

REM-99S10C-3C12S12M-H1181  
Absolute Rotary Encoder - Multiturn  
Industrial Line



Technical data

|                                        |                           |
|----------------------------------------|---------------------------|
| Type                                   | REM-99S10C-3C12S12M-H1181 |
| ID                                     | 100011241                 |
| Measuring principle                    | Magnetic                  |
| General data                           |                           |
| Max. Rotational Speed                  | 4000 rpm                  |
| Starting torque                        | < 0.01 Nm                 |
| Repetition accuracy                    | ± 0.2 ° At 25 °C          |
| Absolute accuracy                      | ± 1 ° At 25 °C            |
| Output type                            | Absolute multiturn        |
| Resolution singleturn                  | 12 Bit                    |
| Resolution multiturn                   | 12 Bit                    |
| Electrical data                        |                           |
| Operating voltage U <sub>B</sub>       | 10...30 VDC               |
| No-load current                        | ≤ 40 mA                   |
| Output current                         | ≤ 30 mA                   |
| Short-circuit protection               | yes                       |
| Wire break/reverse polarity protection | yes                       |
| Signal level high                      | typ. 3.8 V                |
| Signal level low                       | typ. 1.3 V                |
| Communication protocol                 | SSi                       |
| Output function                        | Gray coded                |
| Mechanical data                        |                           |
| Flange type                            | Clamping flange           |
| Flange diameter                        | Ø 36 mm                   |
| Shaft Type                             | Solid shaft               |
| Shaft diameter D (mm)                  | 10                        |

Features

- Clamping flange, Ø 36 mm
- Solid shaft, Ø 10 mm × 20 mm
- Magnetic measuring principle
- Shaft material: stainless steel
- Protection class IP67 on housing and shaft side
- -40...+85 °C
- Max. 4000 rpm (continuous operation 2000 rpm)
- Energy harvesting technology
- 10...30 VDC
- SSI, gray
- M12 × 1 male, 8-pin
- Singleturn, 12-bit resolution
- Multiturn, 12-bit resolution

Wiring diagram



Technical data

|                                     |                        |
|-------------------------------------|------------------------|
| Shaft Length L [mm]                 | 20                     |
| Shaft material                      | Stainless steel        |
| Housing material                    | Die-cast zinc          |
| Electrical connection               | Connector, M12 × 1     |
| Axial shaft load                    | 20 N                   |
| Radial shaft load                   | 40 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)    | 2500 m/s², 6 ms        |
| Protection class                    | IP67                   |
| Protection class shaft              | IP67                   |

Accessories

| Dimension drawing                                                                   | Type           | ID      |                                                                                                                                                                                                                                            |
|-------------------------------------------------------------------------------------|----------------|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | E-RKC 8T-264-2 | U-04781 | Connection cable, female M12, straight, 8-pin (twisted pairs), shielded, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see <a href="http://www.turck.com">www.turck.com</a> |