

# FS-V34C

Fiber Amplifier, M8 Connector Type, Expansion Unit, NPN

*Please note that accessories depicted in the image are for illustrative purposes only and may not be included with the product.

## Specifications

| | | |
|---|---|---|
| Model | | FS-V34C |
| Type | | 2-output with<br>M8 connector |
| Output | | NPN |
| Main unit/Expansion unit | | Expansion unit |
| Control output | | 2 outputs |
| Monitor output (1 to 5 V) | | N/A |
| External input | | |
| Connector | | M8 |
| Light source LED | | Red, 4-element LED (Wavelength: 640 nm) |
| Response time | | 33 µs (HIGH SPEED) /250 µs (FINE) /500 µs (TURBO) /1 ms (SUPER TURBO) /4 ms (ULTRA TURBO) /16 ms (MEGA TURBO) |
| Output selection | | LIGHT-ON/DARK-ON (switch-selectable) |
| Display indicator | | Operation indicator: Red LED/Dual digital monitor: Dual 7-segment display, Preset Value (4-digit green LED indicator) and<br>Current Value (4-digit red LED indicator) illuminated together. Current Value range: 0 to 64,512; Excess gain: 0P to 999P,<br>Hold function: Possible to display both peak and bottom hold values, Selectable from 5 variations<br>Bar LED monitor: Excess gain displayed (85% to 115% in 7 steps), Scaling display |
| Size | | 30.3 mm (H) x 9.8 mm (W) x 71.8 mm (D) 1.19" (H) x 0.39" (W) x 2.83" (D) |
| Detection mode | | Light intensity (area detection possible, automatic sensitivity-tracking function provided)/<br>[Limited light intensity/Count check/Abnormality detection] |
| Timer function | | OFF-delay timer/ON-delay timer/One-shot timer/ON-delay timer + OFF-delay timer/ON-delay timer + One-shot timer, selectable<br>Timer duration selectable: 0.1 ms to 9,999 ms, Maximum error against the setting value: ±10% max. |
| Control output | | NPN open-collector 24 V, 100 mA max.*1 (main unit only)/20 mA max. (when the expansion unit(s) is connected), Residual voltage: 1 V max. |
| External inputy | | Input time: 2 ms (ON)/20 ms (OFF) min.*2 |
| Unit expansion | | Up to 16 expansion units can be connected (a total of 17 units). Note that the 2-output type should be counted as two units. |
| Number of interference prevention units | Normal operation | HIGHSPEED：0 FINE：4 TURBO/SUPER/ULTRA/MEGA：8台 |
| Rating | Power voltage | 12 to 24 VDC ±10 %, Ripple (P-P) 10 % or less |
| | Power consumption | Normal: 710 mW max. (Using 24 V, 29 mA max., using 12 V, 40 mA max.)/Power saving: 540 mW max. (Using 24 V, 22 mA max., using 12 V, 28 mA max.)*3 |
| Environmental resistance | Ambient light | Incandescent lamp: 20,000 lux max., Sunlight: 30,000 lux max. |
| | Ambient temperature | -10 to +55 °C 14 to 131 °F (No freezing)*4 |

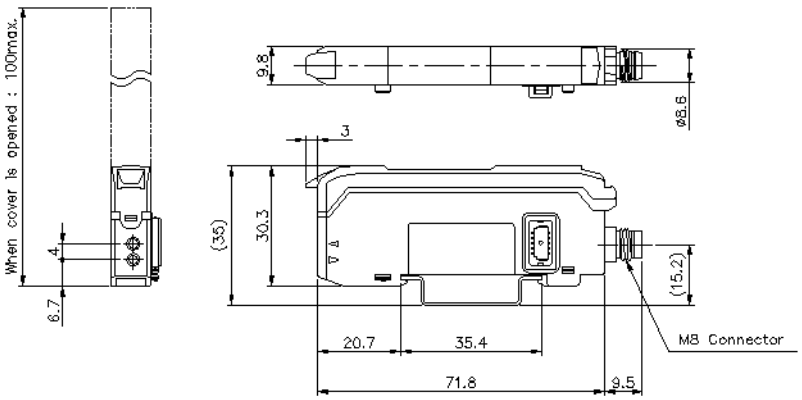
| | | |
|---|---|---|
| | Relative humidity | 35 to 85 % RH (No condensation) |
| | Vibration resistance | 10 to 55 Hz, Double amplitude 1.5 mm 0.06", 2 hours in each of the X, Y, and Z directions |
| | Shock resistance | 500 m/s², 3 times in each of the X, Y, and Z directions |
| Case material | | Polycarbonate |
| Accessories | | N/A |
| Weight | | Approx. 22 g |

*1 Total current of two outputs should be less than 100 mA.
*2 Only available on certain models.
*3 When using the HIGH SPEED mode, the power consumption increases by 160 mW (7 mA).
*4 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.
1 to 2 Units: -10 to +55 °C 14 to 131 °F, 3 to 10 Units: -10 to +50 °C 14 to 122 °F, 11 to 16 Units: -10 to +45 °C 14 to 113 °F

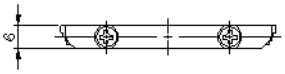
# Dimensions

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

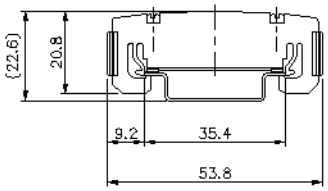
FS-V34C/V34CP




End unit
OP-26751 (Option)




DIN-rail mounting

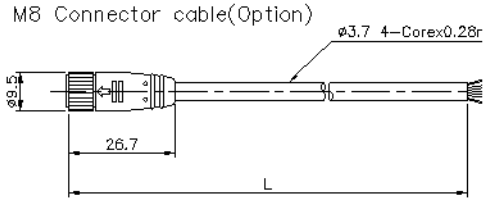




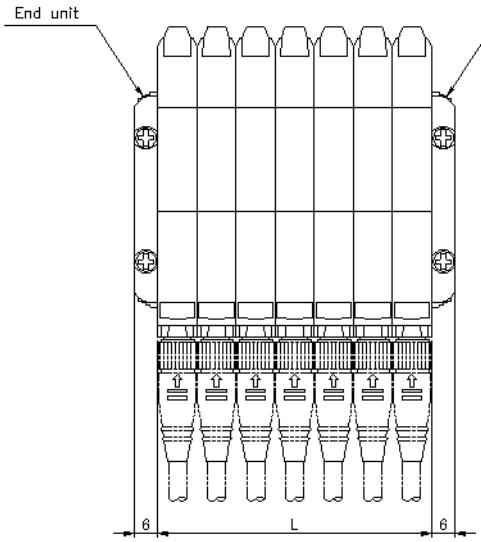


| | |
|---|---|
| ① | – |
| ② | White OUT2 |
| ③ | – |
| ④ | Black OUT1 |

M8 Connector cable(Option)




| | L(m) |
|---|---|
| OP-73864 | 2 |
| OP-73865 | 10 |

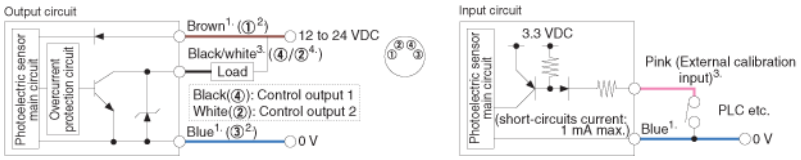



| No. of units | L(mm) |
|---|---|
| 1 | 19.6 |
| 2 | 29.4 |
| 3 | 39.2 |
| 4 | 49.0 |
| 5 | 58.8 |
| 6 | 68.6 |
| 7 | 78.4 |
| 8 | 88.2 |
| 9 | 98.0 |
| 10 | 107.8 |
| 11 | 117.6 |
| 12 | 127.4 |
| 13 | 137.2 |
| 14 | 147.0 |
| 15 | 156.8 |
| 16 | 166.6 |

# I/O Circuit Connection diagram

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

## I/O Circuit




1. FS-V33 only. 2. FS-V33C only. 3. FS-V33/34 only. 4. FS-V33C/34C only.