# Thin type universal isolate transducer MODEL TH-2M, 5M





### 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		
4 to 20mA DC	2500	
0 to 20mA DC	72002	

### Output Specification

Output	Load resistance
0 to 5V DC	
1 to 5V DC	
0 to 10V DC	
-2 to 2V DC	More than 2KO
-2.5 to 2.5V DC	
-5 to 5V DC	7
-10 to 10V DC	
0 to 4V DC	
4 to 20mA DC	Less than 550Ω

### General Specifications

	incutions	
Range setting before shipment: Input;1to 5V, Output;4 to 20mA Error caused by input range setting change: ±1%F.S		
, j	nge setting change: ±1%F.S	
Base accuracy:		
Load resistance variation:		
Power supply variation:	±0.06% F.S	
Temperature characteristic: ±0.02% F.S/°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 ±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 ±10%	
	24V DC ±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	

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: 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

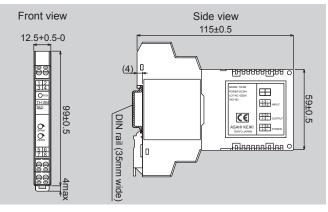
Ordering Code

ТН–⊒М

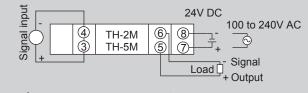
Power specification 2 100 to 240V AC 5 24V DC

Example : TH-5M

### Dimensions

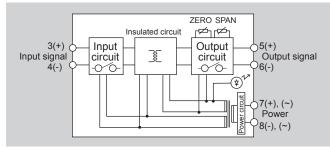


### Connection Diagram

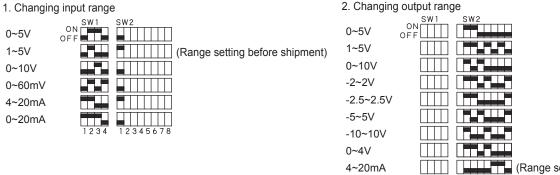


Note : when conducting wiring, be careful with its polarity. Note : Please be careful of the kind of power supply.

### Block Diagram



### 2. Changing output range



(Range setting before shipment)

# Watanabe Electric Industry Co.,Ltd