

REI-E-113T10C-2B1000-H1181
Incremental Encoder
Efficiency Line



Technical data

Type	REI-E-113T10C-2B1000-H1181
ID	100011557
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 Nm
Output type	Incremental
Resolution incremental	1000 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)	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)
- 10...30 VDC
- Push-pull/HTL 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/s², 10...2000 Hz
Shock resistance (EN 60068-2-27)	1000 m/s², 6 ms
Protection class	IP64
Protection class shaft	IP64

Accessories

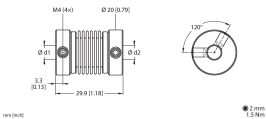
RA-BC-20-06-10 100048779



Bellows coupling with aluminum hub
Ø 20 mm; d1 = 6 mm, d2 = 10 mm

● 2 mm
1.5 Nm

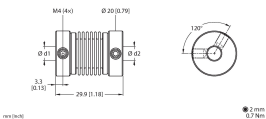
RA-BC-20-10-10 100048782



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

● 2 mm
1.5 Nm

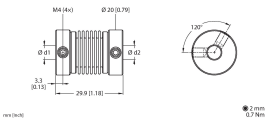
RA-BC-E-20-06-10 100048786



Stainless steel bellows coupling Ø
20 mm; d1 = 6 mm, d2 = 10 mm

● 2 mm
0.7 Nm

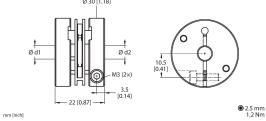
RA-BC-E-20-10-12 100048788



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

● 2 mm
0.7 Nm

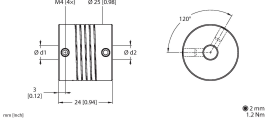
RA-SDC-30-10-12 100048793



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

● 2.5 mm
1.2 Nm

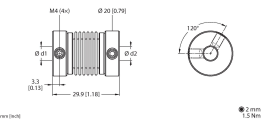
RA-HC-25-10-12 100048797



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

● 2 mm
1.2 Nm

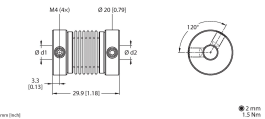
RA-BC-20-08-10 100048781



Bellows coupling with aluminum hub
Ø 20 mm; d1 = 8 mm, d2 = 10 mm

● 2 mm
1.5 Nm

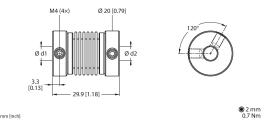
RA-BC-20-10-12 100048783



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

● 2 mm
1.5 Nm

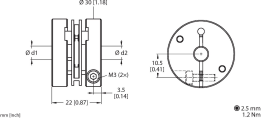
RA-BC-E-20-10-10 100048787



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

● 2 mm
0.7 Nm

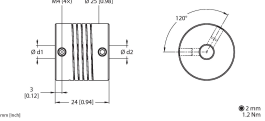
RA-SDC-30-10-10 100048792



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

● 2.5 mm
1.2 Nm

RA-HC-25-10-10 100048796



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

● 2 mm
1.2 Nm

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