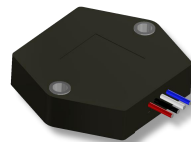




# Low-cost Environmental Resistant Tilt Sensor with Digital Filter 「THD4000Z-R」

In Development



## ■ Product Features

**Environmental Resistant**

**High-Accuracy**

**Customizable**

### ◆ Environmental Resistant

Water-proof/Dirt-proof 【IP67】

EM wave resistance 100V/m

### ◆ High-Precision

Absolute Linearity  $\pm 1\%FS$

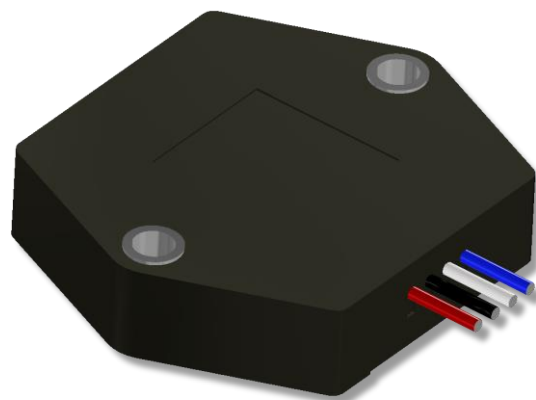
Horizontal Temp. Characteristics  $\pm 0.2^\circ$

### ◆ Customizable

Selectable Electrical Travel  $\pm 10 \sim \pm 60^\circ$

Horizontal Output Zero Set Function(Optional)

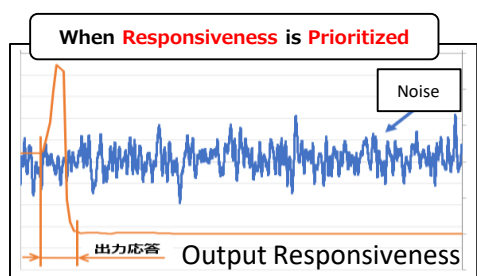
※Various customizations available in small quantities



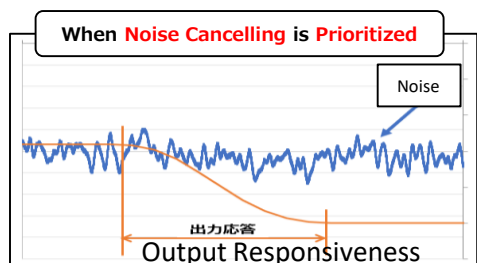
※Product Image

## ■ Digital Filter Feature

### THD2000Z Series

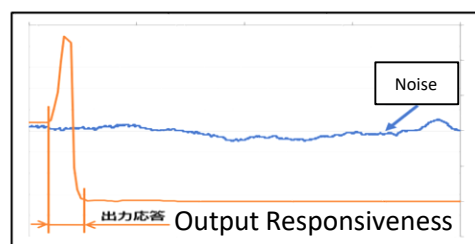


There is a trade off between responsiveness and noise cancellation



Improved

### THD4000Z-R Series



**Simultaneous high-responsiveness and noise cancellation**

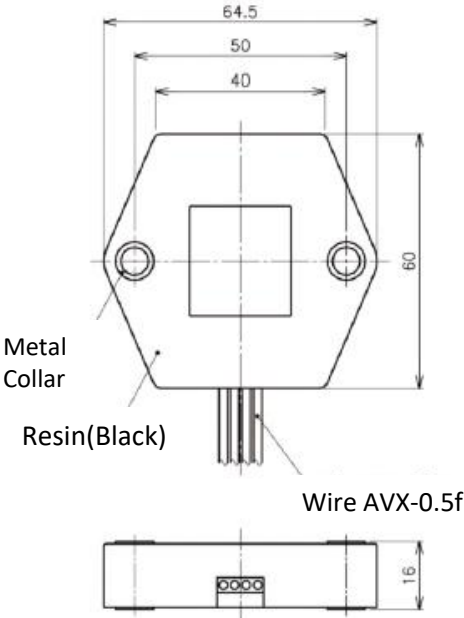
## ■ Applications

Industry	Function
Construction Machine	Automobile body angle detection
Construction Machine	Boom angle detection
Civil Engineering	Building angle detection




■ Tentative Specifications

Items		Specifications
Basic Characteristics	Effective Electrical Travel	$\pm 10, 20, 30, 45, 60^\circ$
	Absolute Linearity	$\pm 1.0\%FS$
	Input Voltage	DC $5 \pm 0.25V$
	Output Type	Voltage Ratio
	Output Range	10%~90%Vin
	Temp. Characteristics	$\pm 0.2^\circ$ (Horizontal)
	Moutning	M6 mounting screws AWG#20 wire 4 strands
Environment Features	Operating Temp.	-30~85°C
	EM Wave Resistance	100V/m(ISO11452-2,-3)
	EM Field Strength	CISPR25
	ESD	$\pm 16kV$ (IEC61000-4-2)
	IP Rating	IP67

■ Outer Dimension



■ 2 Axis Tilt Sensor Lineups

Items	THD2000Z	THD4000Z-R	ESC3000Z
Shape		<div>In Development</div> 	
Dimensions	ø40 x H10mm	W60 x D64.5 x H16	W90 x D70 x H22.5
Absolute Linearity	$\pm 1.0\%FS$	$\pm 1.0\%FS$	$\pm 0.5\%FS$
Temp. Characteristics	$\pm 0.2^\circ$ (Horizontal) -30~+85°C (25°C Std.)	$\pm 0.2^\circ$ (Horizontal) -30~+85°C (25°C Standard)	$\pm 0.2^\circ$ (Horizontal) -30~+85°C (25°C Standard)
IP Rating	IP40	IP67	IP67
Mass	Approx. 15g	Approx. 80g	Approx. 300g