

REI-12H8E-2B2048-H1181  
Incremental Encoder  
Industrial Line



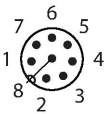
Technical data

|                                        |                                  |
|----------------------------------------|----------------------------------|
| Type                                   | REI-12H8E-2B2048-H1181           |
| ID                                     | 100010460                        |
| Measuring principle                    | Optical                          |
| General data                           |                                  |
| Max. rotational speed                  | 6000 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                 | 2048 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. $0.5 \text{ V}$             |
| Output function                        | Push-Pull/HTL, invertable        |
| Mechanical data                        |                                  |
| Flange type                            | Flange with stator coupling      |
| Flange diameter                        | $\varnothing 63 \text{ mm}$      |
| Shaft Type                             | Hollow shaft                     |
| Shaft diameter D (mm)                  | 8                                |
| Shaft material                         | Stainless steel                  |
| Housing material                       | Die-cast zinc                    |

Features

- Flange with stator coupling,  $\varnothing 63 \text{ mm}$
- Hollow shaft,  $\varnothing 8 \text{ mm}$
- Optical measuring principle
- Shaft material: stainless steel
- Protection class IP67 on housing and shaft side
- $-40 \dots +85 \text{ }^\circ\text{C}$
- Max. 6000 rpm (continuous operation 3000 rpm)
- 10...30 VDC
- Push-pull/HTL invertible
- Pulse frequency max. 300 kHz
- M12  $\times$  1 male connector, 8-pin
- 2048 pulses per revolution

Wiring diagram



Technical data

|                                     |                        |
|-------------------------------------|------------------------|
| 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 housing            | IP65                   |
| Protection class shaft              | IP67                   |

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   |