

# REI-10S12S-2B4096-H1181

## Incremental Encoder

### Industrial Line



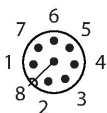
### Features

- Synchro flange, Ø 58 mm
- Solid shaft, Ø 12 mm × 20 mm
- Optical measuring principle
- Shaft material: stainless steel
- Protection class IP67 on housing and shaft side
- -40...+85 °C
- Max. 6000 rpm (continuous operation 3000 rpm)
- 10...30 VDC
- Push-pull/HTL invertible
- Pulse frequency max. 300 kHz
- M12 × 1 male connector, 8-pin
- 4096 pulses per revolution

### Technical data

|                                           |                                         |
|-------------------------------------------|-----------------------------------------|
| Type                                      | REI-10S12S-2B4096-H1181                 |
| ID                                        | 100010319                               |
| Measuring principle                       | Optical                                 |
| General data                              |                                         |
| Max. Rotational Speed                     | 6000 rpm                                |
| Moment of inertia of the rotor            | 1.8 × 10 <sup>-5</sup> kgm <sup>2</sup> |
| Starting torque                           | < 0.05 Nm                               |
| Output type                               | Incremental                             |
| Resolution, incremental                   | 4096 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 <sub>B</sub> - 1 V               |
| Signal level low                          | max. 0.5 V                              |
| Output function                           | Push-Pull/HTL, invertable               |
| Mechanical data                           |                                         |
| Design                                    | Solid shaft                             |
| Flange type                               | Synchro flange                          |
| Flange diameter                           | Ø 58 mm                                 |
| Shaft Type                                | Solid shaft                             |
| Shaft diameter D [mm]                     | 12                                      |

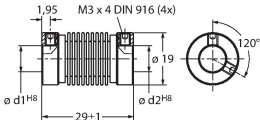
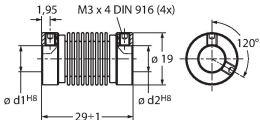
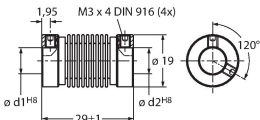
### Wiring diagram



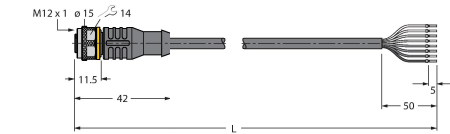
Technical data

|                                     |                        |
|-------------------------------------|------------------------|
| 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                 | -40...+85 °C           |
| Vibration resistance (EN 60068-2-6) | 300 m/s², 10...2000 Hz |
| Shock resistance (EN 60068-2-27)    | 3000 m/s², 6 ms        |
| Protection class                    | IP67                   |
| Protection class shaft              | IP67                   |

Accessories

|                                                                                     |         |                                                                                      |         |
|-------------------------------------------------------------------------------------|---------|--------------------------------------------------------------------------------------|---------|
| RCS-19-12-12                                                                        | 1545354 | RCS-19-12-10                                                                         | 1545355 |
| Bellows coupling, outer diameter:<br>19 mm, bore diameter: 12 mm/12 mm              |         | Bellows coupling, outer diameter:<br>19 mm, bore diameter: 12 mm/10 mm               |         |
|  |         |  |         |
| RCS-19-06-06                                                                        | 1545360 |                                                                                      |         |
| Bellows coupling, outer diameter:<br>19 mm, bore diameter: 6 mm/6 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 |