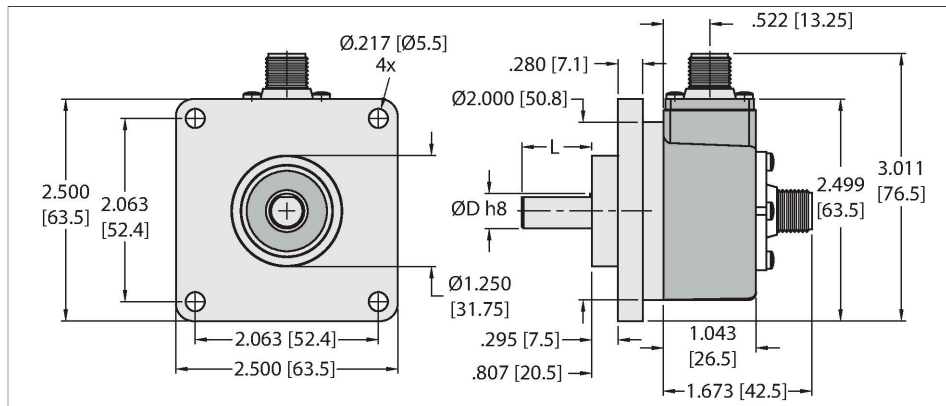


# RI-10TA1R-2K200-H1151

## Incremental Shaft Encoder

### Industrial Line

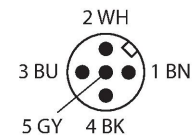
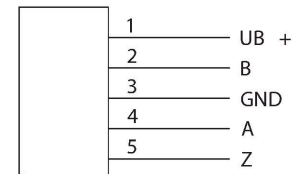


### Features

- Square flange, 63.5mm
- 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)
- 5...30 VDC
- Male connector, M12 x 1 , 5-pole
- Push-pull, with inverted signals
- Pulse frequency max. 300 kHz
- 200 pulses per revolution

### Technical data

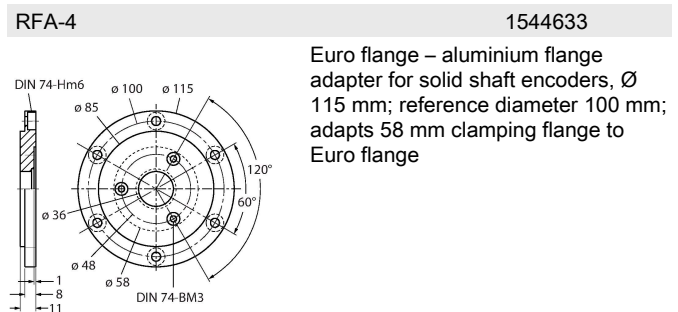
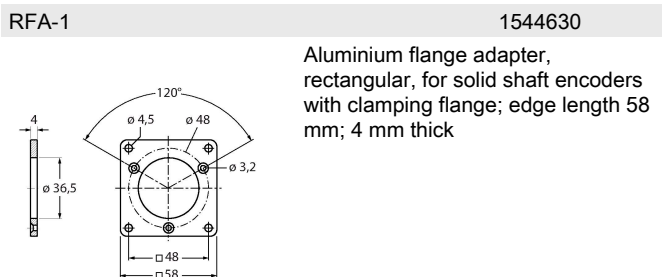
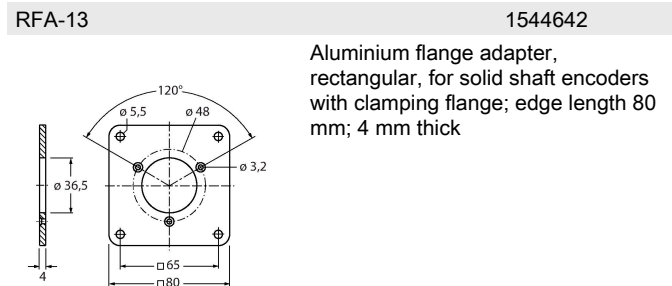
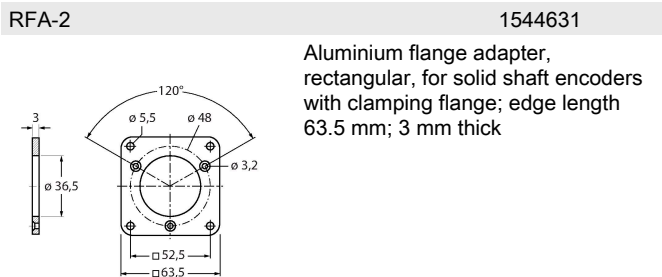
|  |   |
|--|---|
| Type                                   | RI-10TA1R-2K200-H1151                         |
| ID                                     | 100017177                                     |
| Measuring principle                    | Optical                                       |
| <b>General data</b>                    |   |
| Max. rotational speed                  | 6000 rpm                                      |
| Moment of inertia of the rotor         | $1.8 \times 10^{-6} \text{ kgm}^2$            |
| Starting torque                        | < 0.05 Nm                                     |
| Output type                            | Incremental                                   |
| Resolution incremental                 | 200 ppr                                       |
| <b>Electrical data</b>                 |   |
| Operating voltage $U_b$                | 5...30 VDC                                    |
| No-load current                        | $\leq 100 \text{ mA}$                         |
| Output current                         | $\leq 20 \text{ mA}$                          |
| Short-circuit protection               | yes   |
| Wire break/reverse polarity protection | no  |
| Pulse frequency max.                   | 300 kHz                                       |
| Signal level high                      | min. $U_b - 2 \text{ V}$                      |
| Signal level low                       | max. 0.5 V                                    |
| Output function                        | 5-wire, Push-Pull 7272, with inverted signals |
| <b>Mechanical data</b>                 |   |
| Flange type                            | Synchro flange                                |
| Flange diameter                        | Ø 50.8 mm                                     |
| Shaft Type                             | Solid shaft                                   |



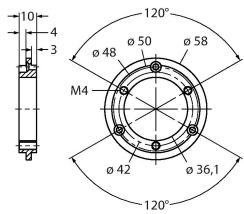
## Technical data

|                                     |                                     |
|-------------------------------------|-------------------------------------|
| Shaft diameter D                    | 0.375 in                            |
| Shaft length (L)                    | 0.625 in                            |
| Shaft material                      | Stainless steel                     |
| Housing material                    | Die-cast zinc                       |
| Electrical connection               | M12 × 1                             |
|                                     | 5-pin                               |
| Axial shaft load                    | 50 N                                |
| Radial shaft load                   | 100 N                               |
| <b>Environmental conditions</b>     |                                     |
| 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

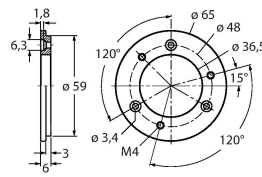


**RFA-6** 1544635



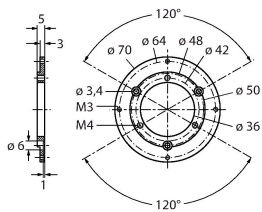
Aluminium flange adapter for solid shaft encoders with clamping flange, Ø 58 mm; adapts clamping flange to synchro flange

**RFA-7** 1544636



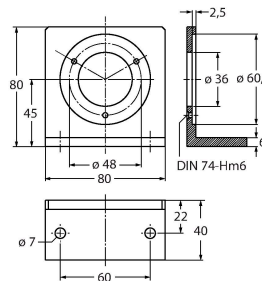
Aluminium flange adapter for solid shaft encoders, Ø 65 mm; adapts to Ø 65 mm flange and 48 mm reference diameter

**RFA-8** 1544637



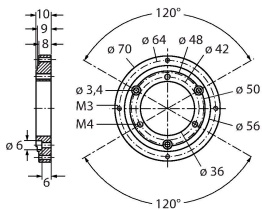
Aluminium flange adapter for solid shaft encoders with clamping flange, Ø 70 mm; thickness 4 mm, adapts to Ø 70 mm flange

**RFA-9** 1544638



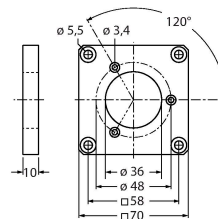
Aluminium angle flange for solid shaft encoders with Ø 58 mm clamping flange

**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