

REI-10S12S-4B4096-H1181
Incremental Encoder
Industrial Line



Technical data

Type	REI-10S12S-4B4096-H1181
ID	100010355
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	4096 ppr
Electrical data	
Operating voltage U_B	5...30 VDC
No-load current	≤ 90 mA
Output current	≤ 20 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	Synchro flange
Flange diameter	Ø 58 mm
Shaft Type	Solid shaft
Shaft diameter D (mm)	12
Shaft Length L [mm]	20
Shaft material	Stainless steel

Features

- Synchro flange, Ø 58 mm
- Solid shaft, Ø 12 mm × 20 mm
- Optical measuring principle
- Shaft material: stainless steel
- Protection class IP67 on housing and shaft side
- -40...+85 °C
- Max. 6000 rpm (continuous operation 3000 rpm)
- 5...30 VDC
- RS422/TTL invertible
- Pulse frequency max. 300 kHz
- M12 × 1 male connector, 8-pin
- 4096 pulses per revolution



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	-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

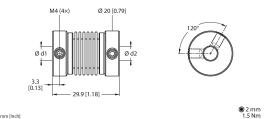
RA-BC-20-10-12 100048783



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

● 2.5 mm
1.5 Nm

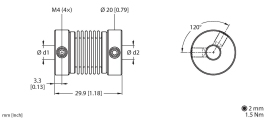
RA-BC-20-12-12 100048784



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

● 2.5 mm
1.5 Nm

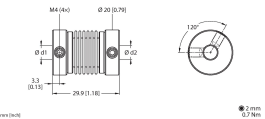
RA-BC-20-08-12 100049106



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

● 2.5 mm
1.5 Nm

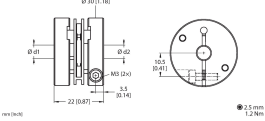
RA-BC-E-20-10-12 100048788



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

● 2.5 mm
0.7 Nm

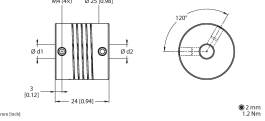
RA-SDC-30-10-12 100048793



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

● 2.5 mm
1.2 Nm

RA-HC-25-10-12 100048797

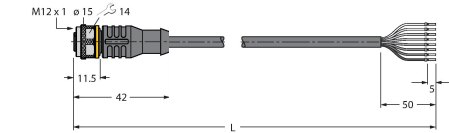


Aluminum helix coupling Ø 25 mm; d1
= 10 mm, d2 = 12 mm

● 2.5 mm
1.2 Nm

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