



NA1-PK5-PN | Ultra-slim Body Picking Sensor NA1-PK5/NA1-5



※Photo may vary from actual product.

Product Number	NA1-PK5-PN
Part Number	NA1-PK5-PN
Product	Ultra-slim Body Picking Sensor
Details	PNP output [Standard type]
Product name	Ultra-slim Body Picking Sensor NA1-PK5/NA1-5
Features	Even a slim hand is detectable by the 25 mm 0.984 in pitch beam area sensor

Spec Detail

As of February 20, 2020

Specifications and design of the products are subject to change without notice for the product improvement.

Item	Specifications
Product Number	NA1-PK5-PN
Part Number	NA1-PK5-PN
CE marking directive compliance	EMC Directive, RoHS Directive
Sensing height	100 mm 3.937 in
Sensing range	0.1 to 1.2 m 0.328 to 3.937 ft (0.05 to 0.5 m 0.164 to 1.640 ft when set to SHORT) (Note) The sensing range is the possible setting distance between the emitter and the receiver.
Beam pitch	25 mm 0.984 in
Number of beam channels	5 beam channels
Sensing object	ø35 mm ø1.378 in or more opaque object (completely beam interrupted object)
Supply voltage	12 to 24 V DC plus or minus 10 % Ripple P-P 10 % or less
Power consumption	Emitter: 0.6 W or less Receiver: 0.9 W or less (Note) Obtain the current consumption by the following equation. Current consumption = Power consumption / Supply voltage (e.g.) When the supply voltage is 12 V, the current consumption of the emitter is $0.5 \text{ W} / 12 \text{ V} \approx 0.042 \text{ A} = 42 \text{ mA}$
Output	PNP open-collector transistor - Maximum source current: 100 mA - Applied voltage: 30 V DC or less (between output and +V) - Residual voltage: 1 V or less (at 100 mA source current), 0.4 V or less (at 16 mA source current)
Output:Utilization category	DC-12 or DC-13
Output:Output operation	ON or OFF when one or more beam channels are interrupted / ON or OFF when two or more beam channels are interrupted, selectable by operation mode switch
Output:Short-circuit protection	Incorporated
Response time	10 ms or less (when the interference prevention is used, in Light state: 30

	ms or less, in Dark state: 13 ms or less)
Indicators:Emitter	Power indicator: Green LED (lights up when the power is ON) Job indicator: Orange LED (lights up or blinks when the job indicator input is High, lighting pattern is selected by operation mode switch)
Indicators:Receiver	Operation indicator: Red LED (lights up when one or more beam channels are interrupted, but lights up when two beam channels or more are interrupted in the double-beaminterruption mode) Stable incident beam indicator: Green LED (lights up when all beam channels are stably received) Job indicator: Orange LED (lights up or blinks when the job indicator input is High, lighting pattern is selected by operation mode switch)
Interference prevention function	Incorporated
Pollution degree	3 (Industrial environment)
Protection	IP62 (IEC)
Ambient temperature	-10 to +55 °C +14 to +131 °F (No dew condensation or icing allowed), Storage: -20 to +70 °C -4 to +158 °F
Ambient humidity	35 to 85 % RH, Storage: 35 to 85 % RH
Ambient illuminance	Incandescent light: 3,000 lx or less at the light-receiving face
Voltage withstandability	1,000 V AC for one min. between all supply terminals connected together and enclosure
Insulation resistance	20 MOhm , or more, with 250 V DC megger between all supply terminals connected together and enclosure
Vibration resistance	10 to 150 Hz frequency, 0.75 mm 0.030 in double amplitude in X, Y and Z directions for two hours each
Shock resistance	490 m/s2 acceleration (50 G approx.) in X, Y and Z directions three times each
Emitting element	Infrared LED (Peak emission wavelength: 950 nm 0.037 mil, synchronized scanning system)
Material	Enclosure: Heat-resistant ABS Lens cover: Acrylic Indicator cover: Acrylic
Cable	0.3 mm ² 4-core (emitter: 3-core) oil resistant cabtyre cable, 2 m 6.562 ft long
Cable extension	Extension up to total 100 m 328.084 ft is possible for both emitter and receiver with 0.3 mm ² , or more, cable.
Weight	Net weight: Emitter 80 g approx., Receiver 85 g approx. Gross weight: 270 g approx.

Accessories



Product Number **MS-NA1-1**

Part Number **MS-NA1-1**

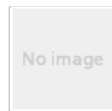
Product name **Mounting bracket**



Product Number **MS-NA2-1**

Part Number **MS-NA2-1**

Product name **Mounting bracket**



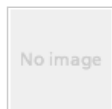
Product Number **MS-NA3**

Part Number **MS-NA3**

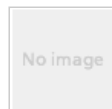
Product name **Sensor protection bracket**



Product **MS-NA3-BK**



Product **OS-NA1-5**



Product **SL-WY**

Number		Number		Number	
Part Number	MS-NA3-BK	Part Number	OS-NA1-5	Part Number	SL-WY
Product name	Sensor protection bracket	Product name	Slit mask	Product name	Y-shaped connector

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