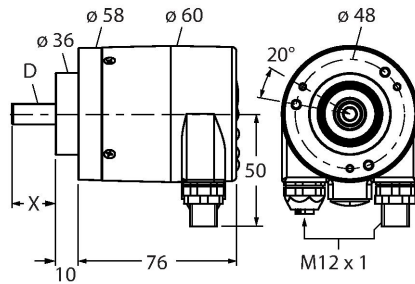


# RM-29S10C-9C28B-R3M12

## Absolute Rotary Encoder - Multiturn Industrial Line



### Features

- Clamping flange, Ø 58 mm
- Solid shaft, Ø 10 mm × 20 mm
- Optical measuring principle
- Shaft material: stainless steel
- Protection class IP67 on shaft side
- -40...+80 °C
- Max. 3000 rpm
- EtherCAT®
- Removable bus cover with male, 3 × M12
- Singleturn, resolution scalable to 16 bit (default 13-bit)
- Multiturn resolution max. 12 bit, scalable

### Technical data

|                                        |                                  |
|----------------------------------------|----------------------------------|
| Type                                   | RM-29S10C-9C28B-R3M12            |
| ID                                     | 1544419                          |
| Measuring principle                    | Optical                          |
| General data                           |                                  |
| Max. rotational speed                  | 3000 rpm                         |
| Moment of inertia of the rotor         | $4 \times 10^{-6} \text{ kgm}^2$ |
| Starting torque                        | < 0.01 Nm                        |
| Output type                            | Absolute multiturn               |
| Resolution singleturn                  | 16 Bit                           |
| Resolution multiturn                   | 12 Bit                           |
|                                        | single-turn scalable             |
| Electrical data                        |                                  |
| Operating voltage $U_B$                | 10...30 VDC                      |
| No-load current                        | ≤ 120 mA                         |
| Wire break/reverse polarity protection | yes                              |
| Communication protocol                 | EtherCAT                         |
| Mechanical data                        |                                  |
| Flange type                            | Clamping flange                  |
| Flange diameter                        | Ø 58 mm                          |
| Shaft Type                             | Solid shaft                      |
| Shaft diameter D (mm)                  | 10                               |
| Shaft Length L [mm]                    | 20                               |
| Shaft material                         | Stainless steel                  |

## Technical data

|                                     |                                     |
|-------------------------------------|-------------------------------------|
| Housing material                    | Die-cast zinc                       |
| Electrical connection               | Bus connection                      |
|                                     | 3 x M12                             |
| Axial shaft load                    | 40 N                                |
| Radial shaft load                   | 80 N                                |
| Environmental conditions            |                                     |
| Ambient temperature                 | -40...+80 °C                        |
| Vibration resistance (EN 60068-2-6) | 100 m/s <sup>2</sup> , 55...2000 Hz |
| Shock resistance (EN 60068-2-27)    | 2500 m/s <sup>2</sup> , 6 ms        |
| Protection class housing            | IP67                                |
| Protection class shaft              | IP67                                |