

REI-10SA1C-2B2048-H1181  
Incremental Encoder  
Industrial Line



Technical data

|                                        |                                    |
|----------------------------------------|------------------------------------|
| Type                                   | REI-10SA1C-2B2048-H1181            |
| ID                                     | 100010247                          |
| 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                 | 2048 ppr                           |
| Electrical data                        |                                    |
| Operating voltage $U_B$                | 10...30 VDC                        |
| No-load current                        | $\leq 100 \text{ mA}$              |
| Output current                         | $\leq 30 \text{ mA}$               |
| Short-circuit protection               | yes                                |
| Wire break/reverse polarity protection | yes                                |
| Pulse frequency max.                   | 300 kHz                            |
| Signal level high                      | min. $U_B - 1 \text{ V}$           |
| Signal level low                       | max. 0.5 V                         |
| Output function                        | Push-Pull/HTL, invertable          |
| Mechanical data                        |                                    |
| Flange type                            | Clamping flange                    |
| Flange diameter                        | Ø 58 mm                            |
| Shaft Type                             | Solid shaft                        |
| Shaft diameter D (mm)                  | 9.525                              |
| Shaft diameter D                       | 0.375 in                           |
| Shaft Length L [mm]                    | 15.875                             |

Features

- Clamping flange, Ø 58 mm
- Solid shaft, Ø 3/8" x 5/8"
- 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)
- 10...30 VDC
- Push-pull/HTL invertible
- Pulse frequency max. 300 kHz
- M12 x 1 male connector, 8-pin
- 2048 pulses per revolution

Wiring diagram

|    |         |
|----|---------|
| 1  | GND     |
| 2  | $U_B$ + |
| 3  | A       |
| 4  | A inv.  |
| 5  | B       |
| 6  | B inv.  |
| 7  | 0       |
| 8  | 0 inv.  |
| PH | shield  |

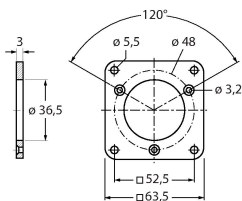


Technical data

|                                     |                        |
|-------------------------------------|------------------------|
| Shaft length X                      | 0.625 in               |
| 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                   |

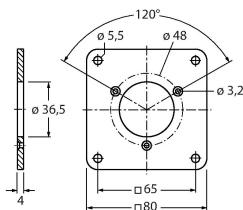
Accessories

RFA-2 1544631



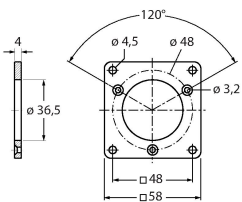
Aluminium flange adapter, rectangular, for solid shaft encoders with clamping flange; edge length 63.5 mm; 3 mm thick

RFA-13 1544642



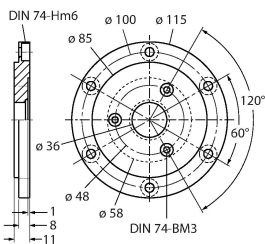
Aluminium flange adapter, rectangular, for solid shaft encoders with clamping flange; edge length 80 mm; 4 mm thick

RFA-1 1544630



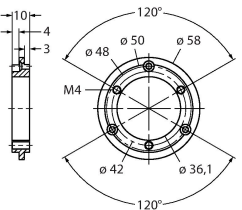
Aluminium flange adapter, rectangular, for solid shaft encoders with clamping flange; edge length 58 mm; 4 mm thick

RFA-4 1544633



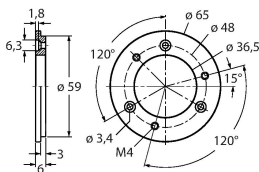
Euro flange – aluminium flange adapter for solid shaft encoders, Ø 115 mm; reference diameter 100 mm; adapts 58 mm clamping flange to Euro flange

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



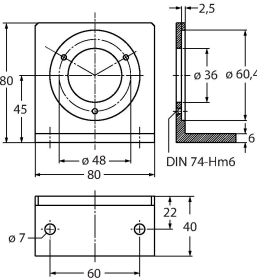
Aluminium flange adapter for solid shaft encoders, Ø 65 mm; adapts to Ø 65 mm flange and 48 mm reference diameter

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



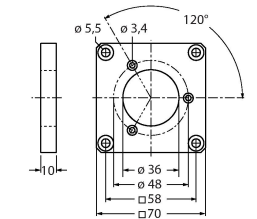
Aluminium angle flange for solid shaft encoders with Ø 58 mm clamping flange

RFA-11 1544640



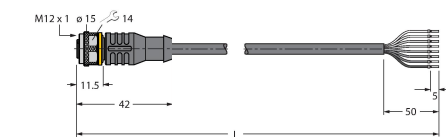
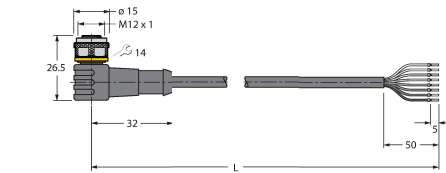
Aluminium flange adapter for solid shaft encoders with clamping flange, Ø 70 mm; thickness 10 mm, adapts to Ø 70 mm flange

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   |