

**ISC58 series**
**Solid-Shaft Incremental Rotary Encoder**

**◆ Application**

- Automatic control , control of transport vehicles, robot, X-Y labor ,printing, fork truck , CNC tooling machine and etc.

**◆ Features**

- High reliability, long life, strong anti-interference ability
- 2 quadrature output channel (A&B) + index signal
- Square flange be used in numerical control machine

**◆ Ordering Information**

| ISC58                                                     | 10 | - | 001G                                                                                                                                | - | 1024                                                                                         | ABZ | 1 | - | 5                                                                             | L                                                                                                                                                |
|-----------------------------------------------------------|----|---|-------------------------------------------------------------------------------------------------------------------------------------|---|----------------------------------------------------------------------------------------------|-----|---|---|-------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| ISC serial no.<br>housing                                 |    |   | Cable lead out :<br>C= Plug connection at side<br>G= Cable lead out at side<br>H=Plug connection behind<br>E= Cable lead out behind |   | Pulses P/R<br>100 200 250 360 400<br>500 1000 1024 2000<br>2048 2500 3600<br>4096 5000 10000 |     |   |   | Supply Voltage<br>5: 5V DC<br>5-30:5~30 VDC                                   | Output Form<br>E: Voltage<br>L: Line Driver 26LS31/TTL<br>K: Line driver 7272<br>F: Push-Pull<br>C: Open Collector NPN<br>CP: Open collector PNP |
| Shaft diameter<br>06=Φ6mm<br>08=Φ8mm<br>10=Φ10mm<br>..... |    |   |                                                                                                                                     |   | Output signal<br>A=A phase<br>B=A,Bphase<br>BZ:A, B Zphase<br>ABZ=ABZ,A-B-Z-phase            |     |   |   | Width of Z signal<br>Blank=no Z phase<br>1: TZ=1T<br>2: TZ=1/2T<br>3: TZ=1/4T |                                                                                                                                                  |

**◆ Note:**

1. Please contact sales representative to confirm the correctness and availability of the part number

**◆ Technical Specifications**

| Electrical Specification             |                     |                       |                  |                    |
|--------------------------------------|---------------------|-----------------------|------------------|--------------------|
| Output circuit                       | Open collector      | Voltage output        | Push pull output | Line driver output |
| Power Vcc                            | 5~30                | 5~30                  | 5±0.25 5~30      | 5±0.25 5~30        |
| Current                              | ≤80mA               | ≤80mA                 | ≤80mA            | ≤150mA             |
| Load current                         | 40mA                | 40mA                  | 40mA             | 60mA               |
| Max Responding Frequency             | 300kHz              | 300kHz                | 300kHz           | 300kHz             |
| Mechanical Specification             |                     |                       |                  |                    |
| Max speed(r/min)                     | Starting Torque     | Max. Shaft Loading    | Shocking         | Vibration          |
| 6000                                 | <0.05Nm             | Radial:20N, Axial:10N | 50G/11ms         | 10G 10-2000Hz      |
| Rotor Inertia                        | Working Temperature | Storage Temperature   | Protection Grade | Weight             |
| 4*10 <sup>-8</sup> Kg·m <sup>2</sup> | -30~85℃             | -35~95℃               | IP51             | 270g               |

**◆ Connection Table**

| Signal    | A     | B     | Z      | Ā     | Ē    | Ž      | Vcc | GND   | Shielded   |
|-----------|-------|-------|--------|-------|------|--------|-----|-------|------------|
| Color     | Green | White | Yellow | Brown | Gray | Orange | Red | Black | Copper net |
| 7Pin Plug | 3     | 5     | 2      | -     | -    | -      | 1   | 4     | 6          |
| 9Pin Plug | 5     | 3     | 2      | 7     | 6    | 8      | 1   | 4     | 9          |

**◆ Dimensions(mm)**
