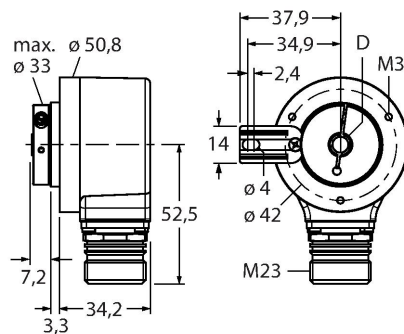


# RI-12HA4T-4A1000-12M23

## Incremental Encoder

### Industrial Line



#### Features

- Flange with torque stop, Ø 50.8 mm
- Hollow shaft, Ø 5/8"
- Optical measuring principle
- Shaft material, stainless steel
- Protection class IP67 on housing and shaft side
- -40...+85 °C
- Max. 6000 rpm (continuous operation 3000 rpm)
- 5 VDC
- Male connector, M23, 12-pole
- RS422 with inverted signals
- Pulse frequency max. 300 kHz
- 1000 pulses per revolution

#### Technical data

|                                           |                                      |
|-------------------------------------------|--------------------------------------|
| Type                                      | RI-12HA4T-4A1000-12M23               |
| Ident. no.                                | 1545514                              |
| Measuring principle                       | Optical                              |
| Max. Rotational Speed                     | 6000 rpm                             |
| Moment of inertia of the rotor            | 6 x10 <sup>-6</sup> kgm <sup>2</sup> |
| Starting torque                           | < 0.05 Nm                            |
| Ambient temperature                       | -40...+85 °C                         |
| Operating voltage                         | 5 VDC                                |
| No-load current                           | ≤ 90 mA                              |
| Output current                            | ≤ 20 mA                              |
| Short-circuit protection                  | yes                                  |
| Wire breakage/Reverse polarity protection | no                                   |
| Output type                               | Incremental                          |
| Resolution, incremental                   | 1000 ppr                             |
| Pulse frequency max.                      | 300 kHz                              |
| Signal level high                         | min. 2.5 V                           |
| Signal level low                          | max. 0.5 V                           |
| Output function                           | RS422, with inverted signals         |
| Design                                    | Hollow shaft                         |
| Flange type                               | Flange with torque stop              |
| Flange diameter                           | Ø 50.8 mm                            |
| Shaft Type                                | Hollow shaft                         |
| Shaft material                            | Stainless steel                      |

## Technical data

|                                     |                                     |
|-------------------------------------|-------------------------------------|
| Housing material                    | Die-cast zinc                       |
| Electrical connection               | Connector                           |
|                                     | M23, 12-pole                        |
| Axial shaft load                    | 40 N                                |
| Radial shaft load                   | 80 N                                |
| Vibration resistance (EN 60068-2-6) | 300 m/s <sup>2</sup> , 10...2000 Hz |
| Shock resistance (EN 60068-2-27)    | 3000 m/s <sup>2</sup> 6 ms          |
| Protection class                    | IP67                                |
| Protection class shaft              | IP67                                |

| Signal            | Gnd     | +U <sub>B</sub>      | A | A inv. | B | B inv. | 0 | 0 inv. | Shield |
|-------------------|---------|----------------------|---|--------|---|--------|---|--------|--------|
| Pin configuration | 10      | 12                   | 5 | 6      | 8 | 1      | 3 | 4      | PH     |
| Signal            | 0V sens | +U <sub>B</sub> sens | - | -      | - | -      | - | -      | -      |
| Pin configuration | E       | A                    | - | -      | - | -      | - | -      | -      |

## Accessories

