

REI-12H15E-4B3600-H1181  
Incremental Encoder  
Industrial Line



Technical data

|                                           |                                  |
|-------------------------------------------|----------------------------------|
| Type                                      | REI-12H15E-4B3600-H1181          |
| ID                                        | 100010534                        |
| 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                   | 3600 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]                     | 15                               |

Features

- Flange with stator coupling,  $\varnothing 63 \text{ mm}$
- Hollow shaft,  $\varnothing 15 \text{ mm}$
- 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)
- 5...30 VDC
- RS422/TTL invertible
- Pulse frequency max. 300 kHz
- M12  $\times$  1 male connector, 8-pin
- 3600 pulses per revolution

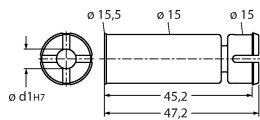
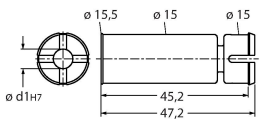
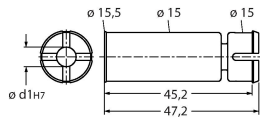
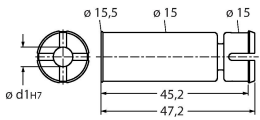
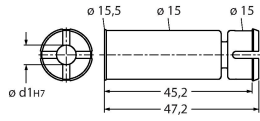
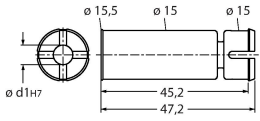
Wiring diagram



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                 | -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

|                                                                                      |         |                                                     |
|--------------------------------------------------------------------------------------|---------|-----------------------------------------------------|
| RSA-6                                                                                | 1544700 | Inlay, outer diameter 15 mm, inner diameter 12.7 mm |
|   |         |                                                     |
| RSA-5                                                                                | 1544669 | Inlay, outer diameter 15 mm, inner diameter 12 mm   |
|  |         |                                                     |
| RSA-4                                                                                | 1544668 | Inlay, outer diameter 15 mm, inner diameter 9.53 mm |
|   |         |                                                     |
| RSA-3                                                                                | 1544667 | Inlay, outer diameter 15 mm, inner diameter 10 mm   |
|  |         |                                                     |
| RSA-2                                                                                | 1544666 | Inlay, outer diameter 15 mm, inner diameter 6.35 mm |
|   |         |                                                     |
| RSA-1                                                                                | 1544665 | Inlay, outer diameter 15 mm, inner diameter 6 mm    |
|  |         |                                                     |

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   |