

REI-10S12C-2B2500-H1181  
Incremental Encoder  
Industrial Line



Technical data

|                                           |                                    |
|-------------------------------------------|------------------------------------|
| Type                                      | REI-10S12C-2B2500-H1181            |
| ID                                        | 100010239                          |
| 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                           | $< 0.05 \text{ Nm}$                |
| Output type                               | Incremental                        |
| Resolution, incremental                   | 2500 ppr                           |
| Electrical data                           |                                    |
| Operating voltage                         | 10...30 VDC                        |
| No-load current                           | 100 mA                             |
| Output current                            | $\leq 30 \text{ mA}$               |
| Short-circuit protection                  | yes                                |
| Wire breakage/Reverse polarity protection | yes                                |
| Pulse frequency max.                      | 300 kHz                            |
| Signal level high                         | min. $U_B - 1 \text{ V}$           |
| Signal level low                          | max. $0.5 \text{ V}$               |
| Output function                           | Push-Pull/HTL, invertable          |
| Mechanical data                           |                                    |
| Design                                    | Solid shaft                        |
| Flange type                               | Clamping flange                    |
| Flange diameter                           | $\varnothing 58 \text{ mm}$        |
| Shaft Type                                | Solid shaft                        |
| Shaft diameter D [mm]                     | 12                                 |

Features

- Clamping flange,  $\varnothing 58 \text{ mm}$
- Solid shaft,  $\varnothing 12 \text{ mm} \times 20 \text{ mm}$
- Optical measuring principle
- Shaft material: stainless steel
- Protection class IP67 on housing and shaft side
- $-40 \dots +85 \text{ }^\circ\text{C}$
- Max. 6000 rpm (continuous operation 3000 rpm)
- 10...30 VDC
- Push-pull/HTL invertible
- Pulse frequency max. 300 kHz
- M12  $\times$  1 male connector, 8-pin
- 2500 pulses per revolution

Wiring diagram

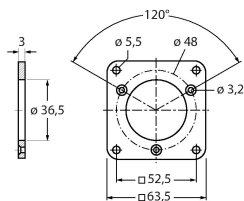


Technical data

|                                     |                        |
|-------------------------------------|------------------------|
| Shaft Length L [mm]                 | 20                     |
| Shaft material                      | Stainless steel        |
| 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/s², 10...2000 Hz |
| Shock resistance (EN 60068-2-27)    | 3000 m/s², 6 ms        |
| Protection class                    | IP67                   |
| Protection class shaft              | IP67                   |

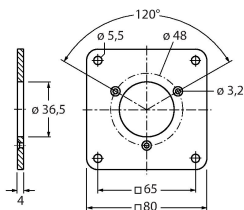
Accessories

RFA-2 1544631



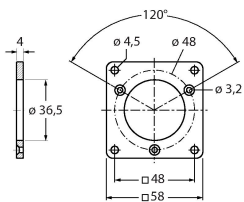
Aluminium flange adapter, rectangular, for solid shaft encoders with clamping flange; edge length 63.5 mm; 3 mm thick

RFA-13 1544642



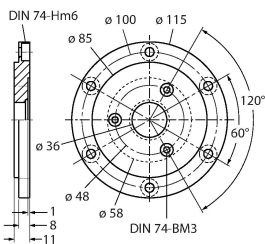
Aluminium flange adapter, rectangular, for solid shaft encoders with clamping flange; edge length 80 mm; 4 mm thick

RFA-1 1544630



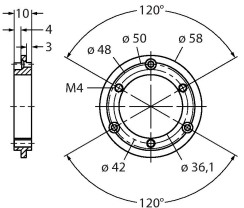
Aluminium flange adapter, rectangular, for solid shaft encoders with clamping flange; edge length 58 mm; 4 mm thick

RFA-4 1544633



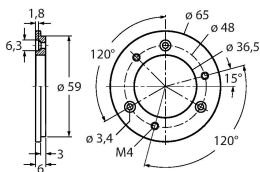
Euro flange – aluminium flange adapter for solid shaft encoders, Ø 115 mm; reference diameter 100 mm; adapts 58 mm clamping flange to Euro flange

RFA-6 1544635



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

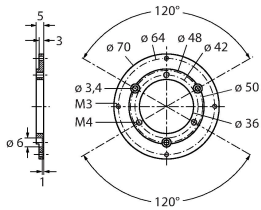
RFA-7 1544636



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

## RFA-8

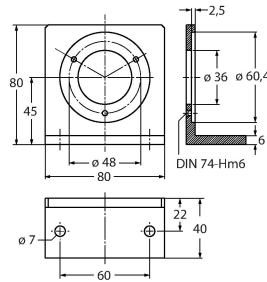
1544637



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

## RFA-9

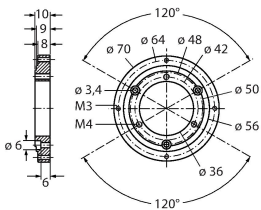
1544638



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

## RFA-11

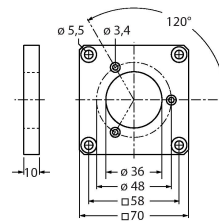
1544640



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