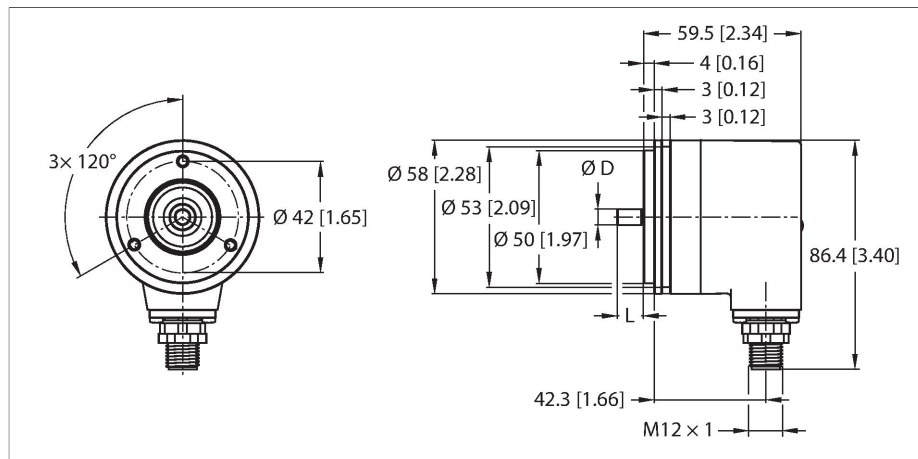


# REM-105SA1S-9D32B-B1M12/N46

## Absolute Rotary Encoder - Multiturn Industrial Line



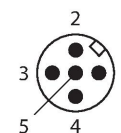
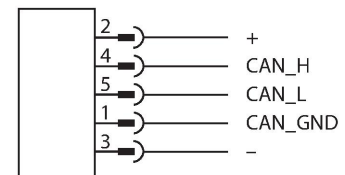
### Features

- Synchro flange, Ø 58 mm
- Solid shaft, Ø 9.525 mm × 22.225 mm
- Optical measuring principle
- Shaft material: stainless steel
- Protection class IP67 on housing and shaft side
- -40...+80 °C
- Max. 8000 rpm (continuous operation 5000 rpm)
- 10...30 VDC
- CANopen
- M12 × 1 male, 5-pin
- Singleturn resolution 14 bit scalable, default 14 bit
- Multiturn resolution scalable up to 16 bit over total resolution
- Total resolution 32 bit scalable, default: 32 bit

### Technical data

|                                           |                                                                                          |
|-------------------------------------------|------------------------------------------------------------------------------------------|
| Type                                      | REM-105SA1S-9D32B-B1M12/N46                                                              |
| ID                                        | 100011426                                                                                |
| Measuring principle                       | Optical                                                                                  |
| General data                              |                                                                                          |
| Max. Rotational Speed                     | 8000 rpm                                                                                 |
| Moment of inertia of the rotor            | $3 \times 10^{-6} \text{ kgm}^2$                                                         |
| Absolute accuracy                         | $\pm 0.015^\circ$ At 25 °C                                                               |
| Output type                               | Absolute multiturn                                                                       |
| Electrical data                           |                                                                                          |
| Operating voltage                         | 10...30 VDC                                                                              |
| No-load current                           | 80 mA                                                                                    |
| Short-circuit protection                  | yes                                                                                      |
| Wire breakage/Reverse polarity protection | yes                                                                                      |
| Communication protocol                    | CANopen                                                                                  |
| Interface                                 | CAN High-Speed in accordance with ISO 11898, basic and full CAN, CAN specification 2.0 B |
| Node ID                                   | 1...127 mit Software konfigurierbar; Werkseinstellung: 63                                |
| Baud rate                                 | 10 kbps to 1000 kbps software configurable                                               |
| Mechanical data                           |                                                                                          |
| Design                                    | Solid shaft                                                                              |
| Flange type                               | Synchro flange                                                                           |
| Flange diameter                           | Ø 58 mm                                                                                  |
| Shaft Type                                | Solid shaft                                                                              |
| Shaft diameter D [mm]                     | 9.525                                                                                    |

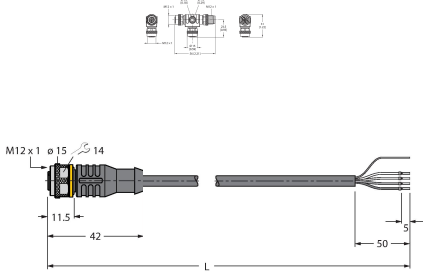
### Wiring diagram



Technical data

|                                     |                               |
|-------------------------------------|-------------------------------|
| Shaft Length L [mm]                 | 22.225                        |
| Shaft material                      | Stainless steel               |
| Housing material                    | Die-cast zinc                 |
| Electrical connection               | Connector, M12 × 1            |
| Axial shaft load                    | 40 N                          |
| Radial shaft load                   | 80 N                          |
| Environmental conditions            |                               |
| Ambient temperature                 | -40...+80 °C                  |
| Vibration resistance (EN 60068-2-6) | 10 g (100 m/s²), 55...2000 Hz |
| Shock resistance (EN 60068-2-27)    | 250 g (2500 m/s²), 6 ms       |
| Protection class                    | IP67                          |
| Protection class shaft              | IP67                          |

Accessories

| Dimension drawing                                                                   | Type       | ID      |                                                                                                                                               |
|-------------------------------------------------------------------------------------|------------|---------|-----------------------------------------------------------------------------------------------------------------------------------------------|
|  | FSM-2FKM57 | 6622101 | CANopen/DeviceNet/power supply T-splitter, 1 × M12 male connector, 2 × M12 female connector, 5-pin                                            |
|                                                                                     | RKC5701-5M | 6931034 | Bus cable for CAN (DeviceNet, - CANopen), M12 female connector, straight, cable length: 5 m, jacket material: PUR, anthracite; cULus approval |