

Super-mini Signal Conditioners Mini-M Series

SIGNAL TRANSMITTER

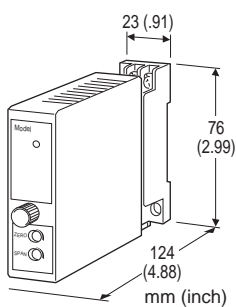
(field-configurable)

Functions & Features

- Converts DC input from a sensor into a standard process signal
- DIP switch configurable input & output range and response time
- High-density mounting
- Power indicator LED

Typical Applications

- Isolation between control room and field instrumentation



MODEL: M2FV-[1][2]

ORDERING INFORMATION

- Code number: M2FV-[1][2]

Specify a code from below for each [1] and [2].

(e.g. M2FV-M2/CE/Q)

- Specify the specification for option code /Q

(e.g. /C01/S01)

Orders will be shipped at default factory settings for Input (4 - 20mA) and Output (4 - 20mA) and Response time (Standard response).

INPUT - Field-selectable

Current

4 - 20 mA DC (Input resistance 50 Ω)

0 - 20 mA DC (Input resistance 50 Ω)

Voltage

0 - 10 V DC (Input resistance 100 k Ω min.)

2 - 10 V DC (Input resistance 100 k Ω min.)

0 - 5 V DC (Input resistance 100 k Ω min.)

1 - 5 V DC (Input resistance 100 k Ω min.)

OUTPUT - Field-selectable

Current

4 - 20 mA DC (Load resistance 750 Ω max.)

0 - 20 mA DC (Load resistance 750 Ω max.)

Voltage

0 - 10 V DC (Load resistance 10 k Ω min.)

2 - 10 V DC (Load resistance 10 k Ω min.)

0 - 5 V DC (Load resistance 5000 Ω min.)

1 - 5 V DC (Load resistance 5000 Ω min.)

[1] POWER INPUT

AC Power

M: 85 - 264 V AC (Operational voltage range 85 - 264 V, 47 - 66 Hz)

(Select 'N' for 'Standards & Approvals' code.)

M2: 100 - 240 V AC (Operational voltage range 85 - 264 V, 47 - 66 Hz)

DC Power

R: 24 V DC

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

R2: 11 - 27 V DC

(Operational voltage range 11 - 27 V, ripple 10 %p-p max.)

(Select 'N' for 'Standards & Approvals' code.)

P: 110 V DC

(Operational voltage range 85 - 150 V, ripple 10 %p-p max.)

[2] OPTIONS (multiple selections)

Standards & Approvals (must be specified)

/N: Without CE

/CE: CE marking

Other Options

blank: none

/Q: Option other than the above (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

TERMINAL SCREW MATERIAL

/S01: Stainless steel

GENERAL SPECIFICATIONS

Construction: Plug-in

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

Screw terminal: Chromated steel (standard) or stainless steel

Housing material: Flame-resistant resin (black)

Isolation: Input to output to power

Overrange output: Approx. -10 to +120 %

Zero adjustment: -2 to +2 % (front)

Span adjustment: 98 to 102 % (front)

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



INPUT SPECIFICATIONS

- DC Current: Input resistor incorporated

INSTALLATION

Power Consumption

•AC:

Approx. 3 VA at 100 V

Approx. 4 VA at 200 V

Approx. 5 VA at 264 V

•DC: Approx. 3 W

Operating temperature: -30 to +60°C (-22 to +140°F)

Operating humidity: 30 to 90 %RH (non-condensing)

Mounting: Surface or DIN rail

Weight: 150 g (0.33 lb)

PERFORMANCE in percentage of span

Accuracy: $\pm 0.1\%$

I/O setting accuracy: $\pm 0.2\%$

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

Response time:

Standard response ≤ 0.5 sec. (0 - 90 %)

Fast response ≤ 30 msec. (0 - 90 %)

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

Insulation resistance: ≥ 100 M Ω with 500 V DC

Dielectric strength: 2000 V AC @1 minute (input to output to power to ground)

STANDARDS & APPROVALS

CE conformity:

EMC Directive (2004/108/EC)

EMI EN 61000-6-4: 2007/A1: 2011

EMS EN 61000-6-2: 2005

Low Voltage Directive (2006/95/EC)

EN 61010-1: 2010

Measurement Category II

Pollution degree 2

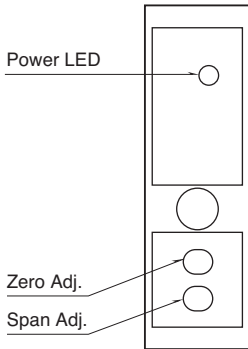
Input or output to power: Reinforced insulation (300 V)

Input to output: Basic insulation (300 V)

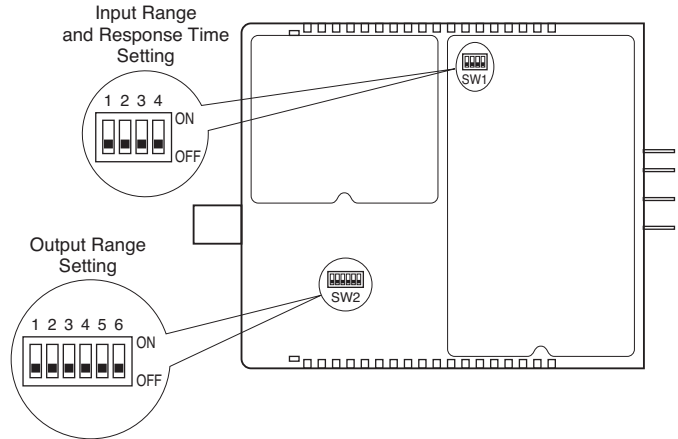


EXTERNAL VIEW

■ FRONT VIEW

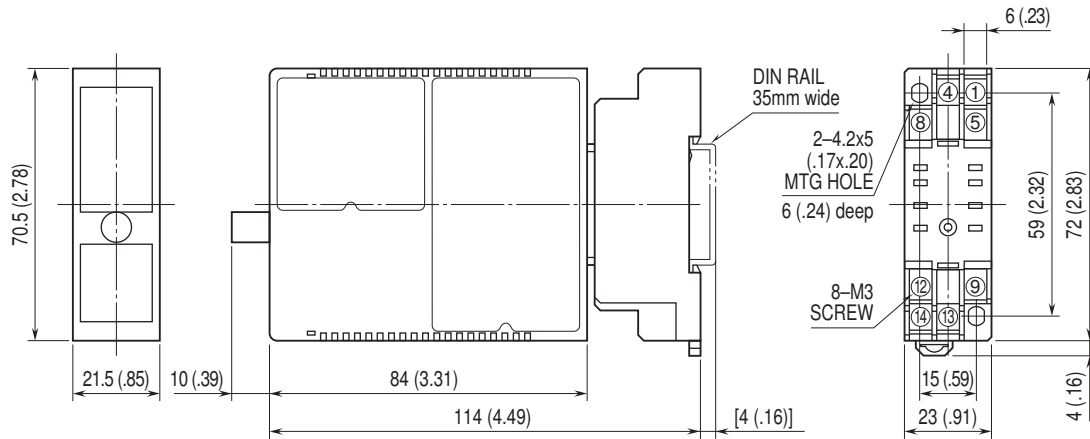


■ SIDE VIEW



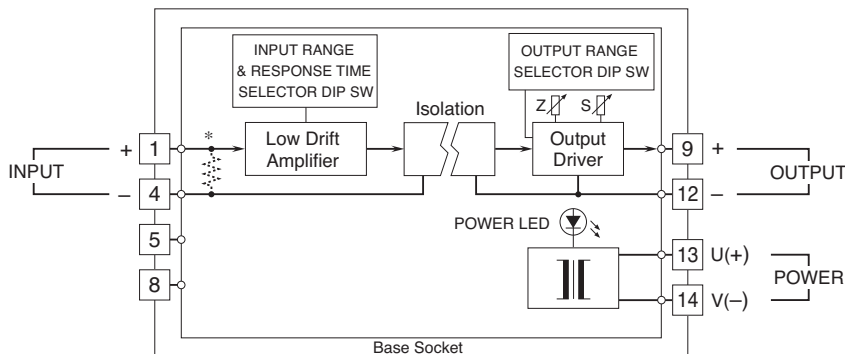
Refer to the instruction manual for detailed procedures.

DIMENSIONS unit: mm (inch)



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

SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



* Input shunt resistor incorporated for current input.



Specifications are subject to change without notice.



幸託有限公司
XIN TOP CORPORATION

TEL : (02)2598-1199
FAX : (02)2596-2331

E-mail : info@xintop.com
Website : www.xintop.com