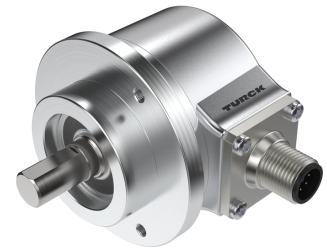
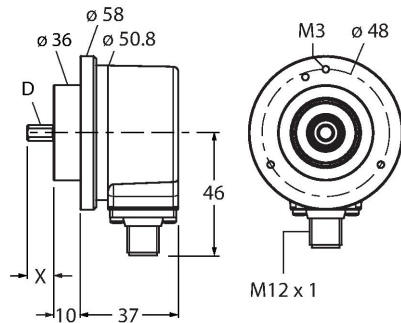


# REI-E-113T12C-2B360-H1181

## Incremental Encoder

### Efficiency Line



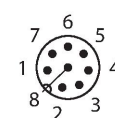
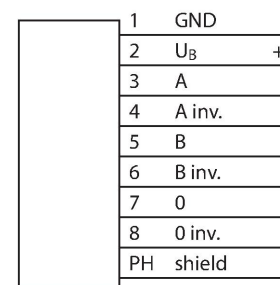
#### Technical data

|                                        |                                      |
|----------------------------------------|--------------------------------------|
| Type                                   | REI-E-113T12C-2B360-H1181            |
| ID                                     | 100011573                            |
| Measuring principle                    | Optical                              |
| <b>General data</b>                    |                                      |
| Max. rotational speed                  | 4500 rpm                             |
| Moment of inertia of the rotor         | $1.8 \times 10^{-6} \text{ kgm}^2$   |
| Starting torque                        | $< 0.05 \text{ Nm}$                  |
| Output type                            | Incremental                          |
| Resolution incremental                 | 360 ppr                              |
| <b>Electrical data</b>                 |                                      |
| Operating voltage $U_B$                | 10...30 VDC                          |
| No-load current                        | $\leq 100 \text{ mA}$                |
| Output current                         | $\leq 30 \text{ mA}$                 |
| Short-circuit protection               | yes                                  |
| Wire break/reverse polarity protection | yes                                  |
| Pulse frequency max.                   | 300 kHz                              |
| Signal level high                      | min. $U_B - 1 \text{ V}$             |
| Signal level low                       | max. $0.5 \text{ V}$                 |
| Output function                        | Push-Pull/HTL, with inverted signals |
| <b>Mechanical data</b>                 |                                      |
| Flange type                            | Clamping flange                      |
| Flange diameter                        | $\varnothing 58 \text{ mm}$          |
| Shaft Type                             | Solid shaft                          |

#### Features

- Clamping flange,  $\varnothing 58 \text{ mm}$
- Solid shaft,  $\varnothing 12 \text{ mm} \times 20 \text{ mm}$
- Optical measuring principle
- Shaft material: stainless steel
- Protection class IP64 on housing and shaft side
- $-20 \dots +70 \text{ }^\circ\text{C}$
- Max. 4500 rpm (continuous operation 3000 rpm)
- 10...30 VDC
- Male connector, M12 x 1, 8-pole
- Push-pull, with inverted signals
- Pulse frequency max. 300 kHz
- 360 pulses per revolution

#### Wiring diagram



## Technical data

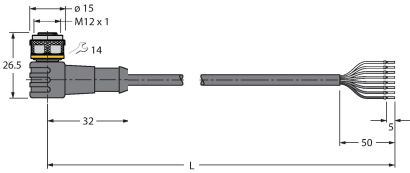
|                                     |                               |
|-------------------------------------|-------------------------------|
| Shaft diameter D (mm)               | 12                            |
| Shaft Length L [mm]                 | 20                            |
| Shaft material                      | Stainless steel               |
| Housing material                    | Die-cast zinc                 |
| Electrical connection               | Connector, M12 × 1            |
|                                     | 8-pin                         |
| Axial shaft load                    | 40 N                          |
| Radial shaft load                   | 80 N                          |
| Environmental conditions            |                               |
| Ambient temperature                 | -20...+70 °C                  |
| Vibration resistance (EN 60068-2-6) | 10 g (100 m/s²), 10...2000 Hz |
| Shock resistance (EN 60068-2-27)    | 1000 m/s², 6 ms               |
| Protection class                    | IP64                          |
| Protection class shaft              | IP64                          |

## Accessories

|                  |           |                                                                       |
|------------------|-----------|-----------------------------------------------------------------------|
| RA-BC-20-10-12   | 100048783 | Bellows coupling with aluminum hub<br>Ø 20 mm; d1 = 10 mm, d2 = 12 mm |
| RA-BC-20-12-12   | 100048784 | Bellows coupling with aluminum hub<br>Ø 20 mm; d1 = 12 mm, d2 = 12 mm |
| RA-BC-20-08-12   | 100049106 | Bellows coupling with aluminum hub<br>Ø 20 mm; d1 = 8 mm, d2 = 12 mm  |
| RA-BC-E-20-10-12 | 100048788 | Stainless steel bellows coupling Ø<br>20 mm; d1 = 10 mm, d2 = 12 mm   |
| RA-SDC-30-10-12  | 100048793 | Spring disc coupling Ø 30 mm; d1 =<br>10 mm, d2 = 12 mm               |
| RA-HC-25-10-12   | 100048797 | Aluminum helix coupling Ø 25 mm; d1<br>= 10 mm, d2 = 12 mm            |

## Wiring accessories

| Dimension drawing                                                                   | Type        | ID      |                                                                                                                                  |
|-------------------------------------------------------------------------------------|-------------|---------|----------------------------------------------------------------------------------------------------------------------------------|
|  | RKC8T-2/TXL | 6625142 | Connection cable, M12 female<br>connector, straight, 8-pin, cable length:<br>2 m, jacket material: PUR, black; cULus<br>approval |

| Dimension drawing                                                                 | Type        | ID      |                                                                                                                       |
|-----------------------------------------------------------------------------------|-------------|---------|-----------------------------------------------------------------------------------------------------------------------|
|  | WKC8T-2/TXL | 6625145 | Connection cable, M12 female connector, angled, 8-pin, cable length: 2 m, jacket material: PUR, black; cULus approval |