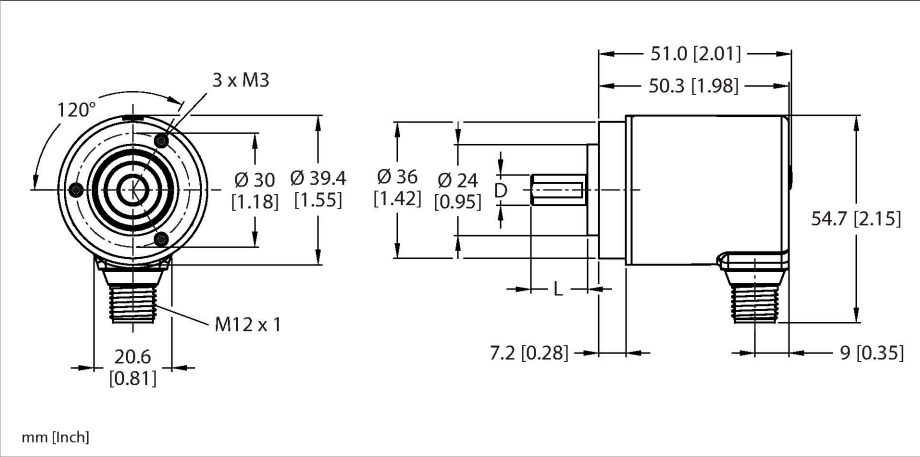


# REM-101S6C-9D38B-H1151

## Absolute Rotary Encoder - Multiturn Industrial Line



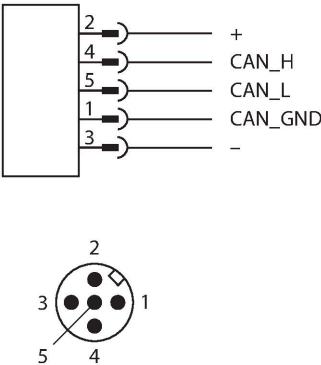
### Technical data

|                                        |                                                                                          |
|----------------------------------------|------------------------------------------------------------------------------------------|
| Type                                   | REM-101S6C-9D38B-H1151                                                                   |
| ID                                     | 100011359                                                                                |
| Measuring principle                    | Magnetic                                                                                 |
| General data                           |                                                                                          |
| Max. Rotational Speed                  | 4000 rpm                                                                                 |
| Moment of inertia of the rotor         | $1.8 \times 10^{-5} \text{ kgm}^2$                                                       |
| Starting torque                        | $< 0.01 \text{ Nm}$                                                                      |
| Repetition accuracy                    | $\pm 0.2^\circ \text{ At } 25^\circ \text{C}$                                            |
| Absolute accuracy                      | $\pm 1^\circ \text{ At } 25^\circ \text{C}$                                              |
| Output type                            | Absolute multiturn                                                                       |
| Electrical data                        |                                                                                          |
| Operating voltage $U_B$                | 10...30 VDC                                                                              |
| No-load current                        | $\leq 30 \text{ mA}$                                                                     |
| Short-circuit protection               | yes                                                                                      |
| Wire break/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...1000 kbps configurable with software                                                |
| Mechanical data                        |                                                                                          |
| Flange type                            | Clamping flange                                                                          |
| Flange diameter                        | $\varnothing 36 \text{ mm}$                                                              |
| Shaft Type                             | Solid shaft                                                                              |

### Features

- Clamping flange,  $\varnothing 36 \text{ mm}$
- Solid shaft,  $\varnothing 6 \text{ mm} \times 12.5 \text{ mm}$
- Magnetic measuring principle
- Shaft material: stainless steel
- Protection class IP67 on housing and shaft side
- $-40 \dots +85^\circ \text{C}$
- Max. 4000 rpm (continuous operation 2000 rpm)
- Energy harvesting technology
- 10...30 VDC
- CANopen
- M12  $\times$  1 male connector, 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

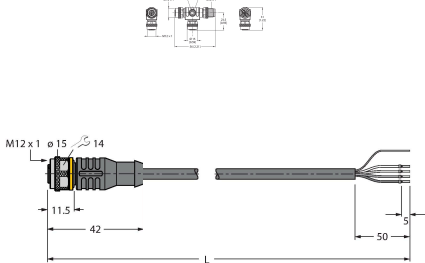
### Wiring diagram



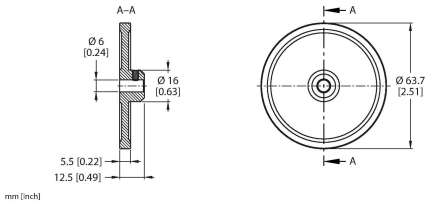
Technical data

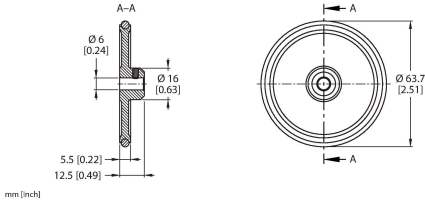
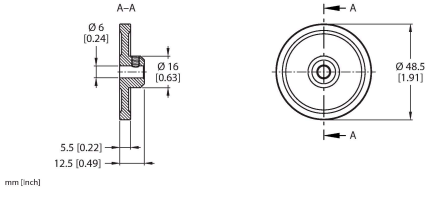
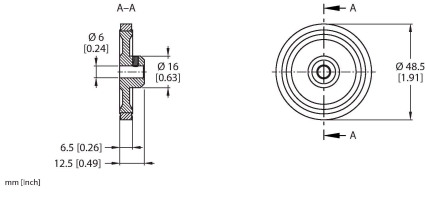
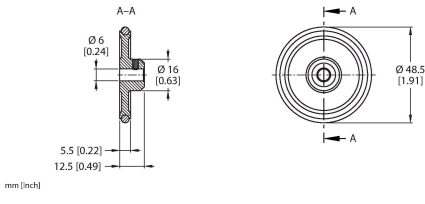
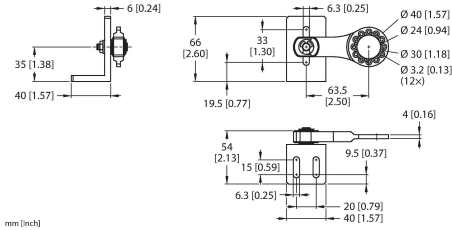
|                                     |                        |
|-------------------------------------|------------------------|
| Shaft diameter D (mm)               | 6                      |
| Shaft Length L [mm]                 | 12.5                   |
| Shaft material                      | Stainless steel        |
| Housing material                    | Die-cast zinc          |
| Electrical connection               | Connector, M12 × 1     |
|                                     | 5-pin                  |
| 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      |                                                                                                                                               |
|-------------------------------------------------------------------------------------|------------|---------|-----------------------------------------------------------------------------------------------------------------------------------------------|
|  | 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 |

Accessories

| Dimension drawing                                                                   | Type                | ID        |                                                                                                    |
|-------------------------------------------------------------------------------------|---------------------|-----------|----------------------------------------------------------------------------------------------------|
|  | RA-MW-200-5.5-DK1-6 | 100038295 | Aluminum measuring wheel (cross knurled) for encoders; circumference 0.2 m, width 5.5 mm, D = 6 mm |
|                                                                                     | RA-MW-200-6.5-PS1-6 | 100038296 | Aluminum measuring wheel (smooth PU) for encoders; circumference 0.2 m, width 6.5 mm, D = 6 mm     |

| Dimension drawing                                                                   | Type                | ID        |                                                                                                                             |
|-------------------------------------------------------------------------------------|---------------------|-----------|-----------------------------------------------------------------------------------------------------------------------------|
|    | RA-MW-200-5.5-OR1-6 | 100038298 | Aluminum measuring wheel (O-ring) for encoders; circumference 0.2 m, width 5.5 mm, D = 6 mm                                 |
|    | RA-MW-B0-5.5-DK1-6  | 100038299 | Aluminum measuring wheel (cross knurled) for encoders; circumference 6", width 5.5 mm, D = 6 mm                             |
|    | RA-MW-B0-6.5-PS1-6  | 100038300 | Aluminum measuring wheel (smooth PU) for encoders; circumference 6", width 6.5 mm, D = 6 mm                                 |
|  | RA-MW-B0-5.5-OR1-6  | 100038301 | Aluminum measuring wheel (O-ring) for encoders; circumference 6", width 5.5 mm, D = 6 mm                                    |
|  | RA-SAB-5-24         | 100038293 | Spring arm for small absolute encoders with a 36-mm flange; recommended contact pressure 5 N; maximum contact pressure 20 N |