

REI-E-113T10C-4B1000-H1181

Incremental Encoder

Efficiency Line



Technical data

Type	REI-E-113T10C-4B1000-H1181
ID	100011629
Measuring principle	Optical
General data	
Max. Rotational Speed	4500 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)	10
Shaft Length L [mm]	20
Shaft material	Stainless steel

Features

- Clamping flange, $\varnothing 58 \text{ mm}$
- Solid shaft, $\varnothing 10 \text{ mm} \times 20 \text{ mm}$
- Optical measuring principle
- Shaft material: stainless steel
- Protection class IP64 on housing and shaft side
- $-20 \dots +70 \text{ }^\circ\text{C}$
- Max. 4500 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

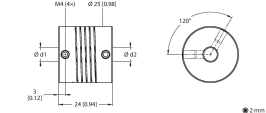
Wiring diagram



Technical data

Housing material	Die-cast zinc
Electrical connection	Connector, M12 × 1
	8-pin
Axial shaft load	40 N
Radial shaft load	80 N
Environmental conditions	
Ambient temperature	-20...+70 °C
Vibration resistance (EN 60068-2-6)	100 m/s ² , 10...2000 Hz
Shock resistance (EN 60068-2-27)	1000 m/s ² , 6 ms
Protection class	IP64
Protection class shaft	IP64

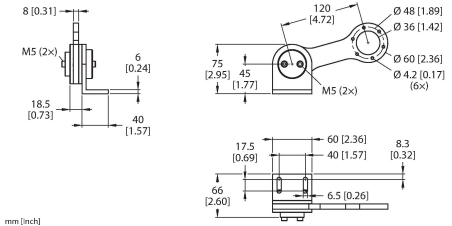
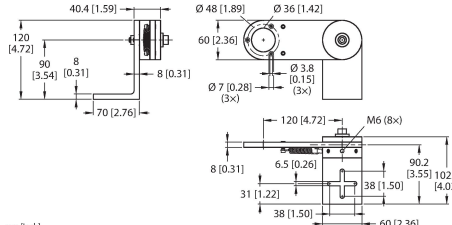
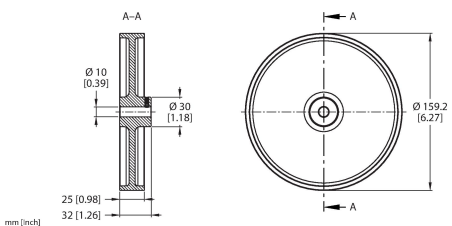
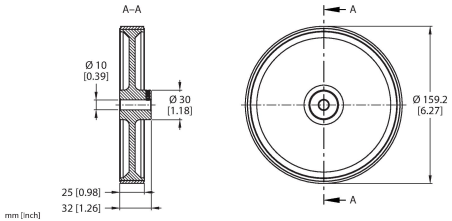
Accessories

RA-BC-20-06-10 	100048779 Bellows coupling with aluminum hub Ø 20 mm; d1 = 6 mm, d2 = 10 mm
RA-BC-20-08-10 	100048781 Bellows coupling with aluminum hub Ø 20 mm; d1 = 8 mm, d2 = 10 mm
RA-BC-20-10-10 	100048782 Bellows coupling with aluminum hub Ø 20 mm; d1 = 10 mm, d2 = 10 mm
RA-BC-20-10-12 	100048783 Bellows coupling with aluminum hub Ø 20 mm; d1 = 10 mm, d2 = 12 mm
RA-BC-E-20-06-10 	100048786 Stainless steel bellows coupling Ø 20 mm; d1 = 6 mm, d2 = 10 mm
RA-BC-E-20-10-10 	100048787 Stainless steel bellows coupling Ø 20 mm; d1 = 10 mm, d2 = 10 mm
RA-BC-E-20-10-12 	100048788 Stainless steel bellows coupling Ø 20 mm; d1 = 10 mm, d2 = 12 mm
RA-SDC-30-10-10 	100048792 Spring disc coupling Ø 30 mm; d1 = 10 mm, d2 = 10 mm
RA-SDC-30-10-12 	100048793 Spring disc coupling Ø 30 mm; d1 = 10 mm, d2 = 12 mm
RA-HC-25-10-10 	100048796 Aluminum helix coupling Ø 25 mm; d1 = 10 mm, d2 = 10 mm
RA-HC-25-10-12 	100048797 Aluminum helix coupling Ø 25 mm; d1 = 10 mm, d2 = 12 mm

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-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
	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

Dimension drawing	Type	ID	
	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
	RA-MW-300-12-RT1-10	100038308	Aluminum measuring wheel (studded PU) for encoders; circumference 0.3 m, width 12 mm, D = 10 mm
	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-MW-200-12-DK1-10	100038302	Aluminum measuring wheel (cross knurled) for encoders; circumference 0.2 m, width 12 mm, D = 10 mm

Dimension drawing	Type	ID	
	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
	RA-MW-200-12-PC1-10	100038305	Aluminum measuring wheel (grooved PU) for encoders; circumference 0.2 m, width 12 mm, D = 10 mm