

REI-10S6C-2B2048-H1181
Incremental Encoder
Industrial Line



Technical data

Type	REI-10S6C-2B2048-H1181
ID	100010217
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	$\varnothing 58 \text{ mm}$
Shaft Type	Solid shaft
Shaft diameter D (mm)	6
Shaft Length L [mm]	10
Shaft material	Stainless steel



Features

- Clamping flange, $\varnothing 58 \text{ mm}$
- Solid shaft, $\varnothing 6 \text{ mm} \times 10 \text{ mm}$
- 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
- 2048 pulses per revolution

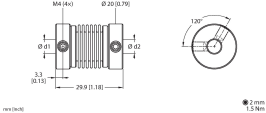
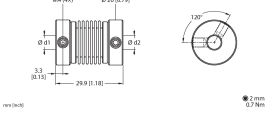
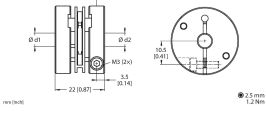
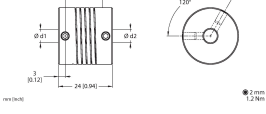
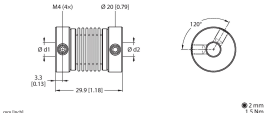
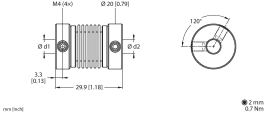
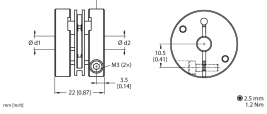
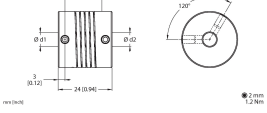
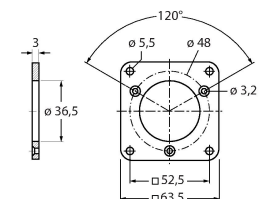
Wiring diagram



Technical data

Housing material	Die-cast zinc
Electrical connection	Connector, M12 × 1
	8-pin
Axial shaft load	50 N
Radial shaft load	100 N
Environmental conditions	
Ambient temperature	-40...+85 °C
Vibration resistance (EN 60068-2-6)	300 m/s ² , 10...2000 Hz
Shock resistance (EN 60068-2-27)	3000 m/s ² , 6 ms
Protection class	IP67
Protection class shaft	IP67

Accessories

RA-BC-20-06-06  rev 16/05	100048777 Bellows coupling with aluminum hub Ø 20 mm; d1 = 6 mm, d2 = 6 mm
RA-BC-20-06-10  rev 16/05	100048779 Bellows coupling with aluminum hub Ø 20 mm; d1 = 6 mm, d2 = 10 mm
RA-BC-E-20-06-10  rev 16/05	100048786 Stainless steel bellows coupling Ø 20 mm; d1 = 6 mm, d2 = 10 mm
RA-SDC-30-06-06  rev 16/05	100048790 Spring disc coupling Ø 30 mm; d1 = 6 mm, d2 = 6 mm
RA-SDC-30-06-10  rev 16/05	100048795 Aluminum helix coupling Ø 25 mm; d1 = 6 mm, d2 = 10 mm
RA-BC-20-06-08  rev 16/05	100048778 Bellows coupling with aluminum hub Ø 20 mm; d1 = 6 mm, d2 = 8 mm
RA-BC-E-20-06-06  rev 16/05	100048785 Stainless steel bellows coupling Ø 20 mm; d1 = 6 mm, d2 = 6 mm
RA-SDC-30-06-10  rev 16/05	100048791 Spring disc coupling Ø 30 mm; d1 = 6 mm, d2 = 10 mm
RA-HC-25-06-06  rev 16/05	100048794 Aluminum helix coupling Ø 25 mm; d1 = 6 mm, d2 = 6 mm
RFA-2  rev 16/05	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

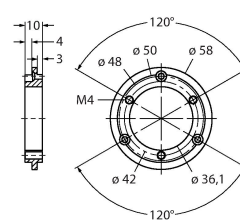
Euro flange – aluminium flange adapter for solid shaft encoders, Ø 115 mm; reference diameter 100 mm; adapts 58 mm clamping flange to Euro flange



RFA-6

1544635

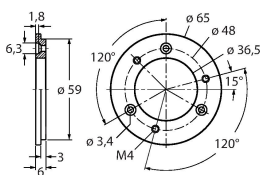
Aluminium flange adapter for solid shaft encoders with clamping flange, Ø 58 mm; adapts clamping flange to synchro flange



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

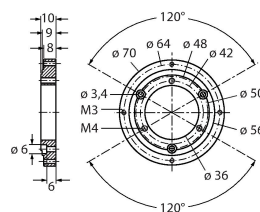
Aluminium angle flange for solid shaft encoders with Ø 58 mm clamping flange



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