



# 58 mm Diameter Incremental Rotary Encoders

## E58 Series

### PRODUCT MANUAL

**Be sure to follow the instructions and precautions in the instruction manual, other manuals, and the Autonics website.**

The specifications, dimensions, and other information in this document are subject to change without notice for product improvement. Certain models may be discontinued without notice.

#### Safety Precautions

- 'Safety Precautions' are provided to ensure safe and proper use of the product and to prevent accidents or hazards. Please make sure to follow them carefully.
- ⚠ symbol indicates a caution, warning of potential hazards under certain conditions..

**⚠ Warning** Failure to follow instructions may result in serious injury or death.

- 01. Fail-safe device must be installed when using the product in applications that may cause serious injuries or property loss. (E.g. nuclear control systems, medical equipment, ships, vehicles, railroads, aircraft, combustion devices, safety devices, security systems, disaster prevention devices, etc.)**  
Failure to do so may result in personal injury, property loss or fire.
- 02. Do not use or store the product in environments containing flammable, explosive, or corrosive gases, or in places exposed to high humidity, direct sunlight, radiant heat, vibration, shock, or salt.**  
Failure to do so may result in explosion or fire.
- 03. Install the product on a device panel before use.**  
Failure to do so may result in fire.
- 04. Do not connect, repair, or inspect the product while connected to a power source.**  
Failure to do so may result in fire.
- 05. Check the connection diagram before wiring.**  
Failure to do so may result in fire.
- 06. Do not make any unauthorized modifications to the product.**  
Failure to do so may result in fire.

**⚠ Caution** Failure to follow instructions may result in injury or product damage.

- 01. Use the product within its rated specifications and performance limits.**  
Failure to do so may result in fire or product damage.
- 02. Do not short-circuit the load.**  
Failure to do so may result in fire.
- 03. Do not use the product near devices that generate strong magnetic fields or electrical noise, or in environments with strong alkaline or acidic substances.**  
Failure to do so may result in product damage.

#### Cautions During Use

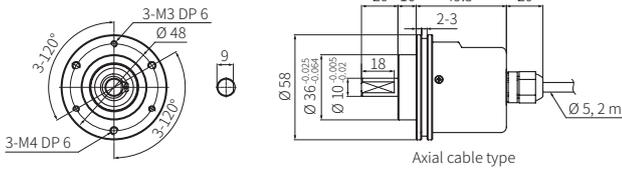
- Make sure to follow the instructions in 'Cautions During Use'.  
Failure to do so may result in unexpected accidents.
- Power input should be supplied from an isolated and limited voltage/current source, or from a Class 2 or SELV power supply..
- When using noise-generating devices (e.g. switching regulators, inverters, servo motors, etc.), ground the shielded wire to F.G.
- Ground the shielded wire to F.G.
- When supplying power with an SMPS, ground the F.G. terminal and connect a noise suppression capacitor between the 0 V and F.G. terminals.
- To prevent surges and inductive noise, separate the wiring from high-voltage and power lines, and keep wiring lengths as short as possible.
- For line driver models, always use twisted-pair cables with sealing, and use receivers suitable for RS-422A communication on the receiver side.
- When extending wiring, check the cable type and response frequency, as line resistance and line-to-line capacitance may cause increased residual voltage or waveform distortion.
- This product may be used in the following environmental conditions.
  - Indoors (within rated environmental performance specifications)
  - Altitude: up to 2,000 m
  - Pollution Degree 2
  - Installation Category II



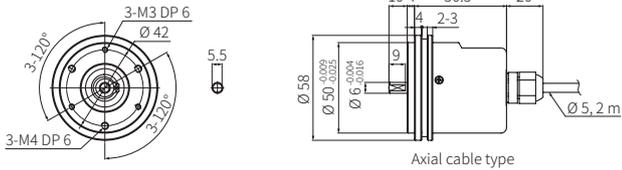
## Dimensions

- Unit: mm (Refer to the CAD files from the Autonics website for exact dimensions)
- Cable type, connector type shown as reference.  
Refer to 'Specifications' for detailed specifications of cable, wire and connector.

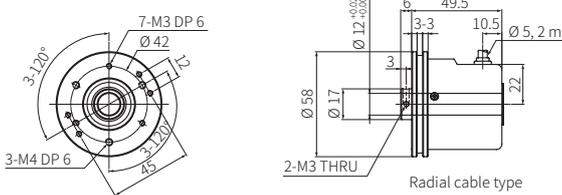
### ■ Shaft Clamping Type



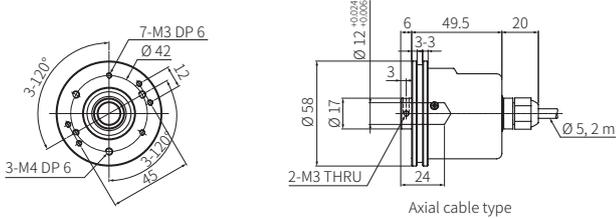
### ■ Shaft Synchro Type



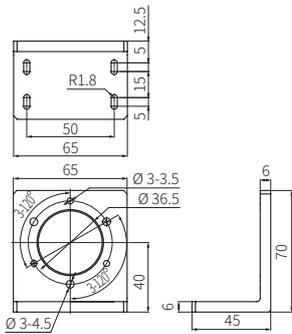
### ■ Hollow Type



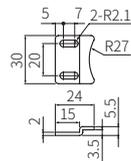
### ■ Hollow Built-in Type



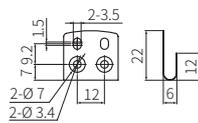
### ■ Bracket (E58SC)



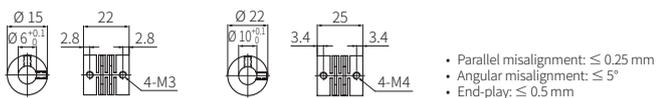
### ■ Bracket (E58SS)



### ■ Bracket (E58H / HB)



### ■ Coupling



## Sold Separately: M17 Connector Cable

- For more information, refer to the M17 Connector Cable Product Manual.

Appearance	Power supply	Connector 1	Connector 2	Length	Model
	DC	M17 (Socket-Female) 6-pin	6-wire	2 m	CID6S-2
				5 m	CID6S-5
				10 m	CID6S-10
				15 m	CID6S-15

Appearance	Power supply	Connector 1	Connector 2	Length	Model
	DC	M17 (Socket-Female) 9-pin	9-wire	2 m	CID9S-2
				5 m	CID9S-5
				10 m	CID9S-10