



FS-N41C

Main Unit (M8 Connector Type)



SPECIFICATIONS

Model	FS-N41C ^{*1}	
Type	M8 Connector ^{*2}	
Main unit/expansion unit	Main unit	
Number of control outputs	2 ^{*3}	
Number of external inputs	1 ^{*3}	
Light source LED	Transmitter side: Red, four-element LED (wavelength: 660 nm)	
Response time	23 μs (S-HSPD ^{*4}) / 50 μs (HSPD ^{*5}) / 250 μs (FINE) / 500 μs (TURBO) / 1 ms (SUPER) / 4 ms (ULTRA) / 16 ms (MEGA) / 64 ms (TERA)	
Control output	Open-collector, 30 V or less 100 mA or less per output, 100 mA or less total for 2 outputs (when used as a solitary unit) / 20 mA or less (when used as an expansion unit) Residual voltage NPN 1.4 V or less (output current: 10 mA or less) / 2 V or less (output current: 10 to 100 mA) PNP 1.6 V or less (output current: 10 mA or less) / 2.2 V or less (output current: 10 to 100 mA)	
External input	Input time: 2 ms (ON) / 20 ms (OFF) or longer ^{*6}	
Protection circuit	Protection against reverse power connection, output overcurrent, output surge, and reverse output connection	
Mutual interference prevention	S-HSPD/HSPD: 0 units, FINE: 4 units, TURBO/SUPER/ULTRA/MEGA/TERA: 8 units (The mutual interference prevention values are twice those shown here when Double is set.)	
Power supply	Power voltage	10 to 30 VDC (including 10 % ripple (P-P) or less) , class 2 or LPS ^{*7}
	Power consumption	During normal operation: 910 mW or less (36 mA or less at 24 V/65 mA or less at 12 V) ECO ON: 840 mW or less (33 mA or less at 24 V/60 mA or less at 12 V) ECO FULL: 750 mW or less (30 mA or less at 24 V/52 mA or less at 12 V) ^{*8}
Environmental resistance	Ambient light	Incandescent lamp: 20,000 lx or less, sunlight: 30,000 lx or less
	Ambient temperature	-20 °C -4 °F to +55 °C +131 °F (no freezing) ^{*9}
	Vibration resistance	10 to 55 Hz; double amplitude 1.5 mm 0.06"; 2 hours each for X, Y, and Z axes
	Shock resistance	500 m/s ² ; 3 times each for X, Y, and Z axes
Case material	Main unit and cover: polycarbonate	
Weight	Approx. 25 g	

^{*1} IO-Link Specification V.1.1/COM2 (38.4 kbps) is supported.

^{*2} Ensure the cable length is 30 m 98.4' or less for the M8 connector type. Ensure the cable length is 20 meters 65.6' or less when connecting by way of IO-Link.

^{*3} Output 2 and the external input are selectable.

^{*4} Restrictions when S-HSPD is selected
Output 2 of dual output types is fixed to OFF.
IO-Link communication cannot be used.
Area detection, Area % Mode, DATUM, Rising edge, and Falling edge cannot be selected for Detection Mode.
Output timer, Limit Detection, and Display Gain cannot be used.
FULL cannot be selected for the ECO function.

^{*5} Restrictions when HSPD is selected
Display Gain cannot be used.

^{*6} The input time becomes 25 ms (ON)/25 ms (OFF) when external calibration input is selected.

^{*7} When expanding the system to 9 or more units, use a power supply voltage of 12 V or higher.

^{*8} The load current is excluded. The power consumption including the load when the maximum number of units are connected is 38 W max.

^{*9} When expanded by 1 to 2 units: -20°C -4°F to +55°C +131°F. When expanded by 3 to 10 units: -20°C -4°F to +50°C +122°F.

When expanded by 11 to 16 units: -20°C -4°F to +45°C +113°F. When using 2 outputs, 1 unit is counted as 2 units.

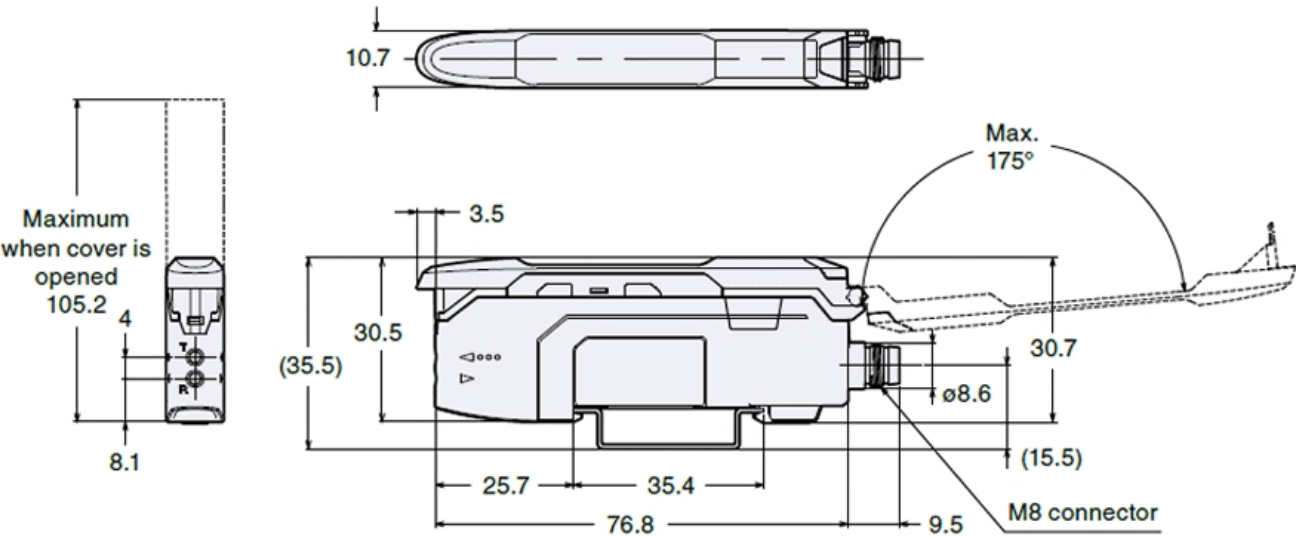
The prescribed values for the ambient temperature assume that the sensor amplifier has been mounted on a DIN rail installed on a metal surface.
Exercise special care when installing the product in an airtight space.

Dimensions

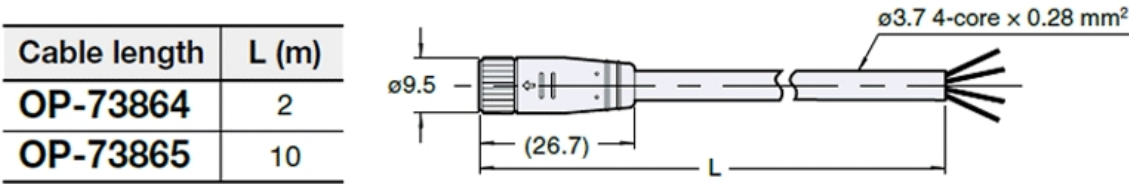
* Download CAD file or product manual for larger image/text and more detail.

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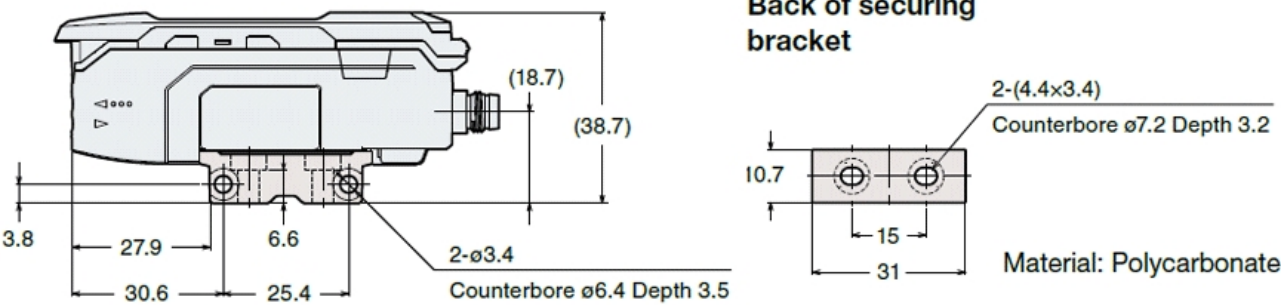


M8 Connector Cable (Option, Sold Separately)



Amplifier Securing Bracket (OP-88245 Option, Sold Separately)

M8 Connector Type



Back of securing
bracket

