

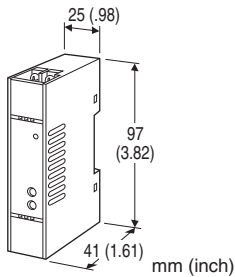
Super-mini Terminal Block Signal Conditioners M5-UNIT

SIGNAL TRANSMITTER

(high speed response 30μsec.)

Functions & Features

- Converts a DC input into an isolated DC signal
- Ultra-high speed response 30 μsec.
- High-density mounting
- Power LED



MODEL: M5VF2-[1][2]-R[3]

ORDERING INFORMATION

- Code number: M5VF2-[1][2]-R[3]
Specify a code from below for each [1] through [3].
(e.g. M5VF2-4W4W-R/Q)
- Specify the specification for option code /Q
(e.g. /C01/V01/S01)

[1] INPUT

Voltage

- 4: 0 - 10 V DC (Input resistance 1 MΩ min.)
- 5: 0 - 5 V DC (Input resistance 1 MΩ min.)
- 6: 1 - 5 V DC (Input resistance 1 MΩ min.)
- 4W: -10 - +10 V DC (Input resistance 1 MΩ min.)
- 5W: -5 - +5 V DC (Input resistance 1 MΩ min.)

[2] OUTPUT

Voltage

- 4: 0 - 10 V DC (Load resistance 5000 Ω min.)
- 5: 0 - 5 V DC (Load resistance 2500 Ω min.)
- 6: 1 - 5 V DC (Load resistance 2500 Ω min.)
- 4W: -10 - +10 V DC (Load resistance 5000 Ω min.)
- 5W: -5 - +5 V DC (Load resistance 2500 Ω min.)

POWER INPUT

DC Power

R: 24 V DC

(Operational voltage range 24 V ±10 %, ripple 10 %p-p max.)

[3] OPTIONS

blank: none

/Q: With options (specify the specification)

SPECIFICATIONS OF OPTION: Q (multiple selections)

COATING (For the detail, refer to M-System's web site.)

- /C01: Silicone coating
- /C02: Polyurethane coating
- /C03: Rubber coating

ADJUSTMENT

/V01: Multi-turn fine adjustment

TERMINAL SCREW MATERIAL

/S01: Stainless steel

GENERAL SPECIFICATIONS

Construction: Terminal block

Connection: M3.5 screw terminals (torque 0.8 N·m)

Screw terminal: Nickel-plated steel (standard) or stainless steel

Housing material: Flame-resistant resin (black)

Isolation: Input to output to power

Overrange output: Approx. -10 to +110 % at 1 - 5 V

Zero adjustment: -3 - +3 % (front)

Span adjustment: 97 - 103 % (front)

Power LED: Green LED turns on when the power is supplied.

INPUT SPECIFICATIONS

- DC Voltage

Input resistance: 1 MΩ min.

OUTPUT SPECIFICATIONS

- DC Voltage

Parallel load capacitance: ≤ 2000 pF

INSTALLATION

Power consumption

- DC: ≤ 1.0 W

Operating temperature: -5 to +55°C (23 to 131°F)

Operating humidity: 5 to 90 %RH (non-condensing)

Mounting: DIN rail

Weight: 80 g (2.8 oz)

PERFORMANCE in percentage of span

Accuracy: $\pm 0.1\%$

Temp. coefficient: $\pm 0.015\%/^{\circ}\text{C}$ ($\pm 0.008\%/^{\circ}\text{F}$)

Frequency characteristics: 12 kHz, -3 dB

Response time: Approx. 30 $\mu\text{sec.}$ (0 - 90 %)

Line voltage effect: $\pm 0.1\%$ over voltage range

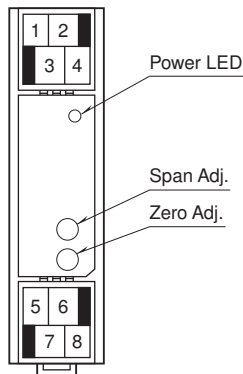
Insulation resistance: $\geq 100\text{ M}\Omega$ with 500 V DC

Dielectric strength: 2000 V AC @1 minute

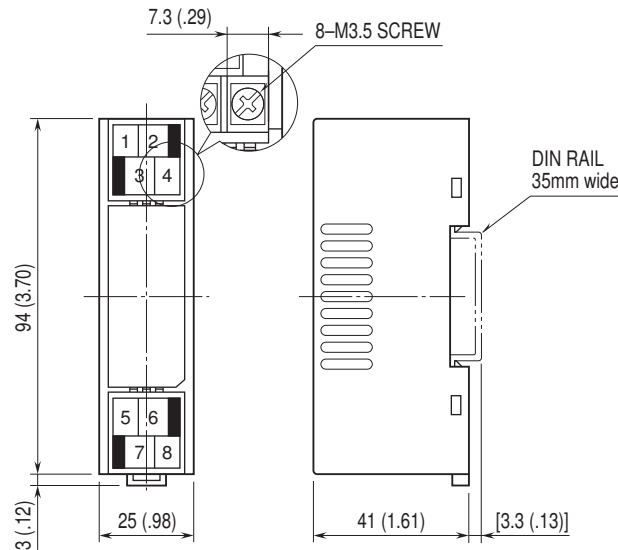
(input or output to power to ground)

1500 V AC @1 minute (input to output)

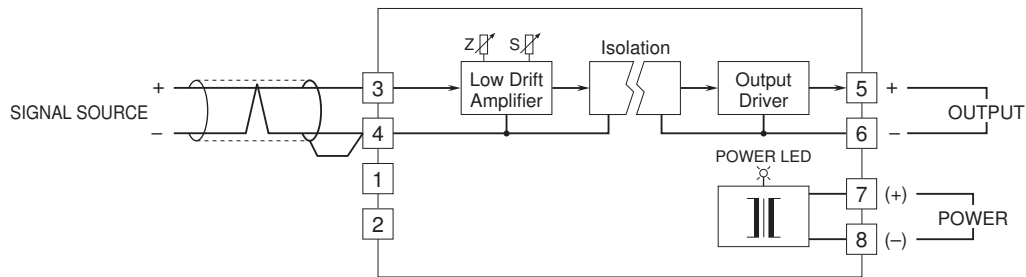
EXTERNAL VIEW



EXTERNAL DIMENSIONS & TERMINAL ASSIGNMENTS unit: mm (inch)



• When mounting, no extra space is needed between units.

SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM

This unit, by its fast-response feature, is not designed to eliminate noise present in the input signal.
Use a shielded twisted-pair cable for preventing noise entering through the input wiring.



Specifications are subject to change without notice.