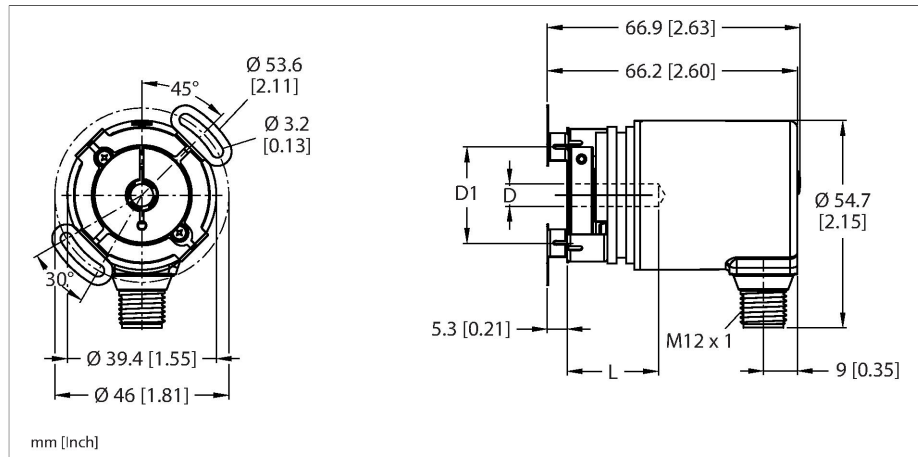


# RES-185B6E-9F14B-H1151

## Absolute Rotary Encoder - Singleturn

### Industrial Line



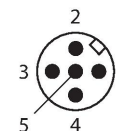
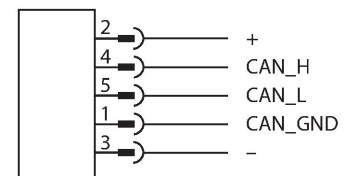
### Features

- Flange with stator coupling, Ø 46 mm
- Blind hole hollow shaft, Ø 6 mm (plug-in depth max. 18.5 mm)
- Magnetic measuring principle
- Shaft material: stainless steel
- Protection class IP67 on housing and shaft side
- -40...+85 °C
- Max. 4000 rpm (continuous operation 2000 rpm)
- 10...30 VDC
- SAE J1939
- M12 × 1 male, 5-pin
- 360° resolved in 14 bit (16384 positions)

### Technical data

|                                          |                             |
|------------------------------------------|-----------------------------|
| Type                                     | RES-185B6E-9F14B-H1151      |
| ID                                       | 100026161                   |
| Measuring principle                      | Magnetic                    |
| <b>General data</b>                      |                             |
| Max. rotational speed                    | 4000 rpm                    |
| Starting torque                          | < 0.01 Nm                   |
| Measuring range                          | 0...360 °                   |
| Absolute accuracy                        | ± 0.015 ° At 25 °C          |
| Output type                              | Absolute singleturn         |
| Resolution singleturn                    | 14 Bit                      |
| <b>Electrical data</b>                   |                             |
| Operating voltage U <sub>B</sub>         | 10...30 VDC                 |
| No-load current                          | ≤ 80 mA                     |
| Short-circuit protection                 | yes                         |
| Wire break/reverse polarity protection   | yes                         |
| Communication protocol                   | SAE J1939                   |
| Interface                                | SAE J1939                   |
| <b>Mechanical data</b>                   |                             |
| Flange type                              | Flange with stator coupling |
| Flange diameter                          | Ø 46 mm                     |
| Shaft Type                               | Blind hole shaft            |
| Shaft diameter D (mm)                    | 6                           |
| Shaft Length L [mm]                      | 18.5                        |
| Outer diameter of compression fitting D1 | 24 mm                       |
| Shaft material                           | Stainless steel             |
| Housing material                         | Die-cast zinc               |

### Wiring diagram



Technical data

|                                     |                        |
|-------------------------------------|------------------------|
| Electrical connection               | Connector, M12 × 1     |
| Axial shaft load                    | 20 N                   |
| Radial shaft load                   | 40 N                   |
| Environmental conditions            |                        |
| Ambient temperature                 | -40...+85 °C           |
| Vibration resistance (EN 60068-2-6) | 300 m/s², 10...2000 Hz |
| Shock resistance (EN 60068-2-27)    | 300 m/s², 10...2000 Hz |
| Protection class                    | IP67                   |
| Protection class shaft              | IP67                   |

Accessories

| Dimension drawing                                                                  | Type       | ID      |                                                                                                                                               |
|------------------------------------------------------------------------------------|------------|---------|-----------------------------------------------------------------------------------------------------------------------------------------------|
|  | RKC5701-5M | 6931034 | Bus cable for CAN (DeviceNet, - CANopen), M12 female connector, straight, cable length: 5 m, jacket material: PUR, anthracite; cULus approval |