

REI-10S12C-4B1000-H1181
Incremental Encoder
Industrial Line



Technical data

Type	REI-10S12C-4B1000-H1181
ID	100010272
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	1000 ppr
Electrical data	
Operating voltage U_B	5...30 VDC
No-load current	$\leq 90 \text{ mA}$
Output current	$\leq 20 \text{ mA}$
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	$\varnothing 58 \text{ mm}$
Shaft Type	Solid shaft
Shaft diameter D (mm)	12
Shaft Length L [mm]	20
Shaft material	Stainless steel

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)
- 5...30 VDC
- RS422/TTL invertible
- Pulse frequency max. 300 kHz
- M12 $\times$ 1 male connector, 8-pin
- 1000 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/s², 10...2000 Hz
Shock resistance (EN 60068-2-27)	3000 m/s², 6 ms
Protection class	IP67
Protection class shaft	IP67

Accessories

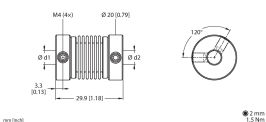
RA-BC-20-10-12 100048783



Bellows coupling with aluminum hub
Ø 20 mm; d1 = 10 mm, d2 = 12 mm

● 2 mm
1.5 Nm

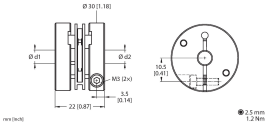
RA-BC-20-08-12 100049106



Bellows coupling with aluminum hub
Ø 20 mm; d1 = 8 mm, d2 = 12 mm

● 2 mm
1.5 Nm

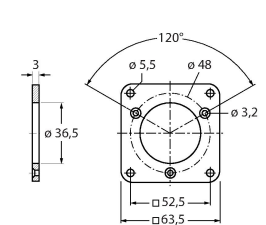
RA-SDC-30-10-12 100048793



Spring disc coupling Ø 30 mm; d1 =
10 mm, d2 = 12 mm

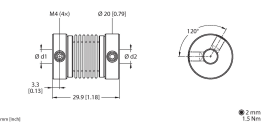
● 2.5 mm
1.2 Nm

RFA-2 1544631



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

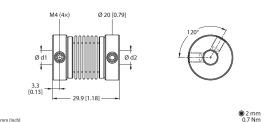
RA-BC-20-12-12 100048784



Bellows coupling with aluminum hub
Ø 20 mm; d1 = 12 mm, d2 = 12 mm

● 2 mm
1.5 Nm

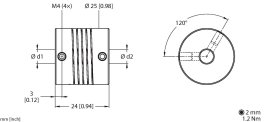
RA-BC-E-20-10-12 100048788



Stainless steel bellows coupling Ø
20 mm; d1 = 10 mm, d2 = 12 mm

● 2 mm
0.7 Nm

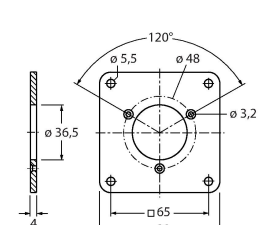
RA-HC-25-10-12 100048797



Aluminum helix coupling Ø 25 mm; d1
= 10 mm, d2 = 12 mm

● 2 mm
1.2 Nm

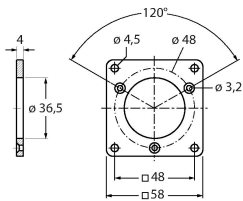
RFA-13 1544642



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

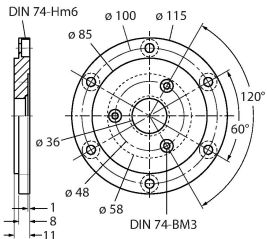
RFA-1 1544630

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



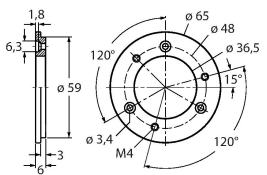
RFA-6 1544635

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



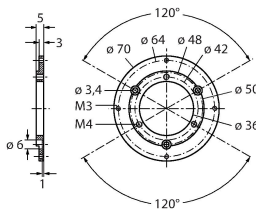
RFA-7 1544636

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



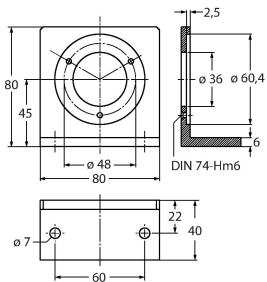
RFA-8 1544637

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



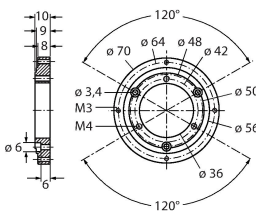
RFA-9 1544638

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



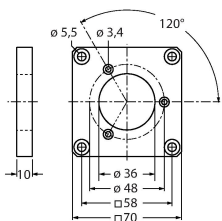
RFA-11 1544640

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

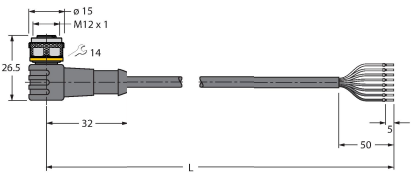
Aluminium flange adapter, rectangular, for solid shaft encoders with clamping flange; edge length 70 mm; 10 mm thick



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



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