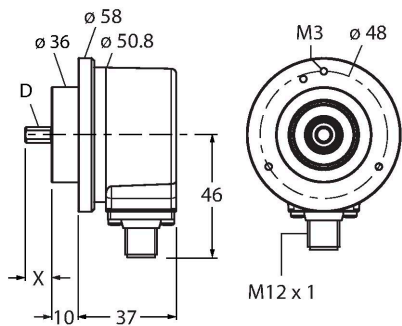


# REI-E-113T10C-2B512-H1181

## Incremental Encoder

### Efficiency Line



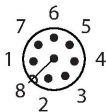
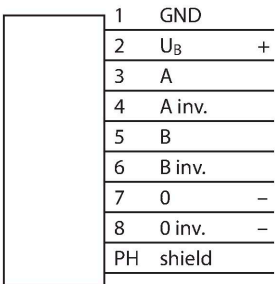
#### Technical data

|                                           |                                    |
|-------------------------------------------|------------------------------------|
| Type                                      | REI-E-113T10C-2B512-H1181          |
| ID                                        | 100011556                          |
| Measuring principle                       | Optical                            |
| General data                              |                                    |
| Max. Rotational Speed                     | 4500 rpm                           |
| Moment of inertia of the rotor            | $1.8 \times 10^{-5} \text{ kgm}^2$ |
| Starting torque                           | < 0.05 Nm                          |
| Output type                               | Incremental                        |
| Resolution, incremental                   | 512 ppr                            |
| Electrical data                           |                                    |
| Operating voltage                         | 10...30 VDC                        |
| No-load current                           | 100 mA                             |
| Output current                            | ≤ 30 mA                            |
| Short-circuit protection                  | yes                                |
| Wire breakage/Reverse polarity protection | yes                                |
| Pulse frequency max.                      | 300 kHz                            |
| Signal level high                         | min. $U_B - 1 \text{ V}$           |
| Signal level low                          | max. 0.5 V                         |
| Output function                           | Push-Pull/HTL, invertable          |
| Mechanical data                           |                                    |
| Design                                    | Solid shaft                        |
| Flange type                               | Clamping flange                    |
| Flange diameter                           | Ø 58 mm                            |
| Shaft Type                                | Solid shaft                        |
| Shaft diameter D [mm]                     | 10                                 |

#### Features

- Clamping flange, Ø 58 mm
- Solid shaft, Ø 10 mm × 20 mm
- Optical measuring principle
- Shaft material: stainless steel
- Protection class IP64 on housing and shaft side
- -20...+70 °C
- Max. 4500 rpm (continuous operation 3000 rpm)
- 10...30 VDC
- Push-pull/HTL invertible
- Pulse frequency max. 300 kHz
- M12 × 1 male connector, 8-pin
- 512 pulses per revolution

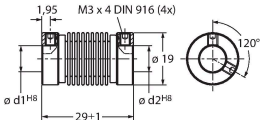
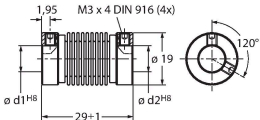
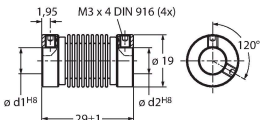
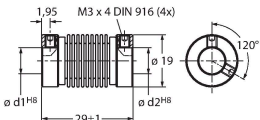
#### Wiring diagram



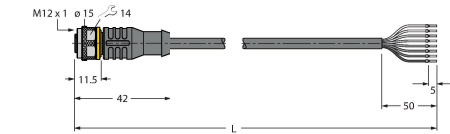
Technical data

|                                     |                        |
|-------------------------------------|------------------------|
| 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) | 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

|                                                                                     |         |                                                                                      |
|-------------------------------------------------------------------------------------|---------|--------------------------------------------------------------------------------------|
| RCS-19-10-10                                                                        | 1545356 | 1545357                                                                              |
| Bellows coupling, outer diameter: 19 mm, bore diameter: 10 mm/10 mm                 |         | Bellows coupling, outer diameter: 19 mm, bore diameter: 10 mm/8 mm                   |
|  |         |  |
| RCS-19-10-06                                                                        | 1545358 | RCS-19-12-10                                                                         |
| Bellows coupling, outer diameter: 19 mm, bore diameter: 10 mm/6 mm                  |         | 1545355                                                                              |
| Bellows coupling, outer diameter: 19 mm, bore diameter: 12 mm/10 mm                 |         |                                                                                      |
|  |         |  |

Accessories

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

## Accessories

| Dimension drawing | Type                | ID        |                                                                                                               |
|-------------------|---------------------|-----------|---------------------------------------------------------------------------------------------------------------|
|                   | RA-SAB-15-36        | 100038251 | Spring arm for encoders with a 58-mm flange; recommended contact pressure 15 N; maximum contact pressure 30 N |
|                   | RA-SAB-30-36        | 100038294 | Spring arm for encoders with a 58-mm flange; recommended contact pressure 30 N; maximum contact pressure 40 N |
|                   | RA-MW-500-25-DK1-10 | 100038314 | Aluminum measuring wheel (cross knurled) for encoders; circumference 0.5 m, width 25 mm, D = 10 mm            |
|                   | RA-MW-500-25-PS1-10 | 100038315 | Aluminum measuring wheel (smooth PU) for encoders; circumference 0.5 m, width 25 mm, D = 10 mm                |
|                   | RA-MW-500-25-RT1-10 | 100038316 | Aluminum measuring wheel (studded PU) for encoders; circumference 0.5 m, width 25 mm, D = 10 mm               |
|                   | RA-MW-500-25-PC1-10 | 100038317 | Aluminum measuring wheel (grooved PU) for encoders; circumference 0.5 m, width 25 mm, D = 10 mm               |

| Dimension drawing | Type                | ID        |                                                                                                    |
|-------------------|---------------------|-----------|----------------------------------------------------------------------------------------------------|
|                   | RA-MW-300-12-DK1-10 | 100038306 | Aluminum measuring wheel (cross knurled) for encoders; circumference 0.3 m, width 12 mm, D = 10 mm |
|                   | RA-MW-300-12-PS1-10 | 100038307 | Aluminum measuring wheel (smooth PU) for encoders; circumference 0.3 m, width 12 mm, D = 10 mm     |
|                   | RA-MW-300-12-RT1-10 | 100038308 | Aluminum measuring wheel (studded PU) for encoders; circumference 0.3 m, width 12 mm, D = 10 mm    |
|                   | RA-MW-300-12-PC1-10 | 100038309 | Aluminum measuring wheel (grooved PU) for encoders; circumference 0.3 m, width 12 mm, D = 10 mm    |
|                   | RA-MW-200-12-DK1-10 | 100038302 | Aluminum measuring wheel (cross knurled) for encoders; circumference 0.2 m, width 12 mm, D = 10 mm |
|                   | RA-MW-200-12-PS1-10 | 100038303 | Aluminum measuring wheel (smooth PU) for encoders; circumference 0.2 m, width 12 mm, D = 10 mm     |
|                   | RA-MW-200-12-RT1-10 | 100038304 | Aluminum measuring wheel (studded PU) for encoders; circumference 0.2 m, width 12 mm, D = 10 mm    |

| Dimension drawing | Type                | ID        |                                                                                                 |
|-------------------|---------------------|-----------|-------------------------------------------------------------------------------------------------|
| <p>mm [inch]</p>  | RA-MW-200-12-PC1-10 | 100038305 | Aluminum measuring wheel (grooved PU) for encoders; circumference 0.2 m, width 12 mm, D = 10 mm |