

# REI-E-113T12C-2B512-H1181

## Incremental Encoder

### Efficiency Line



#### Technical data

|                                        |                                    |
|----------------------------------------|------------------------------------|
| Type                                   | REI-E-113T12C-2B512-H1181          |
| ID                                     | 100011574                          |
| 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 $U_B$                | 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 V                         |
| Output function                        | Push-Pull/HTL, invertable          |
| Mechanical data                        |                                    |
| Flange type                            | Clamping flange                    |
| Flange diameter                        | $\varnothing 58 \text{ mm}$        |
| Shaft Type                             | Solid shaft                        |
| Shaft diameter D (mm)                  | 12                                 |
| Shaft Length L [mm]                    | 20                                 |
| Shaft material                         | Stainless steel                    |

#### 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
- Push-pull/HTL invertible
- Pulse frequency max. 300 kHz
- M12  $\times$  1 male connector, 8-pin
- 512 pulses per revolution

#### 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

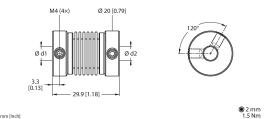
RA-BC-20-10-12 100048783



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

● 2.5 mm  
1.2 Nm

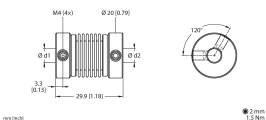
RA-BC-20-12-12 100048784



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

● 2.5 mm  
1.2 Nm

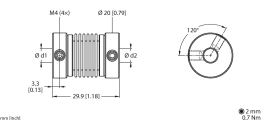
RA-BC-20-08-12 100049106



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

● 2.5 mm  
1.2 Nm

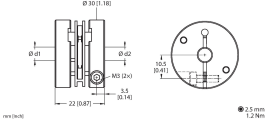
RA-BC-E-20-10-12 100048788



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

● 2.5 mm  
0.7 Nm

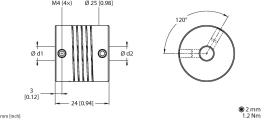
RA-SDC-30-10-12 100048793



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

● 2.5 mm  
1.2 Nm

RA-HC-25-10-12 100048797

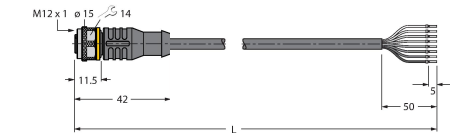


Aluminum helix coupling Ø 25 mm; d1  
= 10 mm, d2 = 12 mm

● 2.5 mm  
1.2 Nm

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 |