



## FS-N11P

Fibre Amplifier, Cable Type, Main Unit, PNP



## SPECIFICATIONS

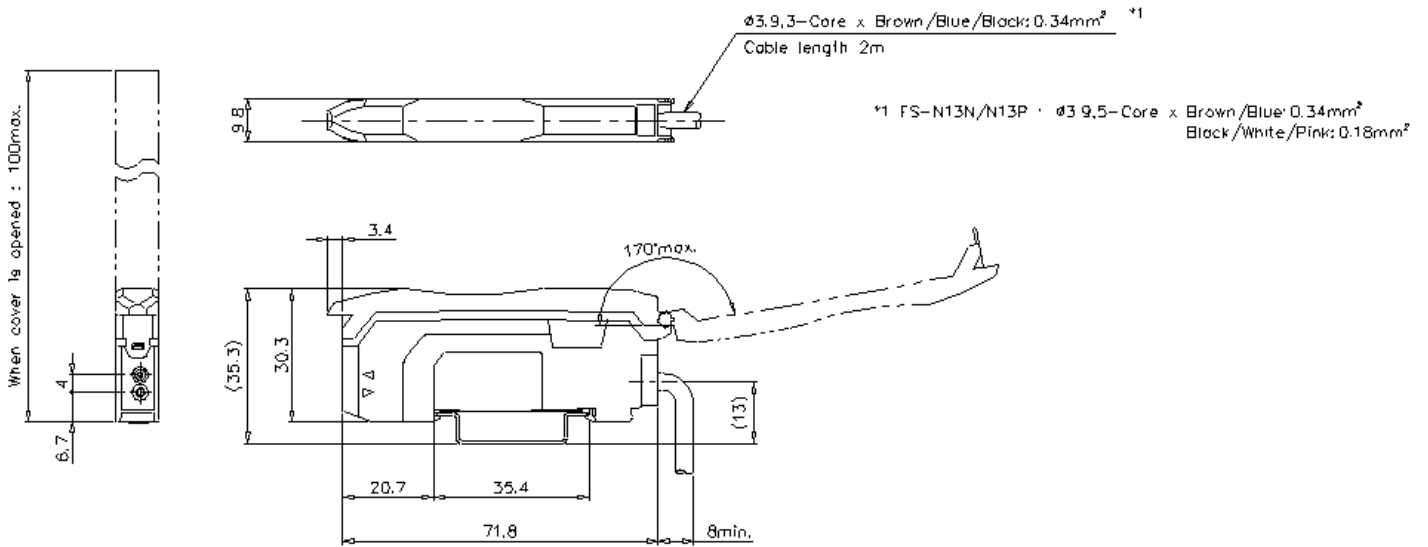
Model		FS-N11P
Type		Standard 1 output
I/O format		Cable
Main unit/Expansion unit		Main unit
Number of inputs/outputs	Control output	1 output PNP open collector 24 V; 1 output max: 100 mA or less; 2 output total: 100 mA or less (used stand-alone)/20 mA or less (multiple connections); residual voltage 1 V or less
	Monitor output (1 to 5 V)	—
	External input	—
Light source		Red, 4-element LED
Response time		50 $\mu$ s (HIGH SPEED)/250 $\mu$ s (FINE)/500 $\mu$ s (TURBO)/1 ms (SUPER)/4 ms (ULTRA)/16 ms (MEGA)
Output selection		LIGHT-ON/DARK-ON (switch-selectable)
Timer function		Timer OFF/OFF-delay timer/ON-delay timer/One-shot timer
APC		ON/OFF switchable (Factory setting: OFF)
Unit expansion		Up to 16 units can be connected total (two output type is treated as two units)
Protection circuit		Reverse polarity protection, Over-current protection, Surge absorber
Number of interference prevention units		0 for HIGH SPEED; 4 for FINE; 8 for TURBO/SUPER/ULTRA/MEGA (When set to double, the number of interference-prevention units will be doubled.)
Rating	Power voltage	12 - 24 V DC $\pm$ 10% ripple (P-P) 10% or less
	Power consumption	Normal: 950 mW or less (39 mA max. at 24 V, 52 mA max. at 12 V) <sup>*1</sup> Eco on mode: 850 mW or less (35 mA max. at 24 V, 44 mA max. at 12 V) <sup>*1</sup> Eco Full mode: 520 mW or less (21 mA max. at 24 V, 26 mA max. at 12 V)
Environmental resistance	Operating ambient luminance	Incandescent lamp: 20000 lux or less; Sunlight: 30000 lux or less
	Operating ambient temperature	-20 to +55 °C (no freezing) <sup>*2</sup>
	Operating ambient humidity	35 to 85% RH (No condensation)
	Vibration	10 to 55 Hz, double amplitude 1.5 mm, 2 hours for each of X,Y,Z axis
	Shock resistance	500 m/s <sup>2</sup> 3 times for each of X,Y,Z axis
Material	Case	Both main unit and expansion unit housing material: Polycarbonate
Case Dimensions		H30.3mmxW9.8mmxL71.8mm
Weight		Approx 75 g

<sup>\*1</sup> Increases 100 mW (4.0 mA) for High Speed mode

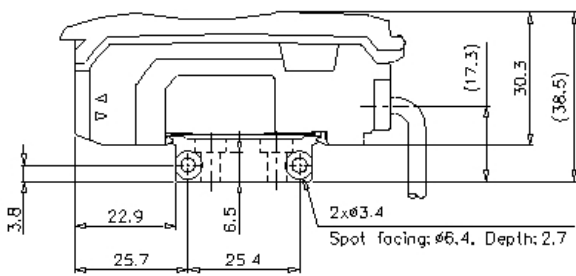
<sup>\*2</sup> One or two more units connected: -20 to +55°C; 3 to 10 more units connected: -20 to +50°C; 11 to 16 more units connected: -20 to +45°C. When using 2-outputs, one unit is counted as two units. All temperature regulations are for when the unit is mounted on a DIN rail and installed on metal sheeting.

Dimensions

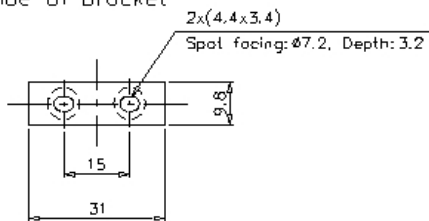
FS-N11N/N11P/N13N/N13P



When mounting bracket is attached  
OP-73880 (Option)

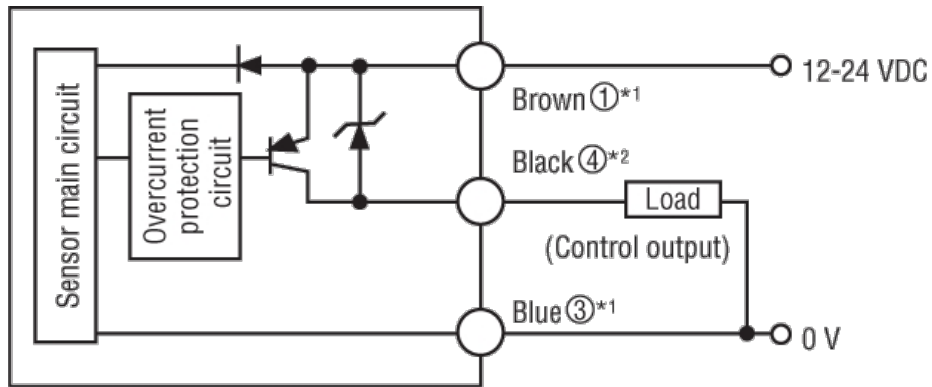


Back side of bracket



I/O Circuit Connection diagram

Output Circuit Diagram



\*1 FS-N11P/N13P/N13CP only

\*2 The FS-N13P/N14P has a white cable as separate output The FS-N13CP/N14CP has pin 2 as separate output 2.

Output Circuit Diagram



\*1 FS-N11P/N13P/N13CP only

\*2 The FS-N13P/N14P has a white cable as separate output The FS-N13CP/N14CP has pin 2 as separate output 2.