

NA40 SERIES

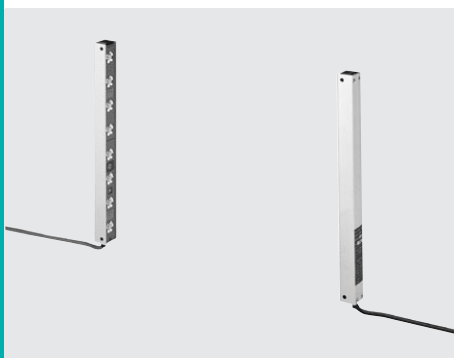
Related Information

■ General terms and conditions F-17

■ Sensor selection guide P.475~

■ Glossary of terms / General precautions P.1359~ / P.1405

■ Korea's S-mark P.1410



Make sure to use light curtains when using a sensing device for personnel protection.

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Slim and smart

SPECIFICATIONS

The CAD data in the dimensions can be downloaded from our website.

		Number of beam channels		4	6	8	10	12	14	16	20	24
		Model No.		NA40-4	NA40-6	NA40-8	NA40-10	NA40-12	NA40-14	NA40-16	NA40-20	NA40-24
Item		With spatter protection hood	NA40-4-H	NA40-6-H	NA40-8-H	NA40-10-H	NA40-12-H	NA40-14-H	NA40-16-H	NA40-20-H	NA40-24-H	
Sensing height			120 mm 4.724 in	200 mm 7.874 in	280 mm 11.024 in	360 mm 14.173 in	440 mm 17.323 in	520 mm 20.472 in	600 mm 23.622 in	760 mm 29.921 in	920 mm 36.221 in	
Sensing range			5 m 16.404 ft									
Beam pitch			40 mm 1.575 in									
Sensing object			ø60 mm ø2.362 in or more opaque object (Completely beam interrupted object)									
Supply voltage			12 to 24 V DC ±10 % Ripple P-P 10 % or less									
Current consumption			Emitter: 30 mA or less Receiver: 60 mA or less			Emitter: 35 mA or less Receiver: 90 mA or less			Emitter: 35 mA or less Receiver: 115 mA or less			
Sensing output			NPN open-collector transistor <ul style="list-style-type: none">Maximum sink current: 100 mAApplied voltage: 30 V DC or less (between sensing output and 0 V)Residual voltage: 1.6 V or less (at 100 mA sink current)									
Output operation			ON when all beam channels are received / OFF when one or more beam channels are interrupted									
Self-diagnosis output			NPN open-collector transistor <ul style="list-style-type: none">Maximum sink current: 50 mAApplied voltage: 30 V DC or less (between self-diagnosis output and 0 V)Residual voltage: 1.6 V or less (at 50 mA sink current)									
Output operation			OFF when unstable light received condition continues for 5 sec. or more, or the output transistor fails									
Response time			12 ms or less									
Interference prevention function			Incorporated (Two units of sensors can be mounted close together.)									
Protection			IP65 (IEC)									
Ambient temperature			-10 to +50 °C +14 to +122 °F (No dew condensation or icing allowed), Storage: -10 to +60 °C +14 to +140 °F									
Emitting element			Infrared LED (synchronized scanning system)									
Material			Protection enclosure: Aluminum, Unit case: ABS, Front cover: Acrylic, Lens: Acrylic									
Net weight (Total of emitter and receiver)			400 g approx.	500 g approx.	630 g approx.	770 g approx.	890 g approx.	1,020 g approx.	1,150 g approx.	1,400 g approx.	1,660 g approx.	
With spatter protection hood			500 g approx.	630 g approx.	800 g approx.	990 g approx.	1,150 g approx.	1,330 g approx.	1,500 g approx.	1,840 g approx.	2,190 g approx.	
Dimensions			W30 × H (Sensing height + 50) × D25.5 mm W1.181 × H (Sensing height + 1.969) × D1.004 in (However NA40-4 / NA40-4-H : H180 mm 7.087 in, and NA40-□-H: D50 mm 1.969 in)									
Accessories			MS-NA40-1 (Sensor mounting bracket): 1 set for emitter and receiver, Adjusting screwdriver: 1 pc.									

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

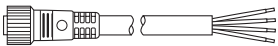
Products that obtained Korea's S-mark certification

We offer products that have obtained Korea's S-mark certification (excluding the sensors with spatter protection hood).

When ordering this type, suffix "-K" to the model No.

(e.g.) NA40-4 with Korea's S-mark certification is "NA40-4-K".

ORDER GUIDE**Mating cables** Mating cable is not supplied with the sensor. Please order it separately.

Appearance	Model No.	Description
	NA40-CC3	Length: 3 m 9.843 ft Net weight: 600 g approx. (two cables)
	NA40-CC7	Length: 7 m 22.966 ft Net weight: 950 g approx. (two cables)
		0.5 mm ² 3-core (for receiver: 4-core) cabtyre cable with connector on one end, two cables per set. Cable outer diameter: ø6.7 mm ø0.264 in Connector outer diameter: ø14 mm ø0.551 in max. Cable color: Gray (for emitter) Black (for receiver)

Accessory

- **MS-NA40-1** (Sensor mounting bracket)

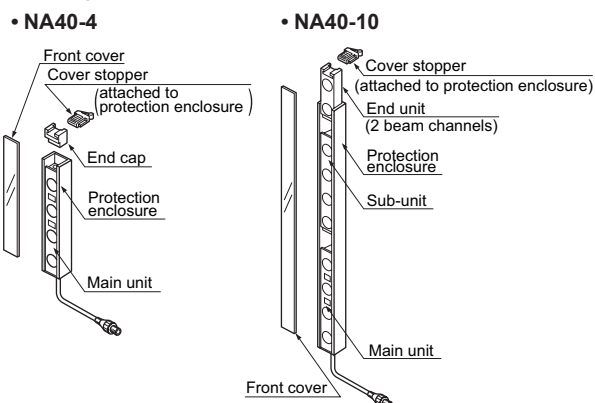


Four bracket set
 [Four M5 (length 40 mm **1.575 in**)
 truss head screws, four nuts and
 four spring washers are attached.]

Individual units and associated components can be purchased separately

Designation	Number of beam channels	Model No.	
		Emitter	Receiver
Main unit	4	NA40-MUP	NA40-MUD
Sub-unit	4	NA40-4SUP	NA40-4SUD
End unit	2	NA40-2EUP	NA40-2EUD
	4	NA40-4EUP	NA40-4EUD
End cap (Note)	—	NA40-ECP	NA40-ECD

Note: It is required only for **NA40-4** or **NA40-4-H**.



Applicable beam channels		4 beam channels	6 beam channels	8 beam channels	10 beam channels	12 beam channels	14 beam channels	16 beam channels	20 beam channels	24 beam channels
Designation	Model No.	MC-NA40-4	MC-NA40-6	MC-NA40-8	MC-NA40-10	MC-NA40-12	MC-NA40-14	MC-NA40-16	MC-NA40-20	MC-NA40-24
	Model No.	MC-NA40-4H	MC-NA40-6H	MC-NA40-8H	MC-NA40-10H	MC-NA40-12H	MC-NA40-14H	MC-NA40-16H	MC-NA40-20H	MC-NA40-24H
	Model No.	FC-NA40-4	FC-NA40-6	FC-NA40-8	FC-NA40-10	FC-NA40-12	FC-NA40-14	FC-NA40-16	FC-NA40-20	FC-NA40-24

Note: The model Nos. given above denote a single unit, not a pair of units.

FIBER SENSORS

LASER SENSORS

PHOTO-ELECTRIC SENSORS

MICRO PHOTO-ELECTRIC SENSORS

AREA SENSORS

LIGHT CURTAINS

PRESSURE / FLOW SENSORS

INDUCTIVE PROXIMITY SENSORS

PARTICULAR USE SENSORS

SENSOR OPTIONS

SIMPLE WIRE-SAVING UNITS

WIRE-SAVING SYSTEMS

MEASURE-MENT SENSORS

STATIC CONTROL DEVICES

ENDOSCOPE

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FA COMPONENTS

MACHINE VISION SYSTEMS

UV CURING SYSTEMS

Selection Guide

Slim Body

Picking

Other Products

NA40

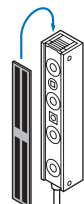
OPTIONS

Applicable beam channels		4 beam channels	6 beam channels	8 beam channels	10 beam channels	12 beam channels	14 beam channels	16 beam channels	20 beam channels	24 beam channels
Designation										
Slit mask	Model No.	OS-NA40-4	OS-NA40-6	OS-NA40-8	OS-NA40-10	OS-NA40-12	OS-NA40-14	OS-NA40-16	OS-NA40-20	OS-NA40-24

Note: The model Nos. given above denote a single unit, not a pair of units.

Slit mask

• OS-NA40-□

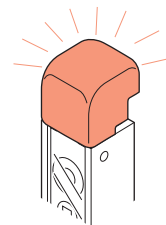


Sensing range

- Slit on emitter side: 1.3 m **4.265 ft**
- Slit on receiver side: 3 m **9.843 ft**
- Slit on both sides: 0.8 m **2.625 ft**

Large indicator for area sensor

• SF-IND



The large indicator can be easily mounted on the sensor head at the top. It also can be mounted on an area sensor already being used.

Designation	Model No.	Description
Large indicator for area sensor	SF-IND	With the large indicators put on the sensors, the operation is easily observable from various directions. Orange.

Note: Two **SF-INDs** are required if they are to be mounted on, both, the emitter and the receiver.

PRECAUTIONS FOR PROPER USE

Refer to General precautions.



- Never use this product as a sensing device for personnel protection.
- For sensing devices to be used as safety devices for press machines or 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.
- If this product is used as a sensing device for personnel protection, death or serious body injury could result.
- For a product which meets safety standards, use the following products.
Type 4: **SF4B** series
Type 2: **SF2B** series

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