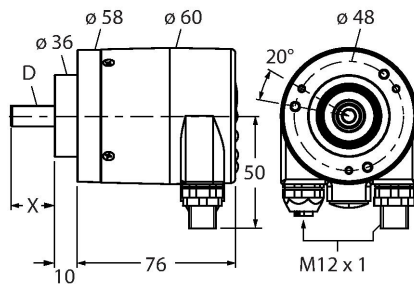


# RM-29S6C-9A28B-R3M12

## Absolute Rotary Encoder - Multiturn

### Industrial Line



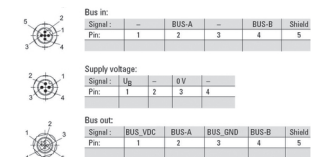
#### Features

- Clamping flange, Ø 58 mm
- Solid shaft, Ø 6 mm × 10 mm
- Optical measuring principle
- Shaft material: stainless steel
- Protection class IP67 on shaft side
- -40...+80 °C
- Max. 3000 rpm
- Profibus
- Removable bus cover with male, 3 × M12
- Singleturn, resolution scalable to 16 bit (default 13-bit)
- Multiturn resolution max. 12 bit, scalable

#### Technical data

|                                                  |                                      |
|--------------------------------------------------|--------------------------------------|
| <b>Type</b>                                      | RM-29S6C-9A28B-R3M12                 |
| <b>Ident. no.</b>                                | 1544413                              |
| <b>Measuring principle</b>                       | Photoelectric                        |
| <b>Max. Rotational Speed</b>                     | 3000 rpm                             |
| <b>Moment of inertia of the rotor</b>            | 4 x10 <sup>-6</sup> kgm <sup>2</sup> |
| <b>Starting torque</b>                           | < 0.01 Nm                            |
| <b>Ambient temperature</b>                       | -40...+80 °C                         |
| <b>Operating voltage</b>                         | 10...30 VDC                          |
| <b>No-load current</b>                           | ≤ 120 mA                             |
| <b>Wire breakage/Reverse polarity protection</b> | yes                                  |
| <b>Communication protocol</b>                    | PROFIBUS-DP                          |
| <b>Output type</b>                               | absolute multiturn                   |
| <b>Resolution single-turn</b>                    | 16 Bit                               |
| <b>Resolution multiturn</b>                      | 12 Bit                               |
|                                                  | single-turn scalable                 |
| <b>Design</b>                                    | Solid shaft                          |
| <b>Flange type</b>                               | Clamping flange                      |
| <b>Flange diameter</b>                           | Ø 58 mm                              |
| <b>Shaft Type</b>                                | Solid shaft                          |
| <b>Shaft diameter D (mm)</b>                     | 6                                    |
| <b>Shaft length X</b>                            | 10 mm                                |
| <b>Shaft material</b>                            | Stainless steel                      |
| <b>Housing material</b>                          | Die-cast zinc                        |
| <b>Electrical connection</b>                     | Bus connection                       |
|                                                  | 3 x M12                              |
| <b>Axial shaft load</b>                          | 40 N                                 |

#### Wiring diagram



Technical data

|                                     |                                     |
|-------------------------------------|-------------------------------------|
| Radial shaft load                   | 80 N                                |
| 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                                |

|             |                |          |          |           |           |           |           |           |   |
|-------------|----------------|----------|----------|-----------|-----------|-----------|-----------|-----------|---|
| Signal      | PB_A           | PB_B     | Shield   | BUS_VDC   | PB_A      | BUS_GND   | PB_B      | Shield    | - |
| Signal -Pin | BUS in 2       | BUS in 4 | BUS in 5 | BUS out 1 | BUS out 2 | BUS out 3 | BUS out 4 | BUS out 5 | - |
| Power       | U <sub>B</sub> | -        | 0V       | -         | -         | -         | -         | -         | - |
| Power- Pin  | 1              | 2        | 3        | 4         | 5         | -         | -         | -         | - |