

# REM-116T10C-7AAR-H1151

## Absolute Rotary Encoder - Multiturn Industrial Line



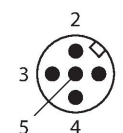
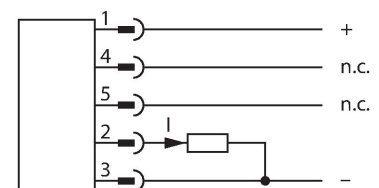
### Technical data

|                                           |                        |
|-------------------------------------------|------------------------|
| Type                                      | REM-116T10C-7AAR-H1151 |
| ID                                        | 100011412              |
| Measuring principle                       | Magnetic               |
| General data                              |                        |
| Max. Rotational Speed                     | 4000 rpm               |
| Absolute accuracy                         | ± 1 ° At 25 °C         |
| Output type                               | Absolute multiturn     |
| Electrical data                           |                        |
| Operating voltage                         | 10...30 VDC            |
| No-load current                           | 38 mA                  |
| Short-circuit protection                  | yes                    |
| Wire breakage/Reverse polarity protection | yes                    |
| Output function                           | Analog output          |
| Current output                            | 4...20 mA              |
| DA converter resolution                   | 12 Bit                 |
| Mechanical data                           |                        |
| Design                                    | Solid shaft            |
| Flange type                               | Clamping flange        |
| Flange diameter                           | Ø 58 mm                |
| Shaft Type                                | Solid shaft            |
| Shaft diameter D [mm]                     | 10                     |
| Shaft Length L [mm]                       | 20                     |
| Shaft material                            | Stainless steel        |
| Housing material                          | Die-cast zinc          |
| Electrical connection                     | Connector, M12 × 1     |

### Features

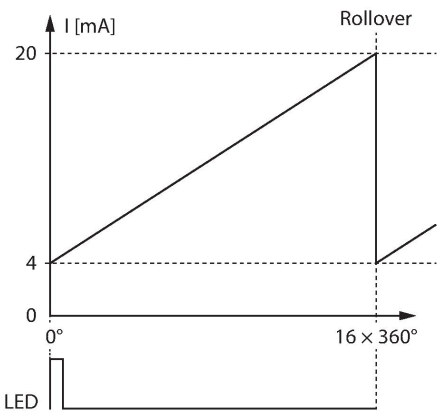
- Clamping flange, Ø 58 mm
- Solid shaft, Ø 10 mm × 20 mm
- Magnetic measuring principle
- Shaft material: stainless steel
- Protection class IP65 on housing and shaft side
- -40...+85°C
- Max. 4000 rpm (continuous operation: 2000)
- Energy harvesting technology
- 10...30 VDC
- Analog output, 4...20 mA per 16 CW revolutions
- 12-bit resolution
- M12 × 1 male connector, 5-pin

### Wiring diagram



Technical data

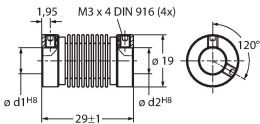
|                                     |                               |
|-------------------------------------|-------------------------------|
|                                     | 5-pin                         |
| Axial shaft load                    | 40 N                          |
| Radial shaft load                   | 80 N                          |
| Environmental conditions            |                               |
| Ambient temperature                 | -40...+85 °C                  |
| Vibration resistance (EN 60068-2-6) | 30 g (300 m/s²), 10...2000 Hz |
| Shock resistance (EN 60068-2-27)    | 500 g (2500 m/s²), 4 ms       |
| Protection class                    | IP65                          |
| Protection class shaft              | IP65                          |



Accessories

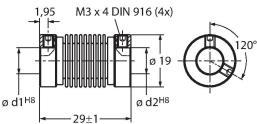
RCS-19-10-081545357

Bellows coupling, outer diameter:  
19 mm, bore diameter: 10 mm/8 mm



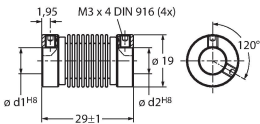
RCS-19-10-101545356

Bellows coupling, outer diameter:  
19 mm, bore diameter: 10 mm/10 mm



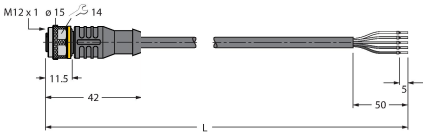
RCS-19-10-061545358

Bellows coupling, outer diameter:  
19 mm, bore diameter: 10 mm/6 mm



Accessories

| Dimension drawing | Type          | ID      |                                                                                                                         |
|-------------------|---------------|---------|-------------------------------------------------------------------------------------------------------------------------|
|                   | RKC4.5T-2/TEL | 6625016 | Connection cable, M12 female connector, straight, 5-pin, cable length: 2 m, jacket material: PVC, black; cULus approval |



## Accessories

| Dimension drawing | Type                | ID        |                                                                                                    |
|-------------------|---------------------|-----------|----------------------------------------------------------------------------------------------------|
|                   | RA-MW-200-12-DK1-10 | 100038302 | Aluminum measuring wheel (cross knurled) for encoders; circumference 0.2 m, width 12 mm, D = 10 mm |
|                   | RA-MW-200-12-PS1-10 | 100038303 | Aluminum measuring wheel (smooth PU) for encoders; circumference 0.2 m, width 12 mm, D = 10 mm     |
|                   | RA-MW-200-12-RT1-10 | 100038304 | Aluminum measuring wheel (studded PU) for encoders; circumference 0.2 m, width 12 mm, D = 10 mm    |
|                   | RA-MW-200-12-PC1-10 | 100038305 | Aluminum measuring wheel (grooved PU) for encoders; circumference 0.2 m, width 12 mm, D = 10 mm    |
|                   | RA-MW-500-25-DK1-10 | 100038314 | Aluminum measuring wheel (cross knurled) for encoders; circumference 0.5 m, width 25 mm, D = 10 mm |
|                   | RA-MW-500-25-PS1-10 | 100038315 | Aluminum measuring wheel (smooth PU) for encoders; circumference 0.5 m, width 25 mm, D = 10 mm     |
|                   | RA-MW-500-25-RT1-10 | 100038316 | Aluminum measuring wheel (studded PU) for encoders; circumference 0.5 m, width 25 mm, D = 10 mm    |

| Dimension drawing | Type                | ID        |                                                                                                               |
|-------------------|---------------------|-----------|---------------------------------------------------------------------------------------------------------------|
|                   | RA-MW-500-25-PC1-10 | 100038317 | Aluminum measuring wheel (grooved PU) for encoders; circumference 0.5 m, width 25 mm, D = 10 mm               |
|                   | RA-MW-300-12-DK1-10 | 100038306 | Aluminum measuring wheel (cross knurled) for encoders; circumference 0.3 m, width 12 mm, D = 10 mm            |
|                   | RA-MW-300-12-PS1-10 | 100038307 | Aluminum measuring wheel (smooth PU) for encoders; circumference 0.3 m, width 12 mm, D = 10 mm                |
|                   | RA-MW-300-12-RT1-10 | 100038308 | Aluminum measuring wheel (studded PU) for encoders; circumference 0.3 m, width 12 mm, D = 10 mm               |
|                   | RA-MW-300-12-PC1-10 | 100038309 | Aluminum measuring wheel (grooved PU) for encoders; circumference 0.3 m, width 12 mm, D = 10 mm               |
|                   | RA-SAB-15-36        | 100038251 | Spring arm for encoders with a 58-mm flange; recommended contact pressure 15 N; maximum contact pressure 30 N |
|                   | RA-SAB-30-36        | 100038294 | Spring arm for encoders with a 58-mm flange; recommended contact pressure 30 N; maximum contact pressure 40 N |