

REI-10SA1S-4B512-H1181  
Incremental Encoder  
Industrial Line



Features

- Synchro flange, Ø 58 mm
- Solid shaft, Ø 3/8" x 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...30 VDC
- RS422/TTL invertible
- Pulse frequency max. 300 kHz
- M12 x 1 male connector, 8-pin
- 512 pulses per revolution

Technical data

|                                           |                                         |
|-------------------------------------------|-----------------------------------------|
| Type                                      | REI-10SA1S-4B512-H1181                  |
| ID                                        | 100010358                               |
| Measuring principle                       | Optical                                 |
| General data                              |                                         |
| Max. Rotational Speed                     | 6000 rpm                                |
| Moment of inertia of the rotor            | 1.8 × 10 <sup>-5</sup> kgm <sup>2</sup> |
| Starting torque                           | < 0.05 Nm                               |
| Output type                               | Incremental                             |
| Resolution, incremental                   | 512 ppr                                 |
| Electrical data                           |                                         |
| Operating voltage                         | 5...30 VDC                              |
| No-load current                           | 90 mA                                   |
| Output current                            | ≤ 20 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                                    | Solid shaft                             |
| Flange type                               | Synchro flange                          |
| Flange diameter                           | Ø 58 mm                                 |
| Shaft Type                                | Solid shaft                             |
| Shaft diameter D [mm]                     | 9.525                                   |

Wiring diagram



Technical data

|                                     |                        |
|-------------------------------------|------------------------|
| Shaft Length L [mm]                 | 15.875                 |
| 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 shaft              | IP67                   |

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   |