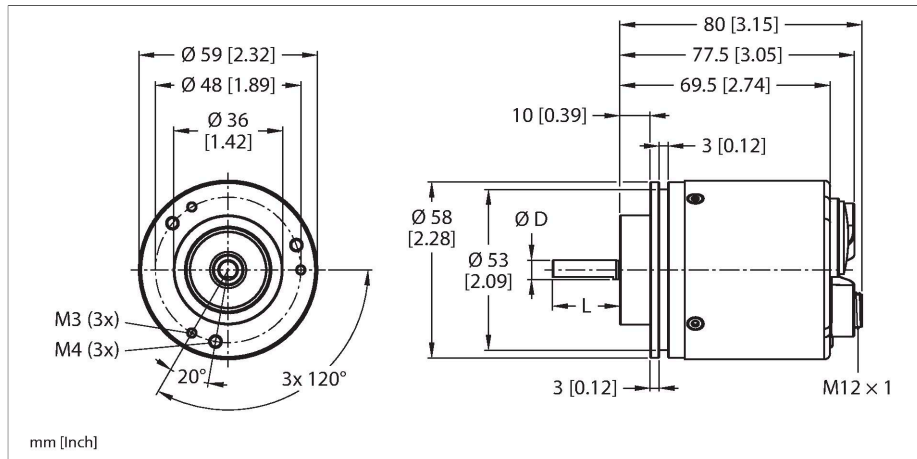


RES-107S10C-9E19B-B3M12

Absolute Rotary Encoder - Singleturn

Industrial Line



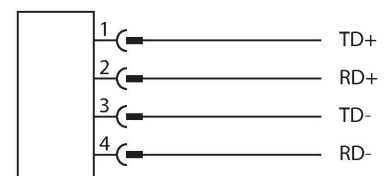
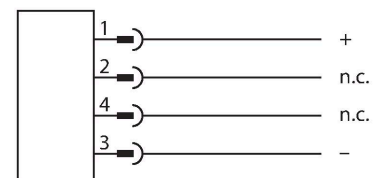
Technical data

Type	RES-107S10C-9E19B-B3M12
ID	100046564
Measuring principle	Optical
General data	
Max. rotational speed	6000 rpm
Moment of inertia of the rotor	$3 \times 10^{-6} \text{ kgm}^2$
Measuring range	$0 \dots 360^\circ$
Output type	Absolute singleturn
Resolution singleturn	19 Bit
	Singleturn scalable
Electrical data	
Operating voltage U_B	10...30 VDC
No-load current	$\leq 250 \text{ mA}$
Wire break/reverse polarity protection	yes
Communication protocol	PROFINET
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
Housing material	Aluminium
Electrical connection	Connector, 3 x M12
Axial shaft load	40 N
Radial shaft load	80 N

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 IP67 on housing side
- $-40 \dots +80^\circ \text{ C}$
- Max. 6000 rpm
- 10...30 VDC
- Profinet IO, RT and IRT up to $250 \mu\text{s}$
- Encoder profile version 4.2
- Media Redundancy Protocol (MRP)
- Link Layer Discovery Protocol (LLDP)
- Simple Network Management Protocol (SNMP)
- Fast Startup (FSU)
- M12 x 3 connector, 4-pin
- Singleturn resolution scalable up to 19 bit, default 13 bit

Wiring diagram



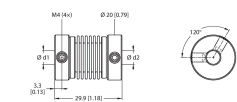
Technical data

Environmental conditions

Ambient temperature	-40...+80 °C
Vibration resistance (EN 60068-2-6)	10 g (100 m/s ²), 55...2000 Hz
Shock resistance (EN 60068-2-27)	250 g (2500 m/s ²), 6 ms
Protection class	IP67
Protection class shaft	IP67
MTTF	19 years

Accessories

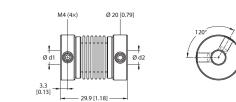
RA-BC-20-06-10 100048779



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

● 2 mm
1.5 Nm

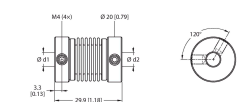
RA-BC-20-08-10 100048781



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

● 2 mm
1.5 Nm

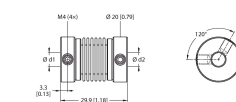
RA-BC-20-10-10 100048782



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

● 2 mm
1.5 Nm

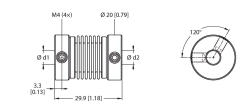
RA-BC-20-10-12 100048783



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

● 2 mm
1.5 Nm

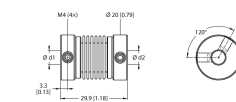
RA-BC-E-20-06-10 100048786



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

● 2 mm
0.7 Nm

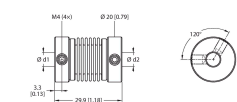
RA-BC-E-20-10-10 100048787



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

● 2 mm
0.7 Nm

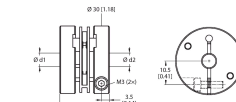
RA-BC-E-20-10-12 100048788



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

● 2 mm
0.7 Nm

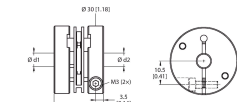
RA-SDC-30-10-10 100048792



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

● 2.5 mm
1.2 Nm

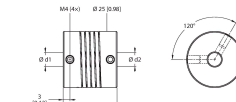
RA-SDC-30-10-12 100048793



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

● 2.5 mm
1.2 Nm

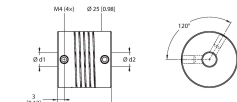
RA-HC-25-10-10 100048796



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

● 3 mm
1.2 Nm

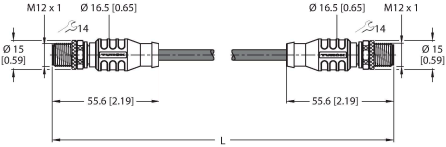
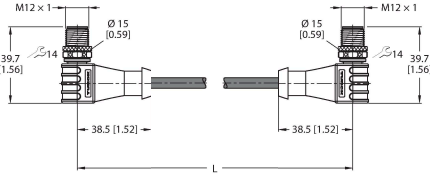
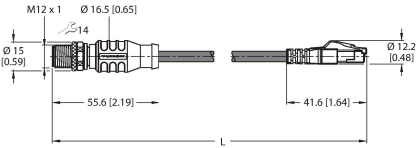
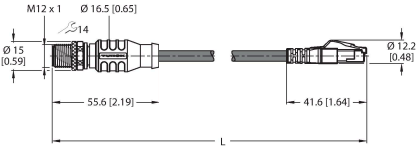
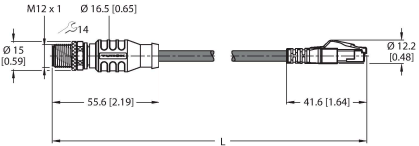

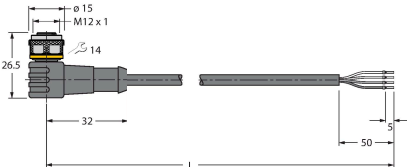
RA-HC-25-10-12 100048797



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

● 3 mm
1.2 Nm

Accessories

Dimension drawing	Type	ID	
	RSSD-RSSD-4422-2M	6635150	Cable for Industrial Ethernet, M12 male connector, D-coded, straight to M12 male connector, D-coded, straight, cable length: 2 m, jacket material: PUR, green
	WSSD-WSSD-4422-2M	6635188	Cable for Industrial Ethernet, M12 male connector, D-coded, angled to M12 male connector, D-coded, angled, cable length: 2 m, jacket material: PUR, green
	RSSD-RJ45S-4422-2M	6635170	Cable for Industrial Ethernet, M12 male connector, D-coded, straight to RJ45 male connector, straight, cable length: 2 m, jacket material: PUR, green
	RSSD-RJ45S-4422-7M	6635579	Cable for Industrial Ethernet, M12 male connector, D-coded, straight to RJ45 male connector, straight, cable length: 2 m, jacket material: PUR, green
	RSSD-RJ45S-4422-8M	6635538	Cable for Industrial Ethernet, M12 male connector, D-coded, straight to RJ45 male connector, straight, cable length: 2 m, jacket material: PUR, green
	RKC4.4T-2/TXL	6625503	Connection cable, M12 female connector, straight, 4-pin, cable length: 2 m, jacket material: PUR, black; cULus approval
	WKC4.4T-2/TXL	6625515	Connection cable, M12 female connector, angled, 4-pin, cable length: 2 m, jacket material: PUR, black; cULus approval