

REI-10S10S-4B5000-H1181  
Incremental Encoder  
Industrial Line



Features

- Synchro flange, Ø 58 mm
- Solid shaft, Ø 10 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)
- 5...30 VDC
- RS422/TTL invertible
- Pulse frequency max. 300 kHz
- M12 × 1 male connector, 8-pin
- 5000 pulses per revolution

Technical data

|                                        |                                         |
|----------------------------------------|-----------------------------------------|
| Type                                   | REI-10S10S-4B5000-H1181                 |
| ID                                     | 100010347                               |
| Measuring principle                    | Optical                                 |
| General data                           |                                         |
| Max. Rotational Speed                  | 6000 rpm                                |
| Moment of inertia of the rotor         | 1.8 × 10 <sup>-6</sup> kgm <sup>2</sup> |
| Starting torque                        | < 0.05 Nm                               |
| Output type                            | Incremental                             |
| Resolution incremental                 | 5000 ppr                                |
| Electrical data                        |                                         |
| Operating voltage U <sub>B</sub>       | 5...30 VDC                              |
| No-load current                        | ≤ 90 mA                                 |
| Output current                         | ≤ 20 mA                                 |
| Short-circuit protection               | yes                                     |
| Wire break/reverse polarity protection | yes                                     |
| Pulse frequency max.                   | 300 kHz                                 |
| Signal level high                      | min. 2.5 V                              |
| Signal level low                       | max. 0.5 V                              |
| Output function                        | RS422/TTL, invertable                   |
| Mechanical data                        |                                         |
| Flange type                            | Synchro flange                          |
| Flange diameter                        | Ø 58 mm                                 |
| Shaft Type                             | Solid shaft                             |
| Shaft diameter D (mm)                  | 10                                      |
| Shaft Length L [mm]                    | 20                                      |
| Shaft material                         | Stainless steel                         |

Wiring diagram



Technical data

|                                     |                        |
|-------------------------------------|------------------------|
| 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

|                  |           |                                                                       |
|------------------|-----------|-----------------------------------------------------------------------|
| RA-BC-20-06-10   | 100048779 | Bellows coupling with aluminum hub<br>Ø 20 mm; d1 = 6 mm, d2 = 10 mm  |
| RA-BC-20-08-10   | 100048781 | Bellows coupling with aluminum hub<br>Ø 20 mm; d1 = 8 mm, d2 = 10 mm  |
| RA-BC-20-10-10   | 100048782 | Bellows coupling with aluminum hub<br>Ø 20 mm; d1 = 10 mm, d2 = 10 mm |
| RA-BC-20-10-12   | 100048783 | Bellows coupling with aluminum hub<br>Ø 20 mm; d1 = 10 mm, d2 = 12 mm |
| RA-BC-E-20-06-10 | 100048786 | Stainless steel bellows coupling Ø<br>20 mm; d1 = 6 mm, d2 = 10 mm    |
| RA-BC-E-20-10-10 | 100048787 | Stainless steel bellows coupling Ø<br>20 mm; d1 = 10 mm, d2 = 10 mm   |
| RA-BC-E-20-10-12 | 100048788 | Stainless steel bellows coupling Ø<br>20 mm; d1 = 10 mm, d2 = 12 mm   |
| RA-SDC-30-10-10  | 100048792 | Spring disc coupling Ø 30 mm; d1 =<br>10 mm, d2 = 10 mm               |
| RA-SDC-30-10-12  | 100048793 | Spring disc coupling Ø 30 mm; d1 =<br>10 mm, d2 = 12 mm               |
| RA-HC-25-10-10   | 100048796 | Aluminum helix coupling Ø 25 mm; d1<br>= 10 mm, d2 = 10 mm            |

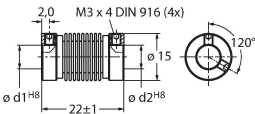
RA-HC-25-10-12 100048797

Aluminum helix coupling Ø 25 mm; d1 = 10 mm, d2 = 12 mm



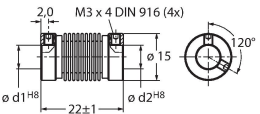
RCS-15-08-06 1545361

Bellows coupling, outer diameter: 15 mm, bore diameter: 8 mm/6 mm



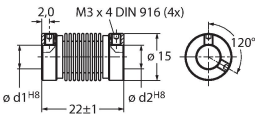
RCS-15-06-06 1545362

Bellows coupling, outer diameter: 15 mm, bore diameter: 6 mm/6 mm



RCS-15-06-04 1545363

Bellows coupling, outer diameter: 15 mm, bore diameter: 6 mm/4 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 |
|                   | WKC8T-2/TXL | 6625145 | Connection cable, M12 female connector, angled, 8-pin, cable length: 2 m, jacket material: PUR, black; cULus approval   |