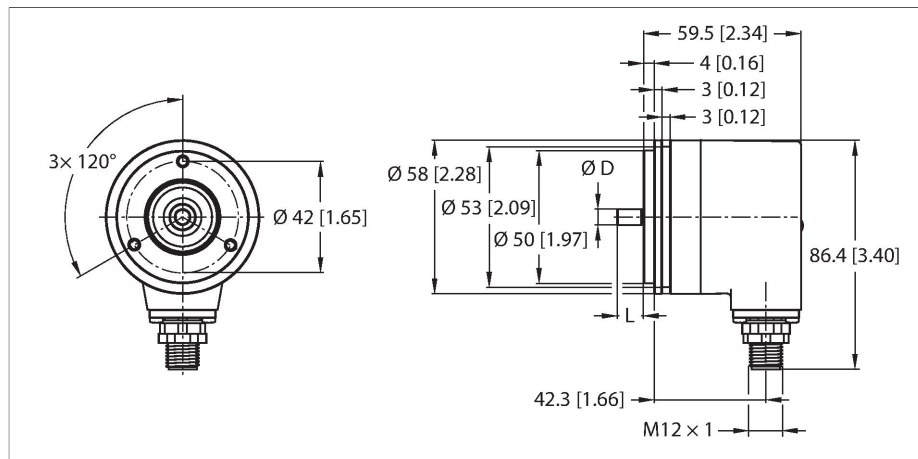


# REM-103S6S-3C13S12M-H1181

## Absolute Rotary Encoder - Multiturn Industrial Line



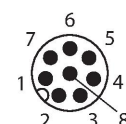
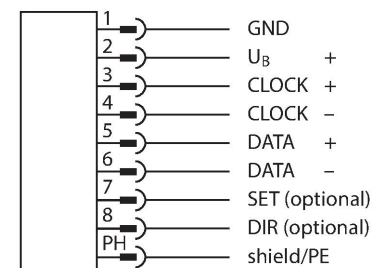
### Features

- Synchro flange, Ø 58 mm
- Solid shaft, Ø 6 mm × 10 mm
- Optical measuring principle
- Shaft material: stainless steel
- Protection class IP67 on housing and shaft side
- -40...+85 °C
- Max. 8000 rpm (continuous operation 5000 rpm)
- 10...30 VDC
- SSI, gray
- M12 × 1 male, 8-pin
- Singleturn, 13-bit resolution
- Multiturn, 12-bit resolution

### Technical data

|                                           |                                  |
|-------------------------------------------|----------------------------------|
| Type                                      | REM-103S6S-3C13S12M-H1181        |
| ID                                        | 100011379                        |
| Measuring principle                       | Optical                          |
| <b>General data</b>                       |                                  |
| Max. Rotational Speed                     | 8000 rpm                         |
| Moment of inertia of the rotor            | $3 \times 10^{-6} \text{ kgm}^2$ |
| Starting torque                           | < 0.05 Nm                        |
| Absolute accuracy                         | $\pm 0.015^\circ$ At 25 °C       |
| Output type                               | Absolute multiturn               |
| Resolution singleturn                     | 13 Bit                           |
| Resolution multiturn                      | 12 Bit                           |
| <b>Electrical data</b>                    |                                  |
| Operating voltage                         | 10...30 VDC                      |
| No-load current                           | 30 mA                            |
| Short-circuit protection                  | yes                              |
| Wire breakage/Reverse polarity protection | yes                              |
| Communication protocol                    | SSi                              |
| Output function                           | Gray coded                       |
| <b>Mechanical data</b>                    |                                  |
| Design                                    | Solid shaft                      |
| Flange type                               | Synchro flange                   |
| Flange diameter                           | Ø 58 mm                          |
| Shaft Type                                | Solid shaft                      |
| Shaft diameter D [mm]                     | 6                                |
| Shaft Length L [mm]                       | 10                               |

### Wiring diagram



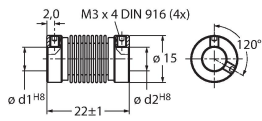
Technical data

|                                     |                        |
|-------------------------------------|------------------------|
| Shaft material                      | Stainless steel        |
| Housing material                    | Die-cast zinc          |
| Electrical connection               | Connector, M12 × 1     |
|                                     | 8-pin                  |
| 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

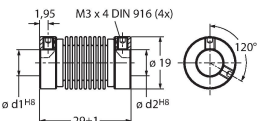
|              |         |
|--------------|---------|
| RCS-15-06-06 | 1545362 |
|--------------|---------|

Bellows coupling, outer diameter:  
15 mm, bore diameter: 6 mm/6 mm



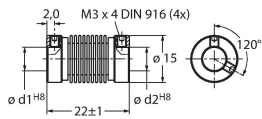
|              |         |
|--------------|---------|
| RCS-19-06-06 | 1545360 |
|--------------|---------|

Bellows coupling, outer diameter:  
19 mm, bore diameter: 6 mm/6 mm



|              |         |
|--------------|---------|
| RCS-15-08-06 | 1545361 |
|--------------|---------|

Bellows coupling, outer diameter:  
15 mm, bore diameter: 8 mm/6 mm



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 [www.turck.com](http://www.turck.com)