

Intro. and Quick Selection

Incremental encoder

Absolute encoder

special position device

Accessories and Kits

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# EINS50

## Universal Solid Shaft Encoder

### Features

- Responsiveness , Optional IP67
- Standard  $\phi$ 50mm OD
- Max. 10000 pulses
- Suitable for flow monitoring, transmission control and other applications



### Specifications

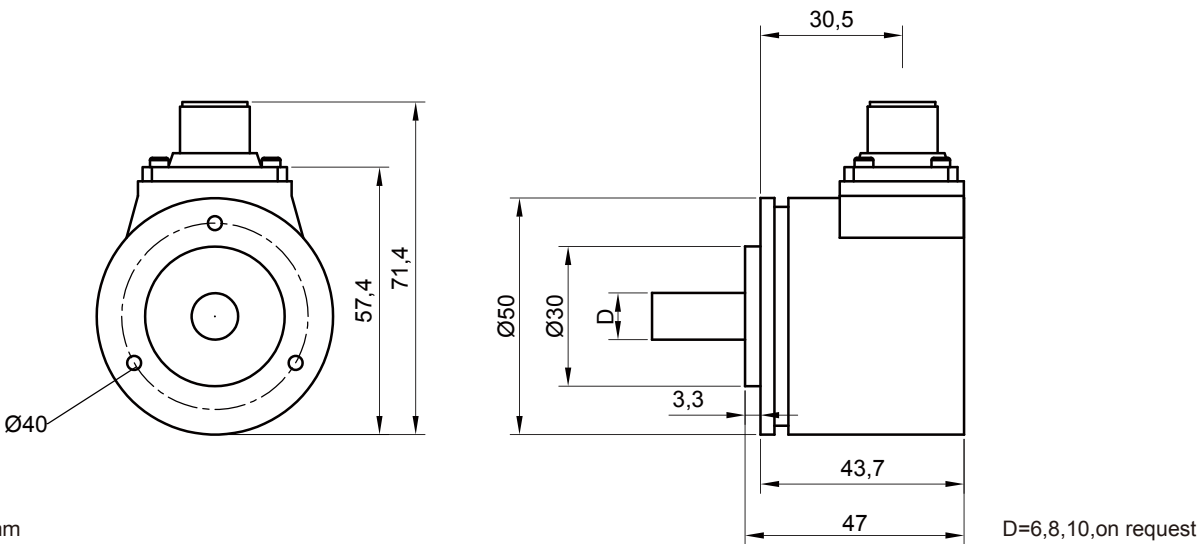
#### Electrical Specifications

|                          |                                                          |
|--------------------------|----------------------------------------------------------|
| Supply Voltage           | 5VDC, 10-30VDC                                           |
| Current Consumption      | 60mA (P-P) , 140mA (RS422)                               |
| Output Circuit           | PUSH-PULL output , RS422                                 |
| Resolution               | 10000PPR (Max. )                                         |
| Output Frequency         | 150kHz                                                   |
| Permissible Load/Channel | Max. 30mA                                                |
| Rise Time                | 200ns                                                    |
| Electrical Protection    | Short Circuit, reverse polarity and lightning Protection |
| Level signal             | H: >70%VCC L: <1V                                        |

#### Mechanical Specifications

|                       |                                            |
|-----------------------|--------------------------------------------|
| Maximum speed         | 10000rpm                                   |
| Shaft load            | Axial 40N Radial 80N                       |
| Starting Torque       | <0.025Nm                                   |
| Shock Resistance      | EN 60068-2-27 1000m/s² 6ms                 |
| Vibration Resistance  | EN 60068-2-6 100m/s² 55....2000HZ          |
| Operating Temperature | -25°C to +85°C                             |
| Protection Class      | IP65/IP67 (option)                         |
| Material              | Aluminum (shell) , stainless steel (shaft) |
| Weight                | 190g                                       |

### Dimension (Installation flanges, hole positions, etc. shall be subject to the order confirmation)



### Connection

| Function  | 3A / 3R | 6A/6R/8A/8R |
|-----------|---------|-------------|
| GND       | white   | 1           |
| VCC       | brown   | 2           |
| A         | green   | 3           |
| B         | yellow  | 4           |
| Z         | grey    | 5           |
| $\bar{A}$ | pink    | 6           |
| $\bar{B}$ | blue    | 7           |
| $\bar{Z}$ | red     | 8           |

### Ordering Code

**Example:** EINS5006A593R-1024  
50 universal solid shaft encoder 1024 pulse push-pull output with ABZ inverse signal, axle diameter 6mm, radial straight out cable

| EINS50 | shaft                                                  | output                             | signals           | connection                                                                                                                                                                    | resolution                                                                                                                                                             |
|--------|--------------------------------------------------------|------------------------------------|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|        | 06=6x10mm<br>08=8x12mm<br>10=10x20mm<br>XX=custom-made | A2=5V RS422<br>A5=10-30V push-pull | 8=ABZ<br>9=ABZABZ | 3A=axial output<br>3R=radial output<br>6A=connector axial output (cw)<br>6R=connector radial output (cw)<br>8A=connector axial output (cw)<br>8R=connector radial output (cw) | 200/256/500<br>512/1000/1024<br>1250/1500<br>2000/2048<br>2500/3000<br>3600/4000<br>4096/5000<br>6000/7000<br>7500/8000<br>8192/9000<br>10000<br>50-10000 customizable |