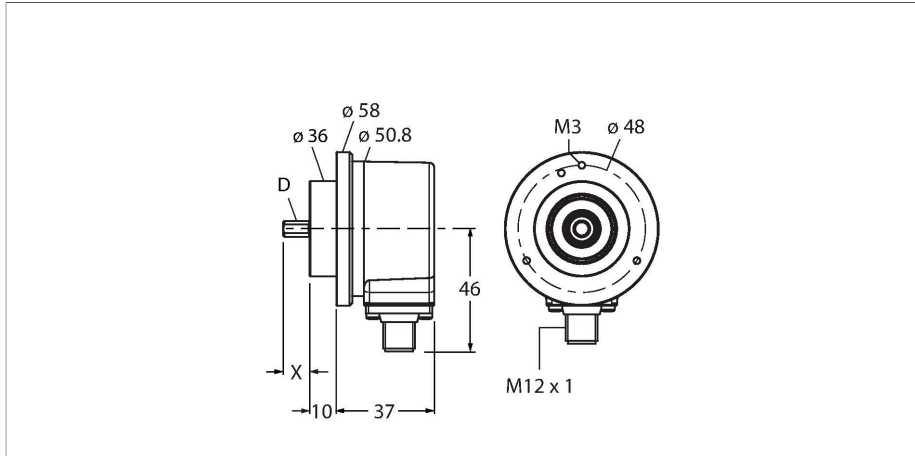


# REI-10S10C-2B3600-H1181

## Incremental Encoder

### Industrial Line



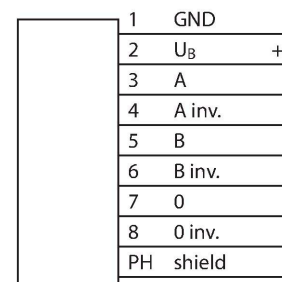
#### Technical data

Type	REI-10S10C-2B3600-H1181
ID	100010231
Measuring principle	Optical
<b>General data</b>	
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	3600 ppr
<b>Electrical data</b>	
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
<b>Mechanical data</b>	
Flange type	Clamping flange
Flange diameter	$\text{Ø } 58 \text{ mm}$
Shaft Type	Solid shaft
Shaft diameter D (mm)	10
Shaft Length L [mm]	20
Shaft material	Stainless steel

#### Features

- Clamping flange,  $\text{Ø } 58 \text{ mm}$
- Solid shaft,  $\text{Ø } 10 \text{ mm} \times 20 \text{ mm}$
- Optical measuring principle
- Shaft material: stainless steel
- Protection class IP67 on housing and shaft side
- $-40 \dots +85 \text{ °C}$
- 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
- 3600 pulses per revolution

#### Wiring diagram



## Technical data

Housing material	Die-cast zinc
Electrical connection	Connector, M12 × 1
	8-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

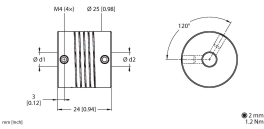
## Accessories

<p><b>RA-BC-20-06-10</b></p> <p>100048779</p> <p>Bellows coupling with aluminum hub Ø 20 mm; d1 = 6 mm, d2 = 10 mm</p> <p>● 2 mm 1.5 Nm</p>	<p><b>RA-BC-20-08-10</b></p> <p>100048781</p> <p>Bellows coupling with aluminum hub Ø 20 mm; d1 = 8 mm, d2 = 10 mm</p> <p>● 2 mm 1.5 Nm</p>
<p><b>RA-BC-20-10-10</b></p> <p>100048782</p> <p>Bellows coupling with aluminum hub Ø 20 mm; d1 = 10 mm, d2 = 10 mm</p> <p>● 2 mm 1.5 Nm</p>	<p><b>RA-BC-20-10-12</b></p> <p>100048783</p> <p>Bellows coupling with aluminum hub Ø 20 mm; d1 = 10 mm, d2 = 12 mm</p> <p>● 2 mm 1.5 Nm</p>
<p><b>RA-BC-E-20-06-10</b></p> <p>100048786</p> <p>Stainless steel bellows coupling Ø 20 mm; d1 = 6 mm, d2 = 10 mm</p> <p>● 2 mm 0.7 Nm</p>	<p><b>RA-BC-E-20-10-10</b></p> <p>100048787</p> <p>Stainless steel bellows coupling Ø 20 mm; d1 = 10 mm, d2 = 10 mm</p> <p>● 2 mm 0.7 Nm</p>
<p><b>RA-BC-E-20-10-12</b></p> <p>100048788</p> <p>Stainless steel bellows coupling Ø 20 mm; d1 = 10 mm, d2 = 12 mm</p> <p>● 2 mm 0.7 Nm</p>	<p><b>RA-SDC-30-10-10</b></p> <p>100048792</p> <p>Spring disc coupling Ø 30 mm; d1 = 10 mm, d2 = 10 mm</p> <p>● 2.5 mm 1.2 Nm</p>
<p><b>RA-SDC-30-10-12</b></p> <p>100048793</p> <p>Spring disc coupling Ø 30 mm; d1 = 10 mm, d2 = 12 mm</p> <p>● 2.5 mm 1.2 Nm</p>	<p><b>RA-HC-25-10-10</b></p> <p>100048796</p> <p>Aluminum helix coupling Ø 25 mm; d1 = 10 mm, d2 = 10 mm</p> <p>● 2 mm 1.2 Nm</p>

RA-HC-25-10-12

100048797

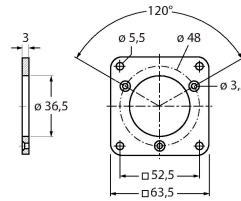
Aluminum helix coupling  $\varnothing$  25 mm;  $d_1 = 10$  mm,  $d_2 = 12$  mm



RFA-2

1544631

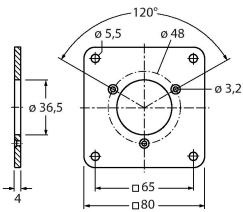
Aluminium flange adapter, rectangular, for solid shaft encoders with clamping flange; edge length 63.5 mm; 3 mm thick



RFA-13

1544642

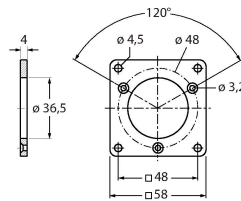
Aluminium flange adapter, rectangular, for solid shaft encoders with clamping flange; edge length 80 mm; 4 mm thick



RFA-1

1544630

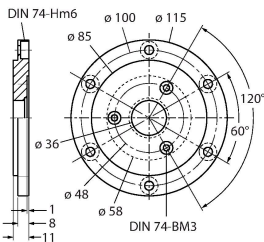
Aluminium flange adapter, rectangular, for solid shaft encoders with clamping flange; edge length 58 mm; 4 mm thick



RFA-4

1544633

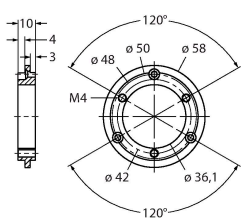
Euro flange – aluminium flange adapter for solid shaft encoders,  $\varnothing$  115 mm; reference diameter 100 mm; adapts 58 mm clamping flange to Euro flange



RFA-6

1544635

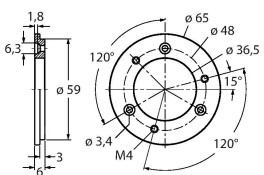
Aluminium flange adapter for solid shaft encoders with clamping flange,  $\varnothing$  58 mm; adapts clamping flange to synchro flange



RFA-7

1544636

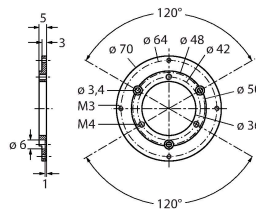
Aluminium flange adapter for solid shaft encoders,  $\varnothing$  65 mm; adapts to  $\varnothing$  65 mm flange and 48 mm reference diameter



RFA-8

1544637

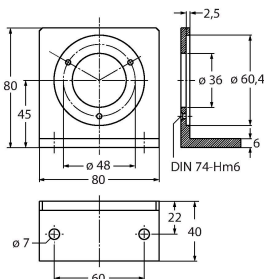
Aluminium flange adapter for solid shaft encoders with clamping flange,  $\varnothing$  70 mm; thickness 4 mm, adapts to  $\varnothing$  70 mm flange



RFA-9

1544638

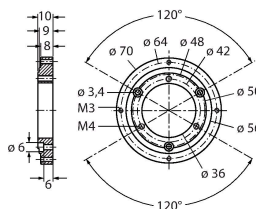
Aluminium angle flange for solid shaft encoders with  $\varnothing$  58 mm clamping flange



RFA-11

1544640

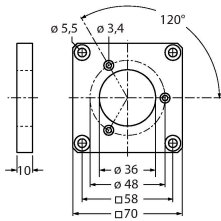
Aluminium flange adapter for solid shaft encoders with clamping flange,  $\varnothing$  70 mm; thickness 10 mm, adapts to  $\varnothing$  70 mm flange




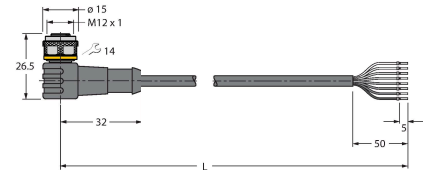
RFA-12

1544641

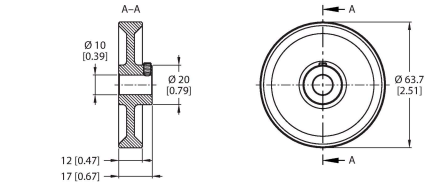
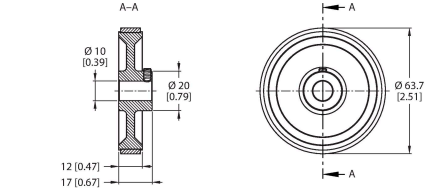
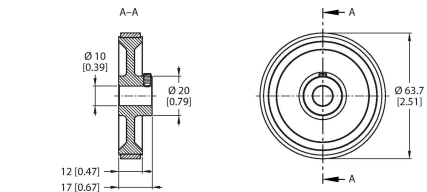
Aluminium flange adapter, rectangular, for solid shaft encoders with clamping flange; edge length 70 mm; 10 mm thick

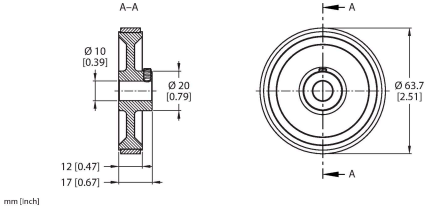
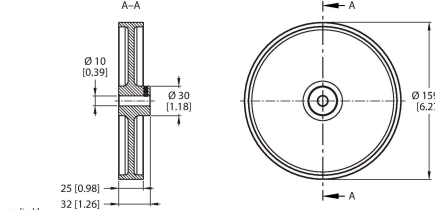
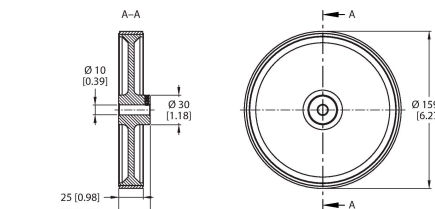
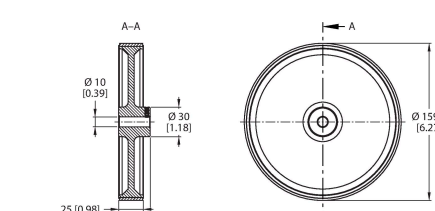
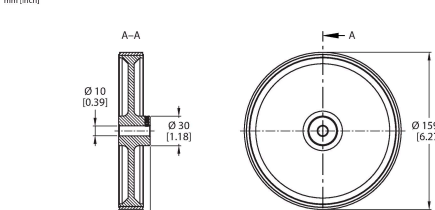
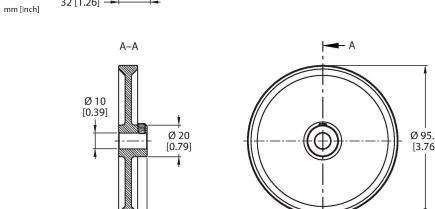
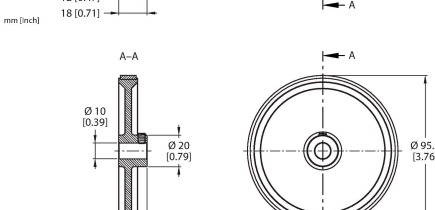


## Accessories

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

## Accessories

Dimension drawing	Type	ID	
	RA-MW-200-12-DK1-10	100038302	Aluminum measuring wheel (cross knurled) for encoders; circumference 0.2 m, width 12 mm, D = 10 mm
	RA-MW-200-12-PS1-10	100038303	Aluminum measuring wheel (smooth PU) for encoders; circumference 0.2 m, width 12 mm, D = 10 mm
	RA-MW-200-12-RT1-10	100038304	Aluminum measuring wheel (studded PU) for encoders; circumference 0.2 m, width 12 mm, D = 10 mm

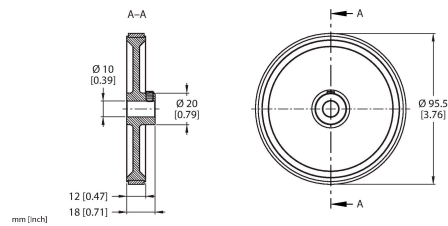
Dimension drawing	Type	ID	
	RA-MW-200-12-PC1-10	100038305	Aluminum measuring wheel (grooved PU) for encoders; circumference 0.2 m, width 12 mm, D = 10 mm
	RA-MW-500-25-DK1-10	100038314	Aluminum measuring wheel (cross knurled) for encoders; circumference 0.5 m, width 25 mm, D = 10 mm
	RA-MW-500-25-PS1-10	100038315	Aluminum measuring wheel (smooth PU) for encoders; circumference 0.5 m, width 25 mm, D = 10 mm
	RA-MW-500-25-RT1-10	100038316	Aluminum measuring wheel (studded PU) for encoders; circumference 0.5 m, width 25 mm, D = 10 mm
	RA-MW-500-25-PC1-10	100038317	Aluminum measuring wheel (grooved PU) for encoders; circumference 0.5 m, width 25 mm, D = 10 mm
	RA-MW-300-12-DK1-10	100038306	Aluminum measuring wheel (cross knurled) for encoders; circumference 0.3 m, width 12 mm, D = 10 mm
	RA-MW-300-12-PS1-10	100038307	Aluminum measuring wheel (smooth PU) for encoders; circumference 0.3 m, width 12 mm, D = 10 mm

**Dimension drawing**

**Type**

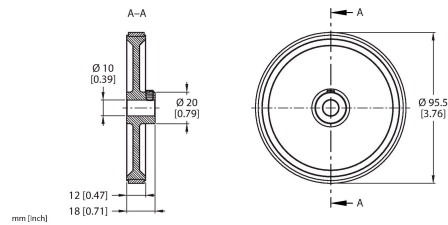
**ID**

Aluminum measuring wheel (studded PU) for encoders; circumference 0.3 m, width 12 mm, D = 10 mm



RA-MW-300-12-RT1-10

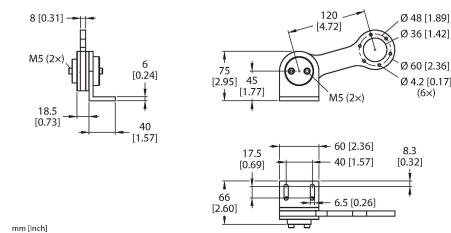
100038308



RA-MW-300-12-PC1-10

100038309

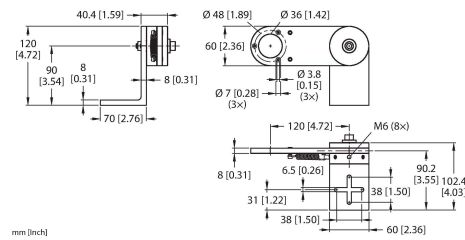
Aluminum measuring wheel (grooved PU) for encoders; circumference 0.3 m, width 12 mm, D = 10 mm



RA-SAB-15-36

100038251

Spring arm for encoders with a 58-mm flange; recommended contact pressure 15 N; maximum contact pressure 30 N



RA-SAB-30-36

100038294

Spring arm for encoders with a 58-mm flange; recommended contact pressure 30 N; maximum contact pressure 40 N