

# REI-E-113T12S-2B360-H1181

## Incremental Encoder

### Efficiency Line



### Features

- Synchro flange, Ø 58 mm
- Solid shaft, Ø 12 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
- 360 pulses per revolution

### Technical data

|                                        |                                         |
|----------------------------------------|-----------------------------------------|
| Type                                   | REI-E-113T12S-2B360-H1181               |
| ID                                     | 100011582                               |
| Measuring principle                    | Optical                                 |
| General data                           |                                         |
| Max. rotational speed                  | 4500 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                 | 360 ppr                                 |
| Electrical data                        |                                         |
| Operating voltage U <sub>B</sub>       | 10...30 VDC                             |
| No-load current                        | ≤ 100 mA                                |
| Output current                         | ≤ 30 mA                                 |
| Short-circuit protection               | yes                                     |
| Wire break/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                        |                                         |
| Flange type                            | Synchro flange                          |
| Flange diameter                        | Ø 58 mm                                 |
| Shaft Type                             | Solid shaft                             |
| Shaft diameter D (mm)                  | 12                                      |
| 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                 | -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                   |

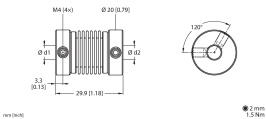
Accessories

RA-BC-20-10-12 100048783



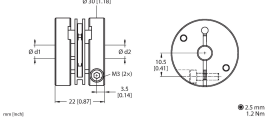
Bellows coupling with aluminum hub  
Ø 20 mm; d1 = 10 mm, d2 = 12 mm

RA-BC-20-08-12 100049106



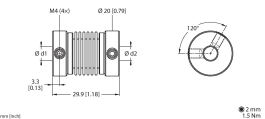
Bellows coupling with aluminum hub  
Ø 20 mm; d1 = 8 mm, d2 = 12 mm

RA-SDC-30-10-12 100048793



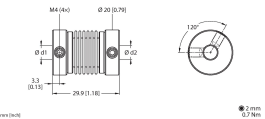
Spring disc coupling Ø 30 mm; d1 =  
10 mm, d2 = 12 mm

RA-BC-20-12-12 100048784



Bellows coupling with aluminum hub  
Ø 20 mm; d1 = 12 mm, d2 = 12 mm

RA-BC-E-20-10-12 100048788



Stainless steel bellows coupling Ø  
20 mm; d1 = 10 mm, d2 = 12 mm

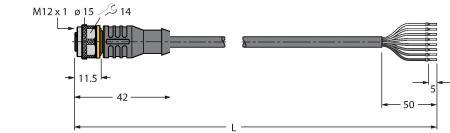
RA-HC-25-10-12 100048797



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

