

Thin type universal isolate transducer

MODEL TH-2M, 5M



■ Features

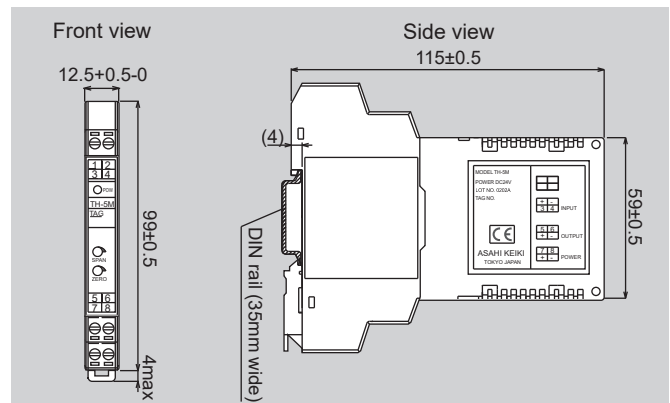
- AC power supply 100 to 240V AC
- DIN rail mounting
- Input/Output/Power supply isolated
- Can change input and output by dip switch

■ Ordering Code

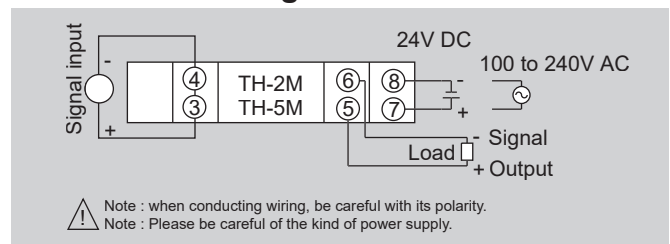
TH-☐M
 Power specification
☐ 2 100 to 240V AC
☐ 5 24V DC

Example : TH-☒M

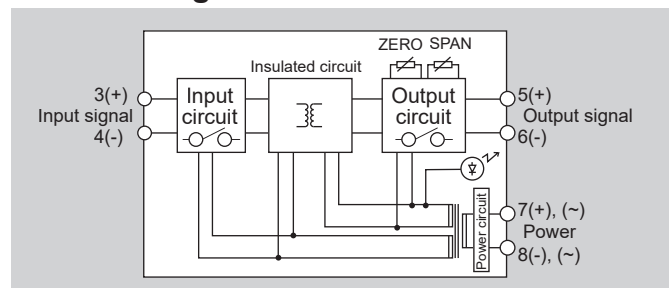
■ Dimensions



■ Connection Diagram



■ Block Diagram



■ 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		
4 to 20mA DC	250Ω	
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°C
 Operating ambient humidity: Less than 90%RH (No-condensing)
 Storage temperature: Within -10 to 70°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)
 EN61326-1
 Only in the case of lines < 30m.
 EN IEC 63000

1. Changing input range

	SW1	SW2	
0~5V	ON	OFF	
1~5V	OFF	ON	
0~10V	OFF	OFF	
0~60mV	ON	ON	
4~20mA	OFF	ON	
0~20mA	ON	ON	
	1 2 3 4	1 2 3 4 5 6 7 8	(Range setting before shipment)

2. Changing output range

	SW1	SW2	
0~5V	ON	OFF	
1~5V	OFF	ON	
0~10V	OFF	OFF	
-2~2V	ON	ON	
-2.5~2.5V	OFF	ON	
-5~5V	ON	ON	
-10~10V	OFF	ON	
0~4V	ON	ON	
4~20mA	ON	ON	
	1 2 3 4	1 2 3 4 5 6 7 8	(Range setting before shipment)