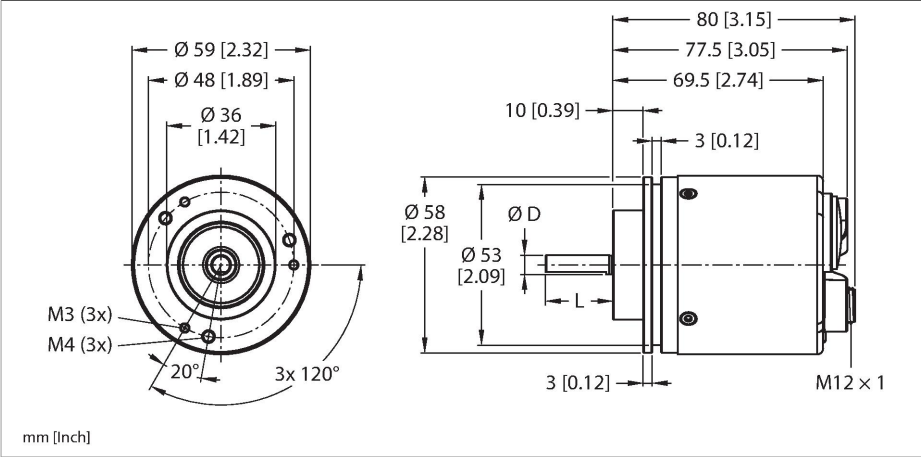


REM-E-105T10C-9E43B-B3M12  
Absolute Rotary Encoder - Multiturn  
Efficiency Line



Technical data

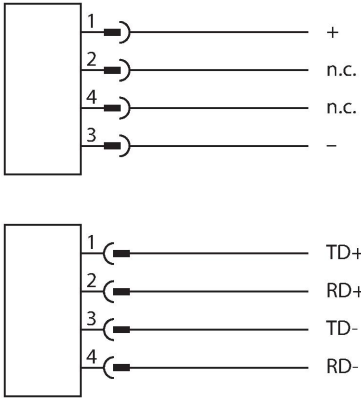
|                                        |                                  |
|----------------------------------------|----------------------------------|
| Type                                   | REM-E-105T10C-9E43B-B3M12        |
| ID                                     | 100044355                        |
| Measuring principle                    | Optical                          |
| General data                           |                                  |
| Max. Rotational Speed                  | 6000 rpm                         |
| Moment of inertia of the rotor         | $3 \times 10^{-6} \text{ kgm}^2$ |
| 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                        | $\leq 250 \text{ mA}$            |
| Wire break/reverse polarity protection | yes                              |
| Communication protocol                 | PROFINET                         |
| Mechanical data                        |                                  |
| 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                       | Aluminium                        |
| Electrical connection                  | Connector, 3 x M12               |
| Axial shaft load                       | 40 N                             |
| Radial shaft load                      | 80 N                             |



Features

- Clamping flange, Ø 58 mm
- Solid shaft, Ø 10 mm × 20 mm
- Optical measuring principle
- Shaft material: stainless steel
- Protection class IP67 on housing side
- -40...+80 °C
- Max. 6000 rpm
- 10...30 VDC
- Profinet IO, RT and IRT up to 250 µs
- Encoder profile version 4.2
- Media Redundancy Protocol (MRP)
- Link Layer Discovery Protocol (LLDP)
- Simple Network Management Protocol (SNMP)
- Fast Startup (FSU)
- M12 × 3 connector, 4-pin
- Singleturn resolution scalable up to 19 bit, default 13 bit
- Multiturn resolution up to 24 bit, default 12 bit
- Total resolution scalable up to 43 bit, default 25 bit

Wiring diagram



## Technical data

### Environmental conditions

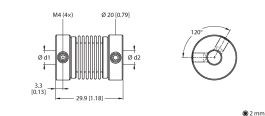
|                                     |                               |
|-------------------------------------|-------------------------------|
| Ambient temperature                 | -40...+80 °C                  |
| Vibration resistance (EN 60068-2-6) | 10 g (100 m/s²), 55...2000 Hz |
| Shock resistance (EN 60068-2-27)    | 250 g (2500 m/s²), 6 ms       |
| Protection class                    | IP64                          |
| Protection class shaft              | IP64                          |
| MTTF                                | 19 years                      |

## Accessories

### RA-BC-20-06-10

100048779

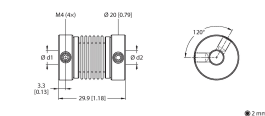
Bellows coupling with aluminum hub  
Ø 20 mm; d1 = 6 mm, d2 = 10 mm



### RA-BC-20-08-10

100048781

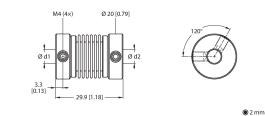
Bellows coupling with aluminum hub  
Ø 20 mm; d1 = 8 mm, d2 = 10 mm



### RA-BC-20-10-10

100048782

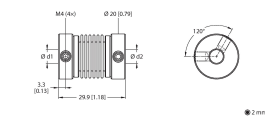
Bellows coupling with aluminum hub  
Ø 20 mm; d1 = 10 mm, d2 = 10 mm



### RA-BC-20-10-12

100048783

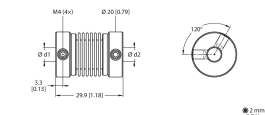
Bellows coupling with aluminum hub  
Ø 20 mm; d1 = 10 mm, d2 = 12 mm



### RA-BC-E-20-06-10

100048786

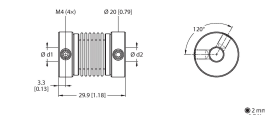
Stainless steel bellows coupling Ø  
20 mm; d1 = 6 mm, d2 = 10 mm



### RA-BC-E-20-10-10

100048787

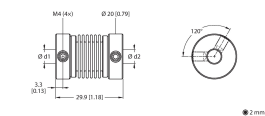
Stainless steel bellows coupling Ø  
20 mm; d1 = 10 mm, d2 = 10 mm



### RA-BC-E-20-10-12

100048788

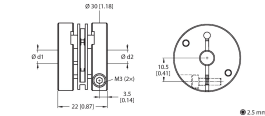
Stainless steel bellows coupling Ø  
20 mm; d1 = 10 mm, d2 = 12 mm



### RA-SDC-30-10-10

100048792

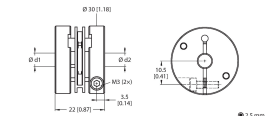
Spring disc coupling Ø 30 mm; d1 =  
10 mm, d2 = 10 mm



### RA-SDC-30-10-12

100048793

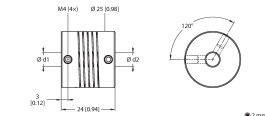
Spring disc coupling Ø 30 mm; d1 =  
10 mm, d2 = 12 mm



### RA-HC-25-10-10

100048796

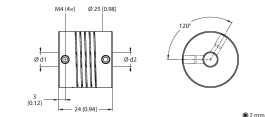
Aluminum helix coupling Ø 25 mm; d1  
= 10 mm, d2 = 10 mm



### RA-HC-25-10-12

100048797

Aluminum helix coupling Ø 25 mm; d1  
= 10 mm, d2 = 12 mm



Accessories

| Dimension drawing | Type               | ID      |                                                                                                                                                               |
|-------------------|--------------------|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                   | RSSD-RSSD-4422-2M  | 6635150 | Cable for Industrial Ethernet, M12 male connector, D-coded, straight to M12 male connector, D-coded, straight, cable length: 2 m, jacket material: PUR, green |
|                   | WSSD-WSSD-4422-2M  | 6635188 | Cable for Industrial Ethernet, M12 male connector, D-coded, angled to M12 male connector, D-coded, angled, cable length: 2 m, jacket material: PUR, green     |
|                   | RSSD-RJ45S-4422-2M | 6635170 | Cable for Industrial Ethernet, M12 male connector, D-coded, straight to RJ45 male connector, straight, cable length: 2 m, jacket material: PUR, green         |
|                   | RSSD-RJ45S-4422-7M | 6635579 | Cable for Industrial Ethernet, M12 male connector, D-coded, straight to RJ45 male connector, straight, cable length: 2 m, jacket material: PUR, green         |
|                   | RSSD-RJ45S-4422-8M | 6635538 | Cable for Industrial Ethernet, M12 male connector, D-coded, straight to RJ45 male connector, straight, cable length: 2 m, jacket material: PUR, green         |
|                   | RKC4.4T-2/TXL      | 6625503 | Connection cable, M12 female connector, straight, 4-pin, cable length: 2 m, jacket material: PUR, black; cULus approval                                       |
|                   | WKC4.4T-2/TXL      | 6625515 | Connection cable, M12 female connector, angled, 4-pin, cable length: 2 m, jacket material: PUR, black; cULus approval                                         |