



FS-M1P

Fiber Amplifier, Cable Type, Main Unit, PNP



ⓘ This model has been discontinued.
Compliance with the certification standard is ensured as of the time of shipment from our company.

Contact Us: 1-888-539-3623

Recommended Replaceable Products: [Digital Fiber Optic Sensor - FS-N40 series](#)

Specifications

Model	FS-M1P	
Type	Main unit	
Output	PNP	
Light source	Red LED	
Sensitivity adjustment/Mode selection	8-turn trimmer (with indicator), FINE/TURBO (switch-selectable)	
Response time	250 μs (FINE) /500 μs (TURBO)	
Operation mode	LIGHT-ON/DARK-ON (switch-selectable)	
Indicator lamp	Output: Red LED Stable operation: Green LED	
Timer function	ON-delay: 40 ms/OFF-delay: 40 ms/Timer OFF (switch-selectable)	
Input	—	
Control output	PNP open-collector 100 mA max. (40 VDC max.), Residual voltage: 1 V max.	
Stability output	PNP open-collector 50 mA max. (40 VDC max.), Residual voltage: 1 V max.*1	
Protection circuit	Reversed polarity protection, over-current protection, surge absorber	
Unit expansion	Up to 16 expansion units can be connected (a total of 17 units).*2	
Mutual interference suppression	FINE : 4, TURBO/SUPER: 8	
Rating	Power voltage	12 to 24 VDC ±10 %, Ripple (P-P) 10 % or less
	Current consumption	35 mA or less
Environmental resistance	Ambient light	Incandescent lamp: 10,000 lux max., Sunlight: 20,000 lux max.
	Ambient temperature	-10 to +55 °C 14 to 131 °F (No freezing)*3
	Relative humidity	35 to 85 % RH (No condensation)
	Vibration resistance	10 to 55 Hz, Double amplitude 1.5 mm 0.06" , 2 hours in each of the X, Y, and Z directions
	Shock resistance	500 m/s ² , 3 times in each of the X, Y, and Z directions
Case material	Polycarbonate	
Weight	Approx. 75 g	

*1 Only the FS-T1 and FS-M1 can provide stability outputs.

*2 If more than one unit is used together, the ambient temperature varies with the conditions below. Mount the units on the DIN rail with mounting brackets and check that the output current is 20 mA or less.

3 to 10 Units: -10 to 50°C **14 to 122°F**, 11 to 16 Units: -10 to 45°C **14 to 113°F**

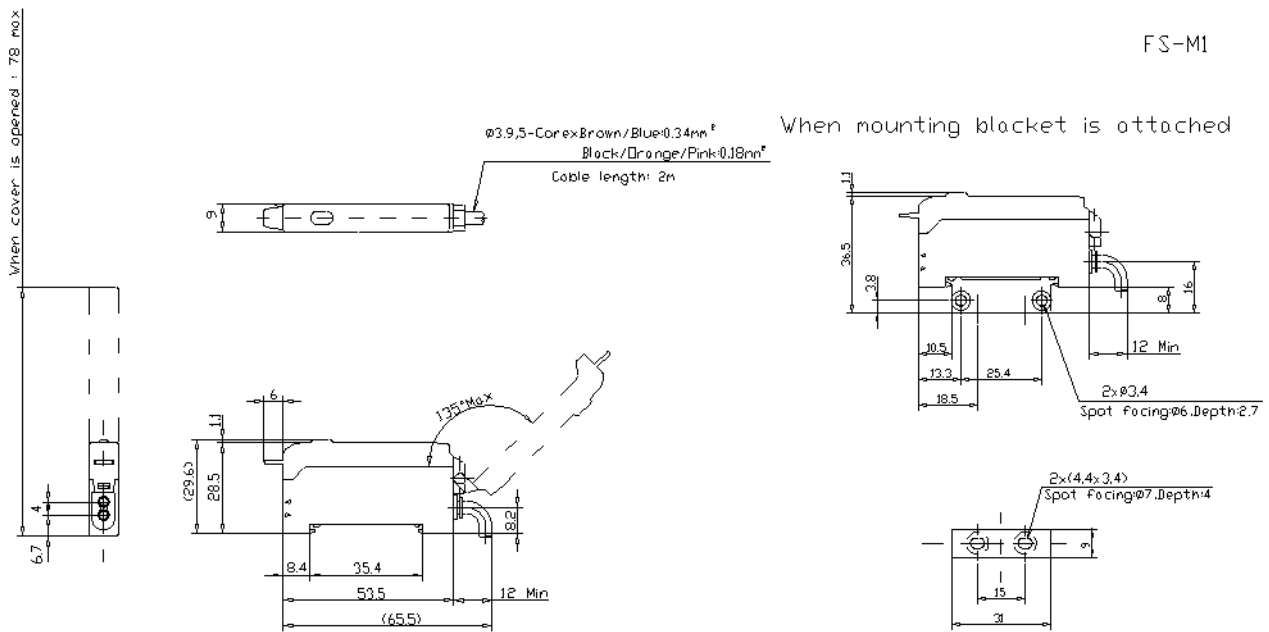
*3 When several units are connected, the ambient temperature requirement varies depending on the total number of units connected.

When 3 to 10 units: -10 to +50 °C **14 to 122 °F**
 When 11 to 16 units: -10 to +45 °C **14 to 113 °F**

When connecting several units, be sure to mount the units to a metallic DIN rail. Make sure that the output current does not exceed 20 mA.

Dimensions

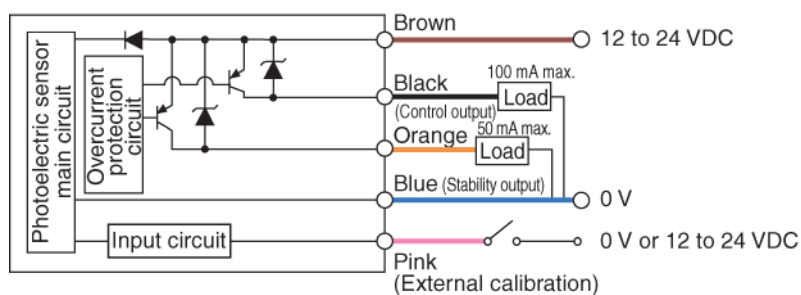
* Download CAD file or product manual for larger image/text and more detail.



I/O Circuit Connection diagram

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

I/O Circuit



* The FS-M1P does not have a pink cable (for external calibration).

When the stability output is not used, cut the orange cable at the base, or connect this cable to the 0 V terminal of the power supply.