

REI-10S12C-4B512-H1181  
Incremental Encoder  
Industrial Line

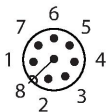


Technical data

|                                        |                                    |
|----------------------------------------|------------------------------------|
| Type                                   | REI-10S12C-4B512-H1181             |
| ID                                     | 100010271                          |
| Measuring principle                    | Optical                            |
| General data                           |                                    |
| Max. rotational speed                  | 6000 rpm                           |
| Moment of inertia of the rotor         | $1.8 \times 10^{-5} \text{ kgm}^2$ |
| Starting torque                        | < 0.05 Nm                          |
| Output type                            | Incremental                        |
| Resolution incremental                 | 512 ppr                            |
| Electrical data                        |                                    |
| Operating voltage $U_B$                | 5...30 VDC                         |
| No-load current                        | ≤ 90 mA                            |
| Output current                         | ≤ 20 mA                            |
| Short-circuit protection               | yes                                |
| Wire break/reverse polarity protection | yes                                |
| Pulse frequency max.                   | 300 kHz                            |
| Signal level high                      | min. 2.5 V                         |
| Signal level low                       | max. 0.5 V                         |
| Output function                        | RS422/TTL, invertable              |
| Mechanical data                        |                                    |
| Flange type                            | Clamping flange                    |
| Flange diameter                        | Ø 58 mm                            |
| Shaft Type                             | Solid shaft                        |
| Shaft diameter D (mm)                  | 12                                 |
| Shaft Length L [mm]                    | 20                                 |
| Shaft material                         | Stainless steel                    |

Features

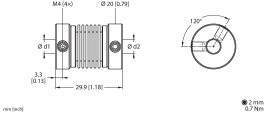
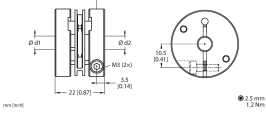
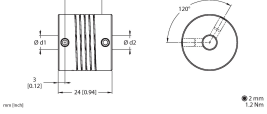
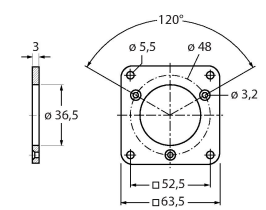
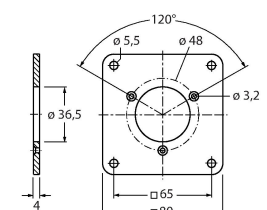
- Clamping flange, Ø 58 mm
- Solid shaft, Ø 12 mm × 20 mm
- Optical measuring principle
- Shaft material: stainless steel
- Protection class IP67 on housing and shaft side
- -40...+85 °C
- Max. 6000 rpm (continuous operation 3000 rpm)
- 5...30 VDC
- RS422/TTL invertible
- Pulse frequency max. 300 kHz
- M12 × 1 male connector, 8-pin
- 512 pulses per revolution



## Technical data

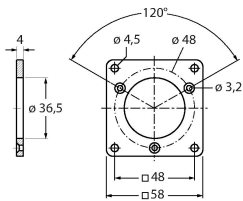
|                                     |                                     |
|-------------------------------------|-------------------------------------|
| Housing material                    | Die-cast zinc                       |
| Electrical connection               | Connector, M12 × 1                  |
|                                     | 8-pin                               |
| Axial shaft load                    | 50 N                                |
| Radial shaft load                   | 100 N                               |
| Environmental conditions            |                                     |
| Ambient temperature                 | -40...+85 °C                        |
| Vibration resistance (EN 60068-2-6) | 300 m/s <sup>2</sup> , 10...2000 Hz |
| Shock resistance (EN 60068-2-27)    | 3000 m/s <sup>2</sup> , 6 ms        |
| Protection class                    | IP67                                |
| Protection class shaft              | IP67                                |

## Accessories

|                                                                                                                 |                                                                                                                                                  |
|-----------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>RA-BC-20-10-12</b><br>    | <b>100048783</b><br>Bellows coupling with aluminum hub<br>Ø 20 mm; d1 = 10 mm, d2 = 12 mm                                                        |
| <b>RA-BC-20-12-12</b><br>   | <b>100048784</b><br>Bellows coupling with aluminum hub<br>Ø 20 mm; d1 = 12 mm, d2 = 12 mm                                                        |
| <b>RA-BC-20-08-12</b><br>    | <b>100049106</b><br>Bellows coupling with aluminum hub<br>Ø 20 mm; d1 = 8 mm, d2 = 12 mm                                                         |
| <b>RA-BC-E-20-10-12</b><br> | <b>100048788</b><br>Stainless steel bellows coupling Ø<br>20 mm; d1 = 10 mm, d2 = 12 mm                                                          |
| <b>RA-SDC-30-10-12</b><br>   | <b>100048793</b><br>Spring disc coupling Ø 30 mm; d1 =<br>10 mm, d2 = 12 mm                                                                      |
| <b>RA-HC-25-10-12</b><br>   | <b>100048797</b><br>Aluminum helix coupling Ø 25 mm; d1<br>= 10 mm, d2 = 12 mm                                                                   |
| <b>RFA-2</b><br>             | <b>1544631</b><br>Aluminium flange adapter,<br>rectangular, for solid shaft encoders<br>with clamping flange; edge length<br>63.5 mm; 3 mm thick |
| <b>RFA-13</b><br>           | <b>1544642</b><br>Aluminium flange adapter,<br>rectangular, for solid shaft encoders<br>with clamping flange; edge length 80<br>mm; 4 mm thick   |

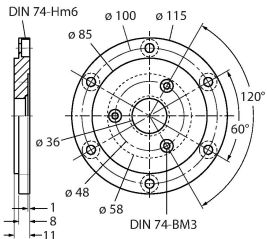
RFA-1 1544630

Aluminium flange adapter, rectangular, for solid shaft encoders with clamping flange; edge length 58 mm; 4 mm thick



RFA-4 1544633

Euro flange – aluminium flange adapter for solid shaft encoders, Ø 115 mm; reference diameter 100 mm; adapts 58 mm clamping flange to Euro flange



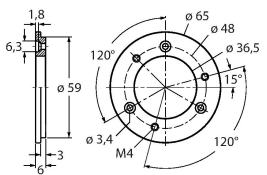
RFA-6 1544635

Aluminium flange adapter for solid shaft encoders with clamping flange, Ø 58 mm; adapts clamping flange to synchro flange



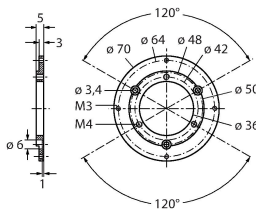
RFA-7 1544636

Aluminium flange adapter for solid shaft encoders, Ø 65 mm; adapts to Ø 65 mm flange and 48 mm reference diameter



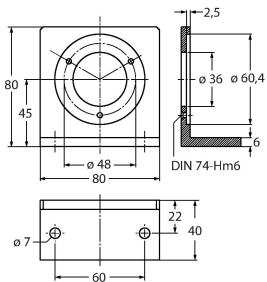
RFA-8 1544637

Aluminium flange adapter for solid shaft encoders with clamping flange, Ø 70 mm; thickness 4 mm, adapts to Ø 70 mm flange



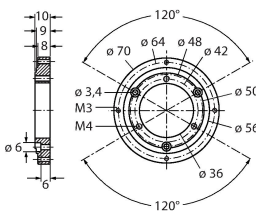
RFA-9 1544638

Aluminium angle flange for solid shaft encoders with Ø 58 mm clamping flange



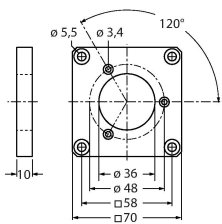
RFA-11 1544640

Aluminium flange adapter for solid shaft encoders with clamping flange, Ø 70 mm; thickness 10 mm, adapts to Ø 70 mm flange



RFA-12 1544641

Aluminium flange adapter, rectangular, for solid shaft encoders with clamping flange; edge length 70 mm; 10 mm thick



Accessories

| Dimension drawing | Type        | ID      |                                                                                                                         |
|-------------------|-------------|---------|-------------------------------------------------------------------------------------------------------------------------|
|                   | RKC8T-2/TXL | 6625142 | Connection cable, M12 female connector, straight, 8-pin, cable length: 2 m, jacket material: PUR, black; cULus approval |

| Dimension drawing | Type        | ID      |                                                                                                                       |
|-------------------|-------------|---------|-----------------------------------------------------------------------------------------------------------------------|
|                   | WKC8T-2/TXL | 6625145 | Connection cable, M12 female connector, angled, 8-pin, cable length: 2 m, jacket material: PUR, black; cULus approval |

