

# REI-E-114I10E-4B2500-H1181

## Incremental Encoder

### Efficiency Line



#### Technical data

|                                           |                                  |
|-------------------------------------------|----------------------------------|
| Type                                      | REI-E-114I10E-4B2500-H1181       |
| ID                                        | 100011902                        |
| Measuring principle                       | Optical                          |
| General data                              |                                  |
| Max. Rotational Speed                     | 4500 rpm                         |
| Moment of inertia of the rotor            | $6 \times 10^{-6} \text{ kgm}^2$ |
| Starting torque                           | $< 0.05 \text{ Nm}$              |
| Output type                               | Incremental                      |
| Resolution, incremental                   | 2500 ppr                         |
| Electrical data                           |                                  |
| Operating voltage                         | 5...30 VDC                       |
| No-load current                           | 90 mA                            |
| Output current                            | $\leq 20 \text{ mA}$             |
| Short-circuit protection                  | yes                              |
| Wire breakage/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                           |                                  |
| Design                                    | Hollow shaft                     |
| Flange type                               | Flange with stator coupling      |
| Flange diameter                           | $\varnothing 63 \text{ mm}$      |
| Shaft Type                                | Hollow shaft                     |
| Shaft diameter D [mm]                     | 10                               |

#### Features

- Flange with stator coupling,  $\varnothing 63 \text{ mm}$
- Hollow shaft,  $\varnothing 10 \text{ mm}$
- 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)
- 5...30 VDC
- RS422/TTL invertible
- Pulse frequency max. 300 kHz
- M12  $\times$  1 male connector, 8-pin
- 2500 pulses per revolution

#### Wiring diagram



Technical data

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

| 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   |