

REI-05I8E-4A2048-H1181  
Incremental Encoder  
Industrial Line



Technical data

|                                |                                    |
|--------------------------------|------------------------------------|
| Type                           | REI-05I8E-4A2048-H1181             |
| ID                             | 100011224                          |
| Measuring principle            | Optical                            |
| General data                   |                                    |
| Max. rotational speed          | 6000 rpm                           |
| Moment of inertia of the rotor | $0.2 \times 10^{-5} \text{ kgm}^2$ |
| Starting torque                | $< 0.05 \text{ Nm}$                |
| Output type                    | Incremental                        |
| Resolution incremental         | 2048 ppr                           |
| Electrical data                |                                    |
| Operating voltage $U_B$        | 5 VDC                              |
| No-load current                | $\leq 90 \text{ mA}$               |
| Output current                 | $\leq 20 \text{ mA}$               |
| Short-circuit protection       | yes                                |
| Pulse frequency max.           | 200 kHz                            |
| Signal level high              | min. 2.5 V                         |
| Signal level low               | max. 0.5 V                         |
| Output function                | RS422, invertable                  |
| Mechanical data                |                                    |
| Flange type                    | Flange with stator coupling        |
| Flange diameter                | $\varnothing 46 \text{ mm}$        |
| Shaft Type                     | Hollow shaft                       |
| Shaft diameter D (mm)          | 8                                  |
|                                | Hollow shaft                       |
| Shaft material                 | Brass                              |
| Housing material               | Aluminum chromated                 |

Features

- Flange with stator coupling,  $\varnothing 46 \text{ mm}$
- Hollow shaft,  $\varnothing 8 \text{ mm}$
- Optical measuring principle
- Shaft material: brass
- Protection class shaft IP50
- Protection class housing IP65
- $-20 \dots +85 \text{ }^\circ\text{C}$
- Max. 6000 rpm
- 5 VDC
- RS422/TTL invertible
- Pulse frequency max. 200 kHz
- M12  $\times$  1 male connector, 8-pin
- 2048 pulses per revolution

Wiring diagram

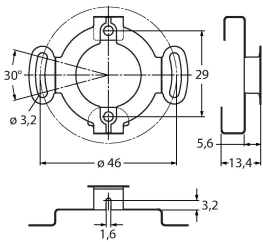


Technical data

|                                     |                        |
|-------------------------------------|------------------------|
| Electrical connection               | Connector, M12 × 1     |
|                                     | 8-polig                |
| Axial shaft load                    | 20 N                   |
| Radial shaft load                   | 40 N                   |
| Environmental conditions            |                        |
| Ambient temperature                 | -20...+85 °C           |
| Vibration resistance (EN 60068-2-6) | 100 m/s², 55...2000 Hz |
| Shock resistance (EN 60068-2-27)    | 1000 m/s², 6 ms        |
| Protection class                    | IP65                   |
| Protection class shaft              | IP50                   |

Accessories

RME-31544614



Stainless steel stator coupling for hollow shaft encoders, reference diameter 46 mm, for highly dynamic applications with axial and radial play

RME-131544624



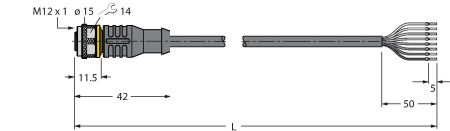
Plastic mounting element for hollow shaft encoders, pitch diameter 42 mm, for applications with limited axial play, low dynamics and limited mounting space

RME-141544625



Plastic mounting element for hollow shaft encoders, pitch diameters 44 mm, 60 mm, 63 mm, 65 mm, for low dynamic applications with high axial play.

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 |