

# REI-E-114I12T-2B1024-H1181

## Incremental Encoder

### Efficiency Line



#### Technical data

|                                           |                                  |
|-------------------------------------------|----------------------------------|
| Type                                      | REI-E-114I12T-2B1024-H1181       |
| ID                                        | 100011684                        |
| 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                   | 1024 ppr                         |
| Electrical data                           |                                  |
| Operating voltage                         | 10...30 VDC                      |
| No-load current                           | 100 mA                           |
| Output current                            | $\leq 30 \text{ mA}$             |
| Short-circuit protection                  | yes                              |
| Wire breakage/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                           |                                  |
| Design                                    | Hollow shaft                     |
| Flange type                               | Flange with mounting element     |
| Flange diameter                           | $\varnothing 50.8 \text{ mm}$    |
| Shaft Type                                | Hollow shaft                     |
| Shaft diameter D [mm]                     | 12                               |

#### Features

- Flange with torque stop
- Hollow shaft,  $\varnothing 12 \text{ mm}$
- 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
- 1024 pulses per revolution

#### Wiring diagram

|    |          |
|----|----------|
| 1  | GND      |
| 2  | $U_B$ +  |
| 3  | A        |
| 4  | A inv.   |
| 5  | B        |
| 6  | B inv.   |
| 7  | 0 -      |
| 8  | 0 inv. - |
| PH | shield   |

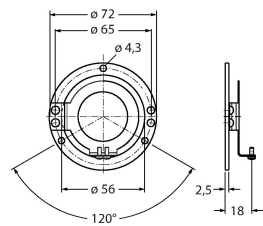


Technical data

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

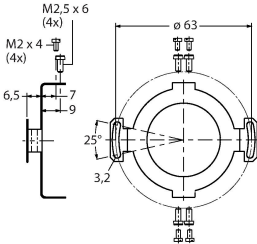
Accessories

RME-11544612



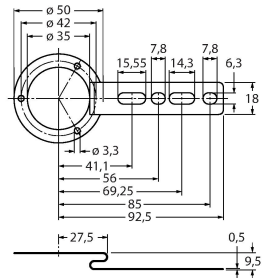
Stainless steel stator coupling for hollow shaft encoders, reference diameter, 65 mm, for highly dynamic, standard applications with axial and radial play

RME-21544613



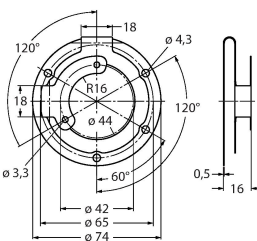
Stainless steel stator coupling for hollow shaft encoders, reference diameter 63 mm, for applications with high demands on accuracy

RME-41544615



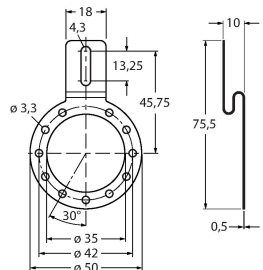
Stainless steel mounting panel for hollow shaft encoders, reference diameter 80...170 mm, for low dynamic applications with axial and radial play

RME-71544618



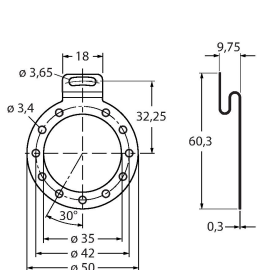
Stainless steel stator coupling for hollow shaft encoders, reference diameter 65 mm, for highly dynamic applications with axial and radial play

RME-81544619



Stainless steel mounting panel for hollow shaft encoders, reference diameter 65...91.5 mm, for applications with axial and radial play at constant rotation speed

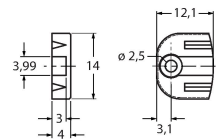
RME-91544620



Stainless steel mounting panel for hollow shaft encoders, reference diameter 64.5 mm, for low dynamic applications with axial and radial play

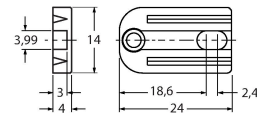
RME-131544624

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 |
|                   | WKC8T-2/TXL | 6625145 | Connection cable, M12 female connector, angled, 8-pin, cable length: 2 m, jacket material: PUR, black; cULus approval   |