

# MIDORI's Rotary Encoder CE58M



Concept

High Resolution

×

Hollow shaft

×

Robust

Future

Single-turn : 17bit  
Multi-turn : 16bit

⇒Precision detecting of angle by absolute type.

Thin & Hollow shaft type

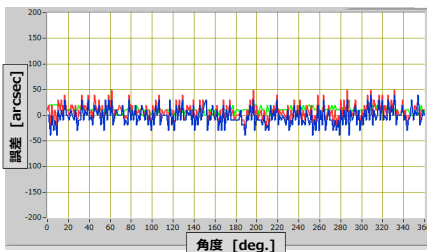
⇒Good for down-sizing when it is installed to the machine.

Waterproof IP65

⇒It can be used under oil-mist condition

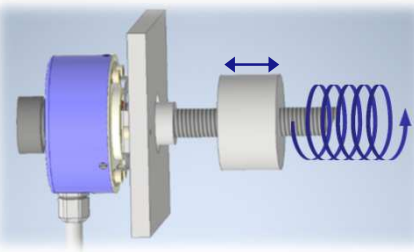
## Various high functions are available.

### High Accuracy



- Resolution 17bit/rotation
- Accuracy  $\pm 0.044^\circ$

### Detecting Multi-turn



- Multi turn
- Multi turn count 16bit
- Detecting 65536 rotations

### Water-drip proof




- IP rating : IP65

## MAIN APPLICATIONS

Market	User	Installed	Application
Special vehicle	A Special vehicle maker	Aerial Work Platform	Control of swiveling
Civil engineering & construction	A Measuring equipment maker	Depth measuring device	Measuring depth of pit excavating
Geological survey	A Geological survey equipment maker	Landside monitoring system	Monitoring crack and landside of the ground
Industrial machinery	A processing machine maker	Metal working machine	Detecting position of XY stage.
Construction machinery	A Construction machine maker	Large crane	Control of swiveling

⇒For details, please refer "Usage Case" flyer.

# Finding a solution to problem by using CE58M

<u>Problem</u>	<u>Customer Wish</u>	<u>MIDORI's Suggestion</u>
The optical encoder which we use is not worked sometime by splashing machine oil.	 Need the encoder which works even though it is splashed machine oil.	CE58M is water-drip proof type, IP65. It can be used under oil-mist conduction.
There is misalignment of measurement value between the Drive shaft and the Encoder.	 Want to use without coupling.	Just joint the rotational shaft to the hollow shaft of CE58M, it can be measured rotational angle efficiently.
No room to install the Encoder in our machine.	 Need an Encoder which is not obstructed if it is installed into the machine.	CE58M is 27.5mm thickness only so it will be realize down-sizing of the drive shaft side.
The sensor which we use is not worked sometime by shock and vibration from the machine.	 Need a Sensor which can be used under shock and vibration conditions.	CE58M is robust design product so it is output is stable if it is applied external shock and vibration.
The encoder which we use cannot be measure exact rotational angle position.	 Want to measure finely both of single turn and multi turn.	Single turn : 17bit Multi turn : 16bit. CE58M can measure with high resolution.
The encoder which we use has to troublesomely be done return to origin operation.	 Want an Encoder (Multi-turn) which is without return to origin operation.	CE58M has battery back-up function if the power is off.
It is difficult to set the current position data of the Encoder which we use,	 Want to reset the current position data of an Encoder easily.	CE58M has zero-reset function so it is easy to adjust at the feild.

Please contact ;

**MIDORI PRECISIONS CO.,LTD.**

3-2-8, Shinmeidai Hamurashi,

Tokyo 205-0023, JAPAN

Tel: +81-42-554-5650

E-mail: overseas@midori.co.jp