

Intro. and Quick Selection

Incremental encoder

Absolute encoder

special position device

Accessories and Kits

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# EINS90

## Heavy-duty Solid Shaft Encoder

### Features

- Heavy-duty encoder
- High precision, short response time used
- Max. 6000 pulses
- Suitable for crane, excavator and other heavy machinery



### Specifications

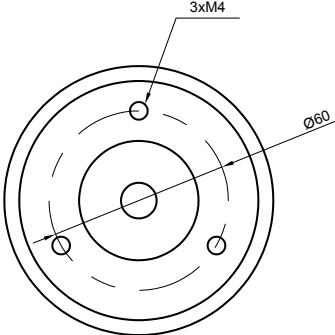
#### Electrical Specifications

|                          |                                                          |
|--------------------------|----------------------------------------------------------|
| Supply Voltage           | 5VD, 10-30VDC<br>5VDC, 10-30VDC                          |
| Current Consumption      | 60mA (P-P) , 140mA (RS422)                               |
| Output Circuit           | PUSH-PULL output , RS422                                 |
| Resolution               | 6000PPR (Max. )                                          |
| Output Frequency         | 100kHz                                                   |
| Permissible Load/Channel | Max. 30mA                                                |
| Rise Time                | 200ns                                                    |
| Level signal             | H:>70%VCC L:<1V                                          |
| Electrical Protection    | Short Circuit, reverse polarity and lightning Protection |

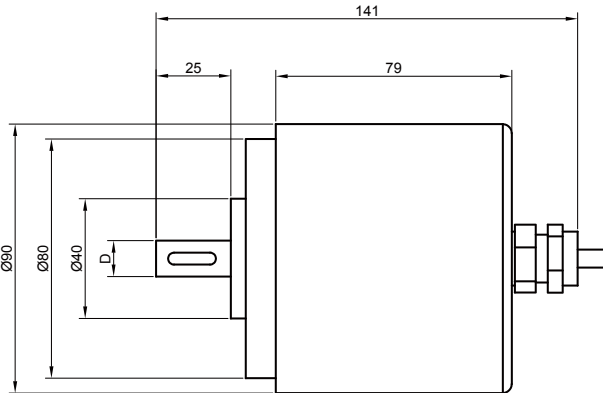
#### Mechanical Specifications

|                       |                                                                   |
|-----------------------|-------------------------------------------------------------------|
| maximum speed         | 5000rpm                                                           |
| Shaft load            | Axial 100N Radial 200N                                            |
| Starting Torque       | <0.08Nm                                                           |
| Shock Resistance      | EN 60068-2-27 1000m/s² 6ms                                        |
| Vibration Resistance  | 068-2-6 100m/s² 55....2000HZ<br>EN 60068-2-6 100m/s² 55....2000HZ |
| Operating Temperature | -20°C to +85°C                                                    |
| Protection Class      | IP66                                                              |
| Material              | Aluminum alloy / Stainless steel                                  |
| Weight                | 850g                                                              |

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



unit: mm



D=12,16,on request

### Connection

| Function | 3A / 3R | 6A/6R/8A/8R |
|----------|---------|-------------|
| GND      | white   | 1           |
| VCC      | brown   | 2           |
| A        | green   | 3           |
| B        | yellow  | 4           |
| Z        | grey    | 5           |
| Ā        | pink    | 6           |
| B̄       | blue    | 7           |
| Z̄       | red     | 8           |

### Ordering Code

**Example:** EINS9012A593R-1024  
90 heavy-duty solid shaft encoder 1024 pulse push-pull output with ABZ inverse signal, axle diameter12mm, radial straight out cable

