

Models Available

TH-2M Slim Analogue Signal Conditioner
100-240Vac Auxiliary Powered

TH-5M Slim Analogue Signal Conditioner
24Vdc Auxiliary Powered

TW-4M-1-N Analogue Signal Conditioner
100-240Vac Powered

TW-4M-4-N Analogue Signal Conditioner
24Vdc Powered

Product Features

- Convert and isolate process signals
- User selectable input and output
- Linearity 0.1% full scale
- Adjustable 'span' and 'zero'
- DIN rail mounting enclosure
- 1.5kV rms 50Hz 1 minute isolation between input / output / auxiliary
- Screw type terminals
- Fingerproof terminal cover included

Analogue Signal Conditioners

Analogue signal conditioners isolate and convert DC voltage or current signals. The signal conditioner converts the DC voltage or DC mA signal to either a DC mA or DC voltage output which is directly proportional to the input signal value.

The user can select the input range and output range through the DIP switches on the front of the isolator. These signal conditioners offer isolation between the DC input signal and the DC output which can be used to prevent earth loops.

The 1.5kV isolated output signals can then be fed to analogue meters, digital meters or PLCs.

For converting and isolating DC process signals

Specification

Linearity:

- < 0.1% full scale

Accuracy:

- < 1% full scale after switches adjusted

Temperature Variation:

- 0.02% full scale / °C

Response Time:

- TH-2M/TH-5M < 50ms for 0-90% input
- TW-4M < 50ms or 500ms

Insulation Resistance:

- > 100Mohm between input / output / auxiliary

Isolation:

- 1.5kV rms 50Hz for 1 minute between input / output / auxiliary

Power Supply:

- TH-5M/TW-4M-4-N 24Vdc $\pm 10\%$
- TH-2M/TW-4M-1-N 100-240Vac $\pm 10\%$

Power Consumption:

- < 80mA at 24Vdc
- < 50mA at 100-240Vac

Operating Temperature:

- -5°C to 50°C

Operating Humidity:

- < 90% non-condensing

Mounting:

- 35mm DIN rail (DIN-EN 50022)

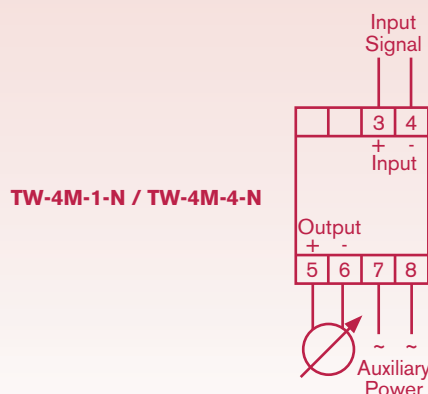
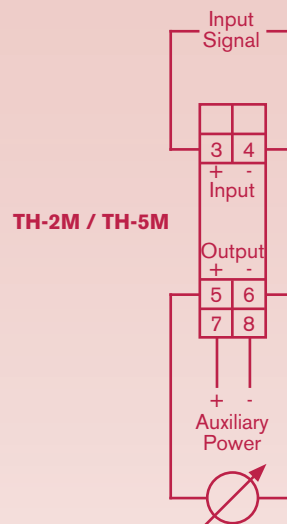
Weight:

- TH-2M/TH-5M 80g, TW-4M 130g

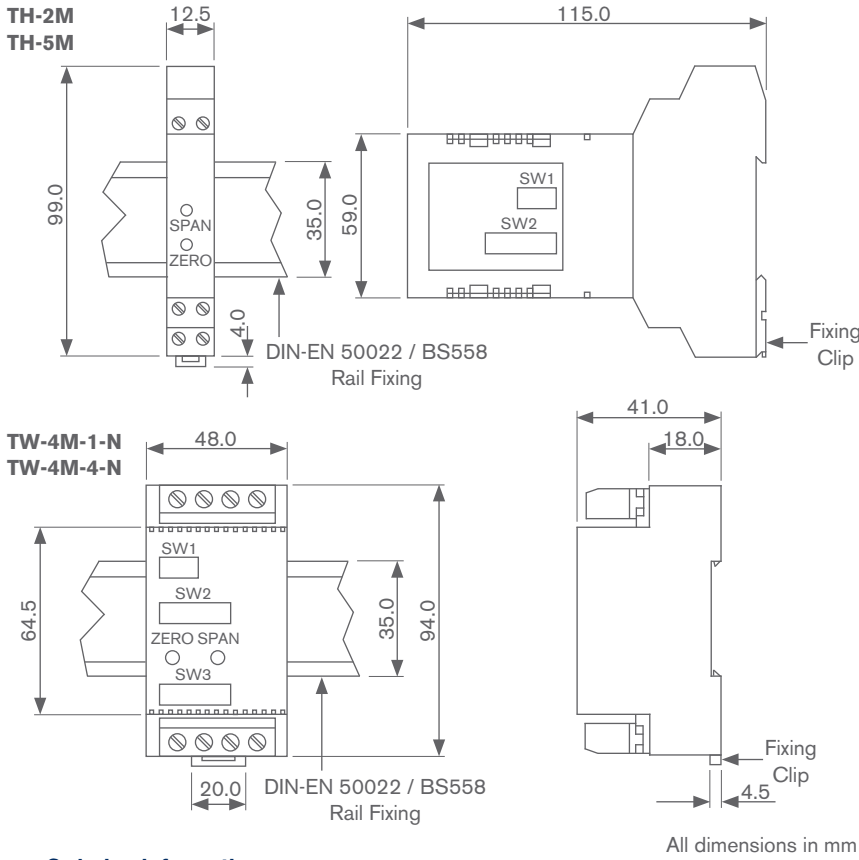
Markings:

- CE marked

Connections



Dimensions



Ordering information

Code	Description
TH-2M	Slim Analogue Signal Conditioner - 100-240Vac
TH-5M	Slim Analogue Signal Conditioner - 24Vdc
TW-4M-1-N	Analogue Signal Conditioner - 100-240Vac
TW-4M-4-N	Analogue Signal Conditioner - 24Vdc

Example TH-5M

Note: Calibration can be factory set at a specific input and output if required (specify when ordering).

Resistance Values

Input	Input Resistance
0-5Vdc 1-5Vdc 0-10Vdc 0-60mV ±5Vdc** ±10Vdc**	More than 1Mohm
4-20mA 0-20mA	250 ohms

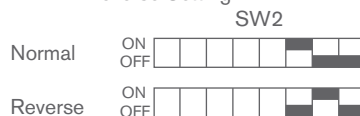
Output	Allowable Load Resistance
0 to 5Vdc 1 to 5Vdc -2 to +2Vdc * -2.5 to +2.5Vdc * -5 to +5Vdc 0 to 4Vdc *	More than 2kohm
0 to 10Vdc -10 to +10Vdc	More than 4kohm
4 to 20mA 0 to 20mA **	Less than 550 ohms

* Only on TH-2M / TH-5M ** Only on TW-4M

TW-4M Response Time



TW-4M Reverse Setting



Range Settings

TH-2M / TH-5M Input

Range	SW1	SW2
0-5V	ON OFF	
1-5V	ON OFF	
0-10V	ON OFF	
0-60mV	ON OFF	
4-20mA	ON OFF	
0-20mA	ON OFF	

TH-2M / TH-5M Output

Range	SW1	SW2
0-5V		ON OFF
1-5V		ON OFF
0-10V		ON OFF
±2V		ON OFF
±2.5V		ON OFF
±5V		ON OFF
±10V		ON OFF
0-4V		ON OFF
4-20mA		ON OFF

TW-4M Input

Range	SW1	SW2
0-5V	ON OFF	
0-10V	ON OFF	
0-60mV	ON OFF	
1-5V	ON OFF	
±5V	ON OFF	
±10V	ON OFF	
0-20mA	ON OFF	
4-20mA	ON OFF	

TW-4M Output

Range	SW3
0-5V	ON OFF
0-10V	ON OFF
1-5V	ON OFF
±5V	ON OFF
±10V	ON OFF
0-20mA	ON OFF
4-20mA	ON OFF

Specification subject to change without notice.