

# RES-185B10T-9F14B-H1151

## Absolute Rotary Encoder - Singleturn Industrial Line



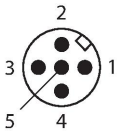
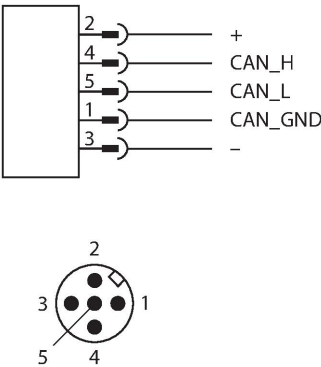
### Technical data

|                                          |                              |
|------------------------------------------|------------------------------|
| Type                                     | RES-185B10T-9F14B-H1151      |
| ID                                       | 100026167                    |
| Measuring principle                      | Magnetic                     |
| General data                             |                              |
| 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                       |
| Electrical data                          |                              |
| 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                    |
| Mechanical data                          |                              |
| Flange type                              | Flange with mounting element |
| Flange diameter                          | Ø 36 mm                      |
| Shaft Type                               | Blind hole shaft             |
| Shaft diameter D (mm)                    | 10                           |
| Shaft Length L [mm]                      | 18.5                         |
| Outer diameter of compression fitting D1 | 25.5 mm                      |
| Shaft material                           | Stainless steel              |
| Housing material                         | Die-cast zinc                |

### Features

- Flange with mounting element
- Blind hole hollow shaft, Ø 10 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)

### 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 |