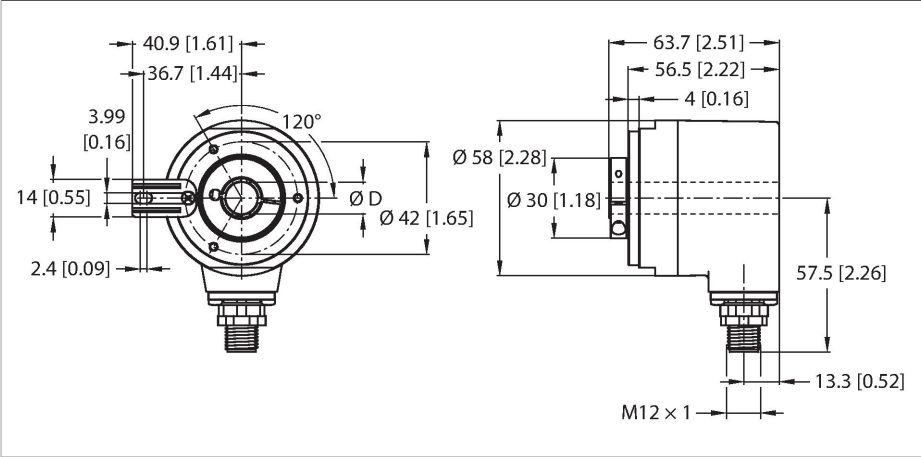


REM-104HA1T-5C13S12M-H1181  
Absolute Rotary Encoder - Multiturn  
Industrial Line



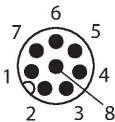
Technical data

|                                        |                                                 |
|----------------------------------------|-------------------------------------------------|
| Type                                   | REM-104HA1T-5C13S12M-H1181                      |
| ID                                     | 100011409                                       |
| Measuring principle                    | Optical                                         |
| General data                           |                                                 |
| Max. Rotational Speed                  | 4000 rpm                                        |
| Moment of inertia of the rotor         | $6 \times 10^{-6} \text{ kgm}^2$                |
| Starting torque                        | $< 0.05 \text{ Nm}$                             |
| Absolute accuracy                      | $\pm 0.015^\circ \text{ At } 25^\circ \text{C}$ |
| Output type                            | Absolute multiturn                              |
| Resolution singleturn                  | 13 Bit                                          |
| Resolution multiturn                   | 12 Bit                                          |
| 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                 | SSi                                             |
| Output function                        | Binary coded                                    |
| Mechanical data                        |                                                 |
| Flange type                            | Flange with mounting element                    |
| Flange diameter                        | $\varnothing 58 \text{ mm}$                     |
| Shaft Type                             | Blind hole shaft                                |
| Shaft diameter D (mm)                  | 9.525                                           |
| Shaft material                         | Stainless steel                                 |
| Housing material                       | Die-cast zinc                                   |
| Electrical connection                  | Connector, M12 $\times$ 1                       |

Features

- Flange with mounting element
- Hollow shaft,  $\varnothing 9.525 \text{ mm}$
- Optical 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)
- 10...30 VDC
- SSI, binary
- M12  $\times$  1 male, 8-pin
- Singleturn, 13-bit resolution
- Multiturn, 12-bit resolution

Wiring diagram



Technical data

|                                     |                        |
|-------------------------------------|------------------------|
|                                     | 8-polig                |
| Axial shaft load                    | 40 N                   |
| Radial shaft load                   | 80 N                   |
| Environmental conditions            |                        |
| Ambient temperature                 | -40...+85 °C           |
| Vibration resistance (EN 60068-2-6) | 100 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      |                                                                                                                                                                                                                                            |
|------------------------------------------------------------------------------------|----------------|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | E-RKC 8T-264-2 | U-04781 | Connection cable, female M12, straight, 8-pin (twisted pairs), shielded, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see <a href="http://www.turck.com">www.turck.com</a> |