

58 mm Diameter Sine Wave Incremental Rotary Encoders



E58-A Series CATALOG

For your safety, read and follow the considerations written in the instruction manual, other manuals and Autonics website.

The specifications, dimensions, etc. are subject to change without notice for product improvement. Some models may be discontinued without notice.

Features

- Tapered shaft
- Analog sine wave operational amplifier (OP Amp.) output
- Power supply: 5 VDC \pm 5%

Ordering Information

This is only for reference, the actual product does not support all combinations. For selecting the specified model, follow the Autonics website.

E58 S 9.25 - 2048 - 10 - A - 5 - ①

① Connection

- R: Axial cable type
- S: Radial cable type

Product Components

- Product
- Bolt \times 2
- Instruction manual

Specifications

Model	E58S9.25-2048-10-A-5-□
Resolution	2,048 PPR
Control output	Analog sine wave OP Amp. output
Output phase	A, \bar{A} , B, \bar{B} , Z, \bar{Z} , C, \bar{C} , D, \bar{D}
Output current	\leq 10 mA
Output voltage V_{P-P}	0.5 \pm 0.1 VDC \approx
DC OFFSET V_{ref}	2.5 \pm 0.3 VDC \approx
Max. response frequency	200 kHz
Max. allowable revolution	6,000 rpm
Shaft	Taper shaft \varnothing 9.25 mm, Taper 1 : 10
Starting torque	\leq 0.0098 N m
Inertia moment	\leq 15 g \cdot cm ² (1.5×10^{-6} kg \cdot m ²)
Allowable shaft load	Radial: \leq 10 kgf, Thrust: \leq 2.5 kgf
Unit weight (packaged)	\approx 930 g (\approx 1.02 kg)
Approval	CE EAC
Power supply	5 VDC \approx \pm 5% (ripple P-P: \leq 5%)
Current consumption	\leq 120 mA (no load)
Insulation resistance	Between all terminals and case: \geq 100 M Ω (500 VDC \approx megger)
Dielectric strength	Between all terminals and case: 750 VAC \sim 50 / 60 Hz for 1 minute
Vibration	1 mm double amplitude at frequency 10 to 55 Hz (for 1 minute) in each X, Y, Z direction for 2 hours
Shock	\leq 100 G
Ambient temp.	-20 to 100 $^{\circ}$ C, storage: -25 to 100 $^{\circ}$ C (no freezing or condensation)
Ambient humi.	35 to 85%RH, storage: 35 to 90%RH (no freezing or condensation)
Protection rating	IP50 (IEC standard)
Connection	Axial / Radial cable type model
Cable spec.	\varnothing 6 mm, 17-wire, 9 m, shield cable
Wire spec.	AWG28 (0.08 mm, 17-core), insulator diameter: \varnothing 0.8 mm

Dimensions

- Unit: mm, For the detailed drawings, follow the Autonics website.

