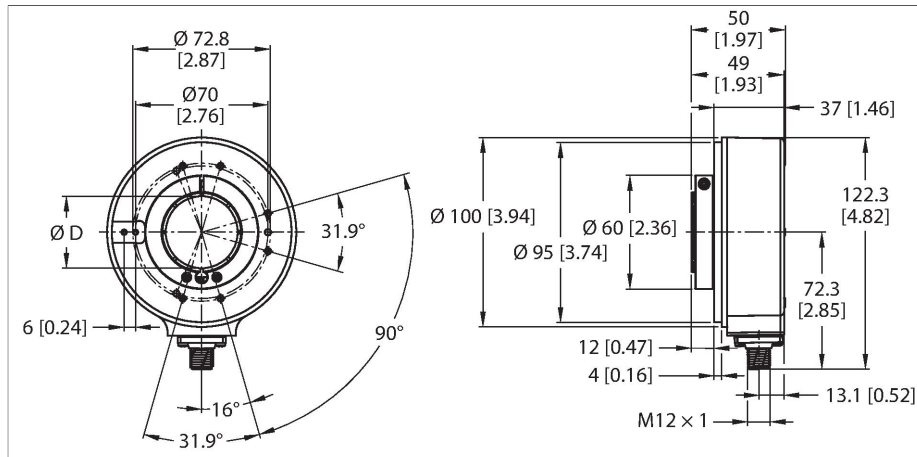


# REI-43H40S-2B4096-H1181

## Incremental Encoder

### Industrial Line



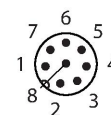
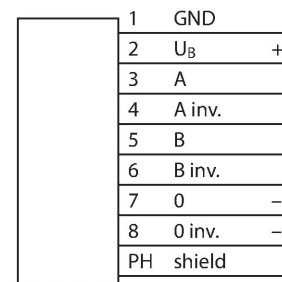
#### Features

- Flange without mounting element, Ø 100 mm
- Hollow shaft, Ø 40 mm
- Optical measuring principle
- Shaft material: stainless steel
- Protection class IP65 on housing and shaft side
- -40 ... +80 °C
- Max. 6000 rpm (at 60 °C: 2500 rpm)
- 10...30 VDC
- Push-pull/HTL invertible
- Pulse frequency max. 300 kHz
- M12 × 1 male connector, 8-pin
- 4096 pulses per revolution

#### Technical data

|                                           |                                    |
|-------------------------------------------|------------------------------------|
| Type                                      | REI-43H40S-2B4096-H1181            |
| ID                                        | 100011465                          |
| Measuring principle                       | Optical                            |
| <b>General data</b>                       |                                    |
| Max. Rotational Speed                     | 6000 rpm                           |
| Moment of inertia of the rotor            | $220 \times 10^{-6} \text{ kgm}^2$ |
| Starting torque                           | < 0.2 Nm                           |
| Output type                               | Incremental                        |
| Resolution, incremental                   | 4096 ppr                           |
| <b>Electrical data</b>                    |                                    |
| Operating voltage                         | 10...30 VDC                        |
| No-load current                           | 100 mA                             |
| Output current                            | ≤ 30 mA                            |
| Short-circuit protection                  | yes                                |
| Wire breakage/Reverse polarity protection | yes                                |
| Pulse frequency max.                      | 300 kHz                            |
| Signal level high                         | min. $U_B - 3 \text{ V}$           |
| Signal level low                          | max. 2.5 V                         |
| Output function                           | Push-Pull/HTL, invertable          |
| <b>Mechanical data</b>                    |                                    |
| Design                                    | Hollow shaft                       |
| Flange type                               | Flange without mounting element    |
| Flange diameter                           | Ø 100 mm                           |
| Shaft Type                                | Hollow shaft                       |
| Shaft diameter D [mm]                     | 40                                 |

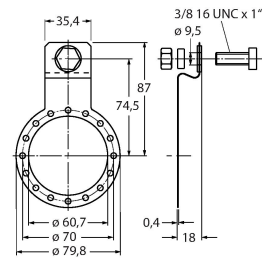
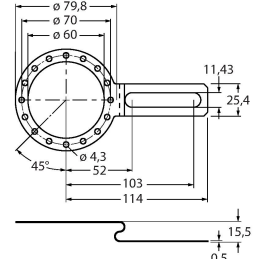
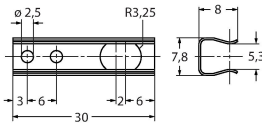
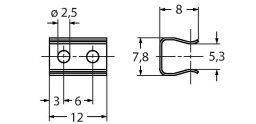
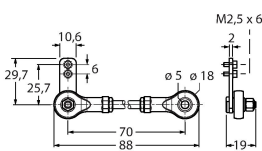
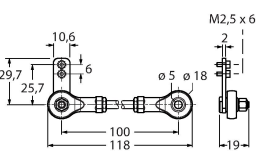
#### Wiring diagram



Technical data

|                                     |                               |
|-------------------------------------|-------------------------------|
| Shaft material                      | Stainless steel               |
| Housing material                    | Die-cast zinc                 |
| Electrical connection               | Connector, M12 × 1            |
|                                     | 8-pin                         |
| Environmental conditions            |                               |
| Ambient temperature                 | -40...+80 °C                  |
| Vibration resistance (EN 60068-2-6) | 10 g (100 m/s²), 10...2000 Hz |
| Shock resistance (EN 60068-2-27)    | 200 g (2000 m/s²), 6 ms       |
| Protection class                    | IP65                          |
| Protection class shaft              | IP65                          |

Accessories

|        |         |                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                 |
|--------|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| RME-5  | 1544616 |  <p>Technical drawing of the RME-5 mounting panel. It shows a circular panel with a central hole and eight mounting holes. Dimensions include: outer diameter 79.8 mm, inner diameter 60.7 mm, mounting hole diameter 9.5 mm, and a central hole diameter of 35.4 mm. A 3/8 16 UNC x 1" screw is shown for mounting.</p> | Stainless steel mounting panel for hollow shaft encoders, reference diameter 149 mm, for applications with axial play                                           |
| RME-6  | 1544617 |  <p>Technical drawing of the RME-6 mounting panel. It shows a circular panel with a central hole and eight mounting holes. Dimensions include: outer diameter 79.8 mm, inner diameter 60 mm, mounting hole diameter 9.5 mm, and a central hole diameter of 35.4 mm. A 3/8 16 UNC x 1" screw is shown for mounting.</p>  | Stainless steel mounting panel for hollow shaft encoders, reference diameter 104...206 mm, for applications with fixing points on adjustable reference diameter |
| RME-10 | 1544621 |  <p>Technical drawing of the RME-10 mounting element. It shows a rectangular element with a central hole and two mounting holes. Dimensions include: outer diameter 2.5 mm, inner diameter 3 mm, and a central hole diameter of 30 mm.</p>                                                                              | Stainless steel mounting element for hollow shaft encoders, pitch diameter 110 mm, for applications with high axial play                                        |
| RME-11 | 1544622 |  <p>Technical drawing of the RME-11 mounting element. It shows a rectangular element with a central hole and two mounting holes. Dimensions include: outer diameter 2.5 mm, inner diameter 3 mm, and a central hole diameter of 30 mm.</p>                                                                             | Stainless steel mounting element for hollow shaft encoders, pitch diameter 76 mm, for applications with limited mounting space                                  |
| RME-15 | 1544626 |  <p>Technical drawing of the RME-15 metal arm bracket. It shows a bracket with a central hole and two mounting holes. Dimensions include: outer diameter 10.6 mm, inner diameter 5 mm, and a central hole diameter of 70 mm.</p>                                                                                        | Metal arm bracket, for hollow shaft encoders, length 70 mm; for applications with little axial and radial play; flexibly adjustable                             |
| RME-16 | 1544627 |  <p>Technical drawing of the RME-16 metal arm bracket. It shows a bracket with a central hole and two mounting holes. Dimensions include: outer diameter 10.6 mm, inner diameter 5 mm, and a central hole diameter of 100 mm.</p>                                                                                      | Metal arm bracket, for hollow shaft encoders, length 100 mm; for applications with little axial and radial play; flexibly adjustable                            |

