

# Thin type universal isolate transducer

## MODEL TH-2M, 5M

**NEW!**



**CE**  
(Only DC Power)

### Input Specification

Input	Input resistance	Input allowable range
0 to 5V DC	More than 1MΩ	-50 to +150% F.S
1 to 5V DC		
0 to 10V DC		
0 to 0.06V DC	250Ω	
4 to 20mA DC		
0 to 20mA DC		

### Output Specification

Output	Load resistance
0 to 5V DC	More than 2KΩ
1 to 5V DC	
0 to 10V DC	
-2 to 2V DC	
-2.5 to 2.5V DC	
-5 to 5V DC	
-10 to 10V DC	
0 to 4V DC	Less than 550Ω
4 to 20mA DC	

### General Specifications

Range setting before shipment: Input;1to 5V, Output;4 to 20mA  
 Error caused by input range setting change:  $\pm 1\%$ F.S  
 Error caused by output range setting change:  $\pm 1\%$ F.S  
 Base accuracy:  $\pm 0.1\%$  F.S (at  $25 \pm 2^\circ\text{C}$ )  
 Load resistance variation:  $\pm 0.06\%$  F.S  
 Power supply variation:  $\pm 0.06\%$  F.S  
 Temperature characteristic:  $\pm 0.02\%$  F.S/ $^\circ\text{C}$   
 Response time: Less than 50msec TYP (At AC power, 0  $\rightarrow$  90%)  
 Response time: Less than 10msec TYP (At DC power, 0  $\rightarrow$  90%)  
 Front adjustments: More than  $\pm 5\%$ F.S (zero, span)  
 Insulation resistance: Between the input and output/power supply  
 More than 100MΩ at 500V DC  
 Dielectric strength: Between the input and output/power supply  
 For 1 min. at 1500V AC  
 Power supply voltage: 100 to 240V AC  $\pm 10\%$   
 24V DC  $\pm 10\%$   
 Consuming current: Less than 30mA (at 100V AC)  
 Less than 60mA (at 24V DC)  
 Operating ambient temperature:  $-5$  to  $50^\circ\text{C}$   
 Operating ambient humidity: Less than 90%RH (No-condensing)  
 Storage temperature: Within  $-10$  to  $70^\circ\text{C}$   
 Storage humidity: Less than 60%RH (No-condensing)  
 Case material: Black PC 94V-2  
 Weight: Approx. 80g  
 Applicable standards: TH-5M (24V DC POWER)  
 EN61326: 1997 +A1: 1998 +A2: 2001  
 Only in the case of lines < 30m.

### Features

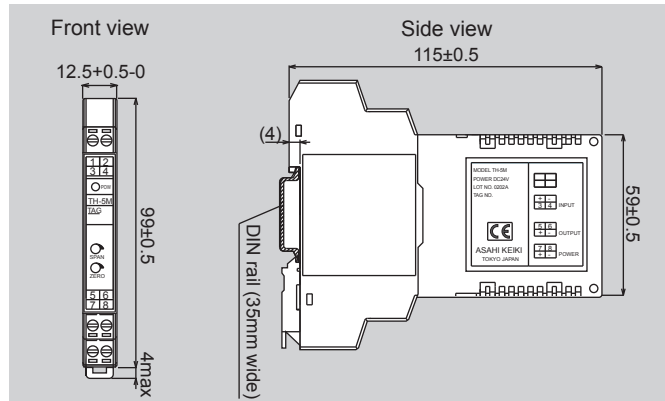
- AC power supply 100 to 240V AC
- DIN rail mounting
- Input/Output/Power supply isolated
- Can change input and output by dip switch

### Ordering Code

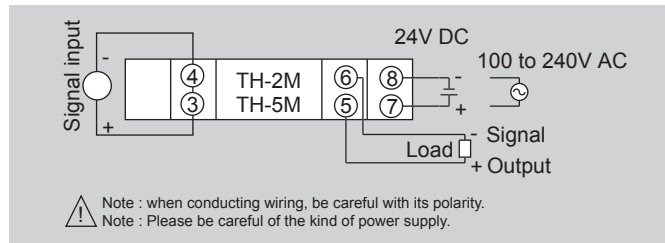
TH-M  
 Power specification  
 [ 2 100 to 240V AC  
 [ 5 24V DC

Example : TH-M

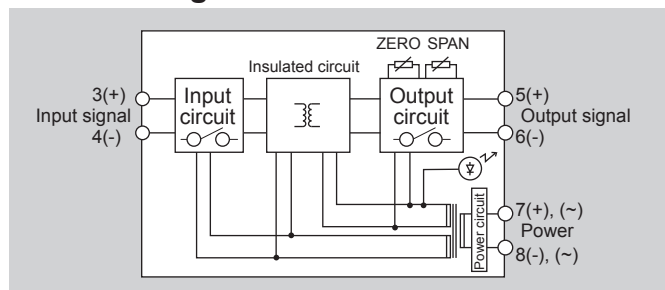
### Dimensions



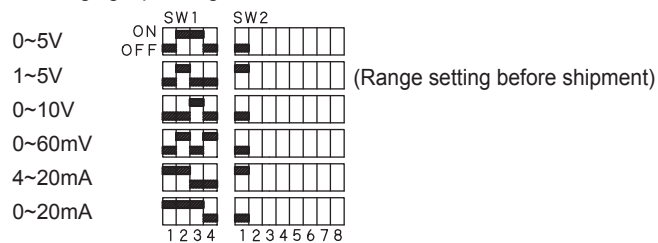
### Connection Diagram



### Block Diagram



#### 1. Changing input range



#### 2. Changing output range

