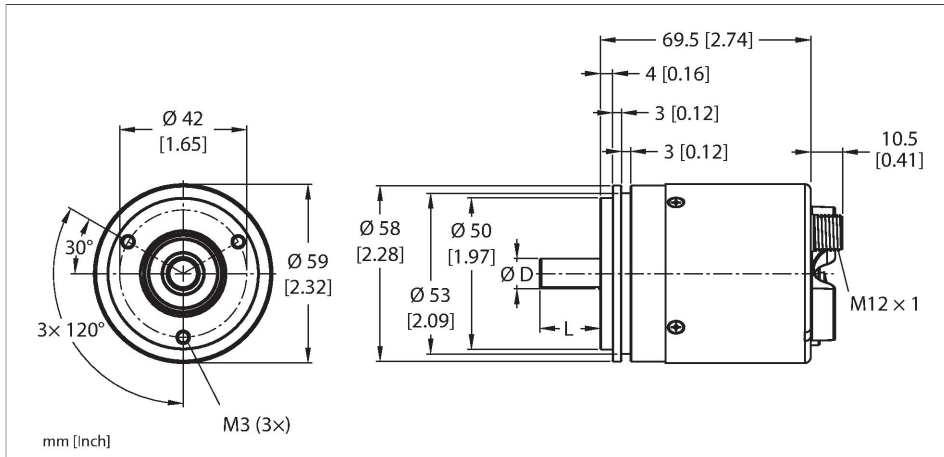


# RM-105T10S-9N43B-B3M12

## Absolute Rotary Encoder - Multiturn

### Industrial Line



#### Technical data

|                                        |                                         |
|----------------------------------------|-----------------------------------------|
| Type                                   | RM-105T10S-9N43B-B3M12                  |
| ID                                     | 200010781                               |
| Measuring principle                    | Optical                                 |
| General data                           |                                         |
| Max. rotational speed                  | 9000 rpm                                |
| Moment of inertia of the rotor         | $3 \times 10^{-6} \text{ kgm}^2$        |
| Absolute accuracy                      | $\pm 0.015^\circ$ At $25^\circ\text{C}$ |
| Output type                            | Absolute multiturn                      |
| Resolution singleturn                  | 19 Bit                                  |
| Resolution multiturn                   | 24 Bit                                  |
|                                        | Singleturn scalable                     |
| Electrical data                        |                                         |
| Operating voltage $U_B$                | 10...30 VDC                             |
| No-load current                        | $\leq 250 \text{ mA}$                   |
| Short-circuit protection               | yes                                     |
| Wire break/reverse polarity protection | yes                                     |
| Communication protocol                 | EtherNet/IP                             |
| Mechanical data                        |                                         |
| Flange type                            | Synchro flange                          |
| Flange diameter                        | $\varnothing 58 \text{ mm}$             |
| Shaft Type                             | Solid shaft                             |
| Shaft diameter D (mm)                  | 10                                      |
| Shaft Length L [mm]                    | 20                                      |

#### Features

- $\varnothing 58 \text{ mm}$  servo flange
- Solid shaft,  $\varnothing 10 \text{ mm} \times 20 \text{ mm}$
- Optical measuring principle
- Shaft material, stainless steel
- Protection class IP65 on the shaft side
- $-40 \dots +80^\circ\text{C}$
- max. 9000 rev / min
- 10...30 VDC
- Ethernet/IP
- M12  $\times$  3 male connector, 4-pin
- Singleturn resolution scalable to 19 bit (default 18 bit)
- Multiturn resolution scalable to 24 bit (default 12 bit)

## Technical data

|                                     |                                            |
|-------------------------------------|--------------------------------------------|
| Shaft material                      | Stainless steel                            |
| Housing material                    | Aluminium                                  |
| Electrical connection               | Connector, 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) | 10 g (100 m/s <sup>2</sup> ), 55...2000 Hz |
| Shock resistance (EN 60068-2-27)    | 250 g (2500 m/s <sup>2</sup> ), 6 ms       |
| Protection class                    | IP65                                       |
| Protection class shaft              | IP65                                       |