) Where measurement conditions have not been specified precisely, the conditions used were an ambient temperature of +23 °C +73.4 °F.

Ty where measurement conditions have not been specified precisely, the conditions used were an ambient temperature of +23 C +73.4 F.
 The sensing range and the sensing object of the retroreflective type sensor is specified for the RF-230 reflector. Further, the sensing range is the possible setting range for the reflector.

The sensor can detect an object less than 0.1 m 0.328 ft away.



- 3) The sensing range and the hysteresis of the diffuse reflective type sensor are specified for white non-glossy paper (200 × 200 mm 7.874 × 7.874 in) as the object.
- 4) If slit masks (optional) are fitted, an object as small as 3×6 mm 0.118×0.236 in can be detected.
- 5) Make sure to confirm detection with an actual sensor before use.
- 6) In case the sensor is to be used at an ambient temperature of $-15\,^{\circ}\text{C}$ +5 $^{\circ}\text{F}$, or less, please contact our office.

FIBER SENSORS

LASER SENSORS

> HOTO-LECTRIC ENSORS IICRO HOTO-LECTRIC

AREA SENSORS SAFETY LIGHT CURTAINS / SAFETY COMPONENTS

SAFETY COMPONENTS PRESSURE / FLOW SENSORS INDUCTIVE PROXIMITY SENSORS

PARTICULAR USE SENSORS

SENSOR OPTIONS SIMPLE

WIRE-SAVING SYSTEMS

MEASURE-MENT SENSORS STATIC CONTROL DEVICES

LASER MARKERS

PLC

HUMAN MACHINE INTERFACES ENERGY MANAGEMENT SOLUTIONS

FA COMPONENTS MACHINE

UV CURING SYSTEMS

Selection Guide Amplifier Built-in

NX5

FIBER SENSORS

LASER SENSORS

MICRO PHOTO-ELECTRIC SENSORS AREA SENSORS

COMPONENTS PRESSURE / SENSORS

SENSOR OPTIONS SIMPLE WIRE-SAVING UNITS

PARTICULAR USE SENSORS

MEASURE-MENT SENSORS STATIC CONTROL DEVICES

> LASER MARKERS PLC

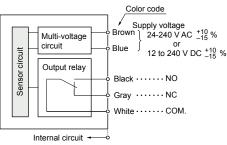
HUMAN MACHINE INTERFACES ENERGY MANAGEMENT SOLUTIONS

FA COMPONENTS MACHINE VISION SYSTEMS UV CURING SYSTEMS

Amplifier Built-in Amplifier-separated

■ I/O CIRCUIT DIAGRAM AND OUTPUT OPERATION

I/O circuit diagram



Note: The emitter of the thru-beam type sensor has two wires for power (+V and 0 V) only.

Output operation

Object detected state.

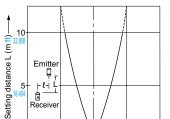
| Compiner manda | | Т | hru-beam & Re | troreflective typ | е | Diffuse reflective type | | | | |
|------------------|---------------------|---------------------|--------------------|---------------------|--------------------|-------------------------|--------------------|---------------------------|--------------------|--|
| 56 | ensing mode | Light-ON | I (A) type | Dark-ON | (B) type | Light-ON | (A) type | Dark-ON (B) type | | |
| Output | | NO (Black cable) | NC (Gray cable) | NO (Black cable) | NC (Gray cable) | NO (Black cable) | NC (Gray cable) | NO (Black cable) | NC (Gray cable) | |
| Output condition | Power OFF Open | | Close | Open | Close | Open | Close | Open | Close | |
| | Beam-received Close | | Open | Open | Close | Close | Open | Open | Close | |
| | Beam-interrupted | Open | Close | Close | Open | Open | Close | Close | Open | |

SENSING CHARACTERISTICS (TYPICAL)

NX5-M10RA NX5-M10RB

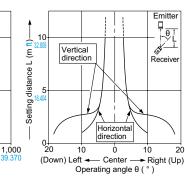
Parallel deviation

Thru-beam type

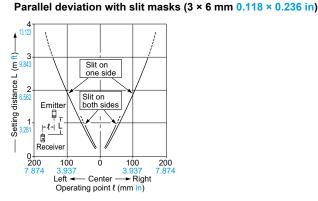


500

► Right



Angular deviation



NX5-M30A NX5-M30B

Center

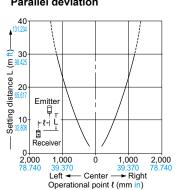
Operational point ℓ (mm in)

Thru-beam type

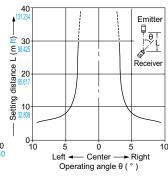
Parallel deviation

500

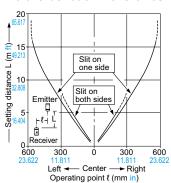
0|--- 1,000



Angular deviation



Parallel deviation with slit masks (3 × 6 mm 0.118 × 0.236 in)



SENSING CHARACTERISTICS (TYPICAL)

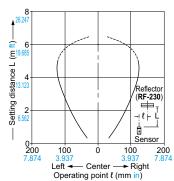
NX5-PRVM5A NX5-PRVM5B

Retroreflective type

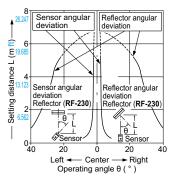
NX5-RM7A NX5-RM7B

Retroreflective type

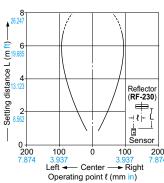
Parallel deviation



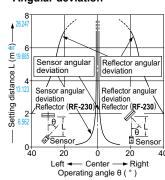
Angular deviation



Parallel deviation



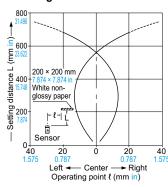
Angular deviation



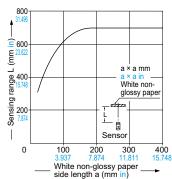
NX5-D700A NX5-D700B

Diffuse reflective type

Sensing field



Correlation between sensing object size and sensing range



As the sensing object size becomes smaller than the standard size (white non-glossy paper 200×200 mm 7.874×7.874 in), the sensing range shortens, as shown in the left graph.

For plotting the left graph, the sensitivity has been set such that a 200 × 200 mm 7.874 × 7.874 in white non-glossy paper is just detectable at a distance of 700 mm 27.559 in.

PRECAUTIONS FOR PROPER USE

Refer to p.1552~ for general precautions.

<u>^</u>

 Never use this product as a sensing device for personnel protection.

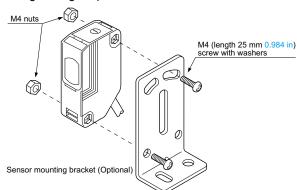
 In case of using sensing devices for personnel protection, use products which meet laws and standards, such as OSHA, ANSI or IEC etc., for personnel protection applicable in each region or country.

Others

- Do not use during the initial transient time (50 ms) after the power supply is switched on.
- Although the protection degree is specified for the sensor including the cable, the cable end is not waterproof, and is not covered by the protection specified. Hence, make sure that water does not seep in from the cable end.

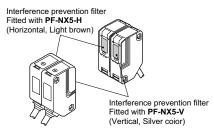
Mounting

• The tightening torque should be 0.8 N·m or less.



Interference prevention filter (Exclusively for NX5-M10R_□)

- Use the interference prevention filters (optional) when two units of thru-beam type sensors are mounted close together. However, take note that the sensing range will become short.
- There are 2 types of interference prevention filters. Install PF-NX5-H (Horizontal, Light brown) for 1 set, and install PF-NX5-V (Vertical, Silver color) for the other set.



Note: The filters cannot be used for NX5-M30A or NX5-M30B.

FIBER SENSORS

LASER SENSORS

> PHOTO-ELECTRIC SENSORS MICRO PHOTO-ELECTRIC SENSORS

AREA SENSORS

CURTAINS / SAFETY COMPONENTS PRESSURE / FLOW SENSORS

INDUCTIVE PROXIMITY SENSORS

PARTICULAR USE SENSORS

SENSOR OPTIONS

WIRE-SAVING UNITS

WIRE-SAVING SYSTEMS

MEASURE-MENT SENSORS

STATIC CONTROL DEVICES

LASER MARKERS

PLC

HUMAN MACHINE INTERFACES

ENERGY MANAGEMENT SOLUTIONS

COMPONENTS

MACHINE

VISION SYSTEMS

CURING SYSTEMS

Selection Guide Amplifier Built-in

Power Supply Built-in Amplifierseparated

NX5

PARTICULAR SENSORS

HUMAN

CURING SYSTEMS

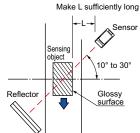
PRECAUTIONS FOR PROPER USE

Refer to p.1552~ for general precautions.

Retroreflective type sensor (NX5-RM7_□)

- · Please take care of the following points when detecting materials having a gloss.
- ① Make L, shown in the diagram, sufficiently long.
- 2 Install at an angle of 10 to 30 degrees to the sensing object.

* NX5-PRVM5□ does not need the above adjustment.



Retroreflective type sensor with polarizing filters (NX5-PRVM5_□)

• If a shiny object is covered or wrapped with a transparent film, such as those described below, the retroreflective type sensor with polarizing filters may not be able to detect it.

In that case, follow the steps given below.

Example of sensing objects

- · Can wrapped by clear film
- Aluminum sheet covered by plastic film
- · Gold or silver color (specular) label or wrapping paper

Steps

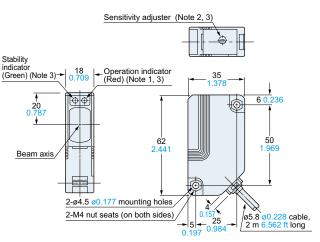
- Tilt the sensor with respect to the sensing object while fitting.
- · Reduce the sensitivity.
- Increase the distance between the sensor and the sensing object.

DIMENSIONS (Unit: mm in)

The CAD data can be downloaded from our website.

NX5-M10RA NX5-M10RB NX5-M30A NX5-M30B Sensor

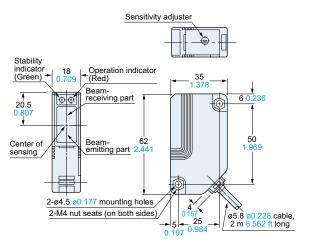




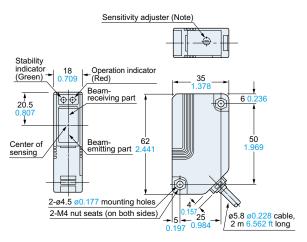
Notes: 1) It is the power indicator (red) on the emitter of NX5-M30□.

- 2) Not incorporated on NX5-M30 ...
- 3) Not incorporated on the emitter.

NX5-D700A NX5-D700B



NX5-PRVM5A NX5-PRVM5B NX5-RM7A NX5-RM7B Sensor



Note: Not incorporated on NX5-RM7 ...

DIMENSIONS (Unit: mm in)

Reflector (Accessory for the retroreflective type sensor)

The CAD data can be downloaded from our website.

SENSOR

Reflector (Optional)

LASER SENSORS

PHOTO-ELECTRIC SENSORS

PHOTO-ELECTRIC SENSORS

AREA SENSORS SAFETY LIGHT CURTAINS / SAFETY COMPONENTS

PRESSURE / FLOW SENSORS

INDUCTIVE PROXIMITY SENSORS PARTICULAR USE SENSORS

SENSOR OPTIONS

SIMPLE WIRE-SAVING UNITS

WIRE-SAVING SYSTEMS

MEASURE-MENT SENSORS

STATIC CONTROL DEVICES

LASER MARKERS

PLC

HUMAN MACHINE INTERFACES

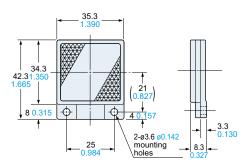
FA COMPONENTS

MACHINE VISION SYSTEMS

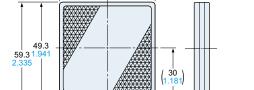
UV CURING SYSTEMS

Amplifier Built-in

RF-220



Material: Acrylic (Reflector) ABS (Base)



Material: Acrylic (Reflector)
ABS (Base)

A0

1.575

→ 8.3

0.327

2-ø4.6 Ø0.181
mounting
holes

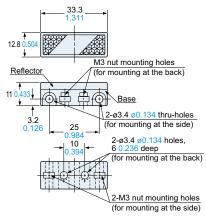
RF-210

RF-11

10 (

RF-230

Reflector (Optional)



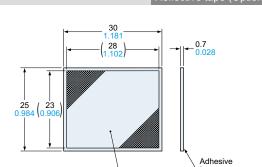
Material: Acrylic (Reflector) ABS (Base)

ADS (Dase)

Two M3 (length 8 mm 0.315 in) screws with washers and two nuts are attached.

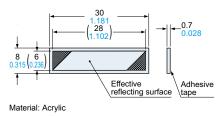
Reflective tape (Optional)

RF-12



Effective reflecting surface

Material: Flexible polyvinyl chloride



Reflective tape (Optional)



FIBER SENSORS LASER SENSORS

AREA SENSORS COMPONENTS PRESSURE / FLOW SENSORS

PARTICULAR USE SENSORS

SENSOR OPTIONS SIMPLE WIRE-SAVING UNITS

WIRE-SAVING SYSTEMS

MEASURE-MENT SENSORS STATIC CONTROL DEVICES

LASER MARKERS

HUMAN MACHINE INTERFACES

PLC

FA COMPONENTS

MACHINE VISION SYSTEMS

CURING SYSTEMS

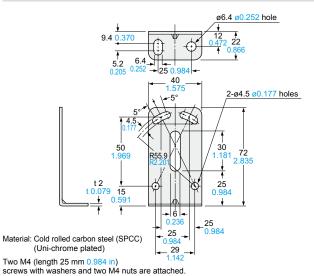
Amplifier Built-in

Amplifier-separated

DIMENSIONS (Unit: mm in)

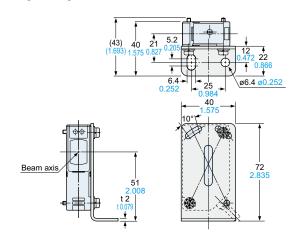
The CAD data can be downloaded from our website.

MS-NX5-1



Sensor mounting bracket (Optional) **Assembly dimensions**

Mounting drawing with the receiver of NX5-M10R□

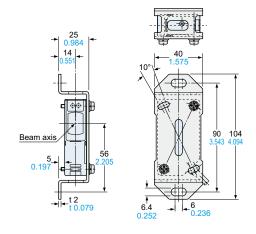


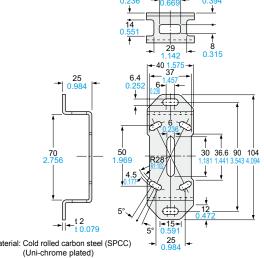
MS-NX5-2

Sensor mounting bracket (Optional)

Assembly dimensions

Mounting drawing with the receiver of NX5-M10R□





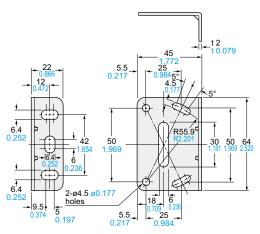
Material: Cold rolled carbon steel (SPCC)

Two M4 (length 25 mm 0.984 in) screws with washers and

MS-NX5-3

two M4 nuts are attached.

Sensor mounting bracket (Optional)

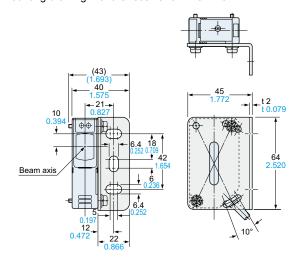


Material: Cold rolled carbon steel (SPCC) (Uni-chrome plated)

Two M4 (length 25 mm 0.984 in) screws with washers and two M4 nuts are attached.

Assembly dimensions

Mounting drawing with the receiver of NX5-M10R□



DIMENSIONS (Unit: mm in)

The CAD data can be downloaded from our website.

Reflector mounting bracket for **RF-210** (Optional)

SAFETY LIGHT CURTAINS / SAFETY COMPONENTS PRESSURE / FLOW SENSORS

PARTICULAR USE SENSORS

SENSOR OPTIONS

MEASURE-MENT SENSORS

STATIC CONTROL DEVICES

LASER MARKERS

PLC

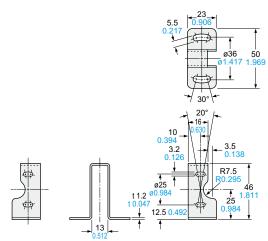
HUMAN MACHINE INTERFACES

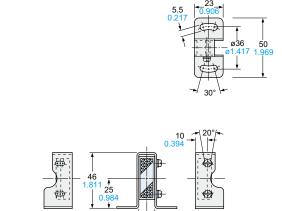
FA COMPONENTS

MACHINE VISION SYSTEMS

Amplifie Built-in

Assembly dimensions





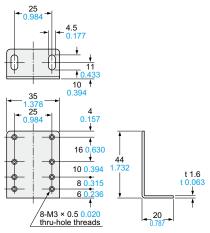
Material: Stainless steel (SUS304)

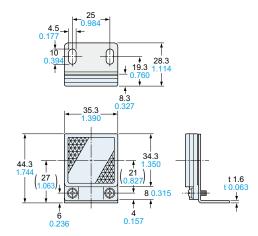
Two M3 (length 12 mm 0.472 in) screws with washers are attached.

MS-RF22

MS-RF21-1

Assembly dimensions



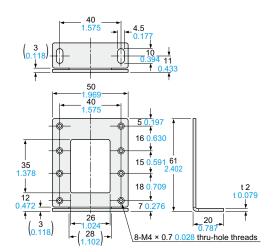


Material: Cold rolled carbon steel (SPCC) (Uni-chrome plated)

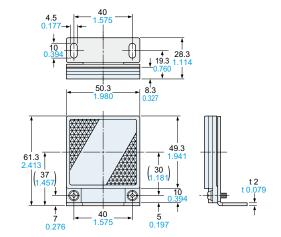
Two M3 (length 8 mm 0.315 in) screws with washers are attached.

MS-RF23

Reflector mounting bracket for **RF-230** (Optional)



Assembly dimensions



Material: Cold rolled carbon steel (SPCC) (Uni-chrome plated)

Two M4 (length 10 mm 0.394 in) screws with washers are attached.