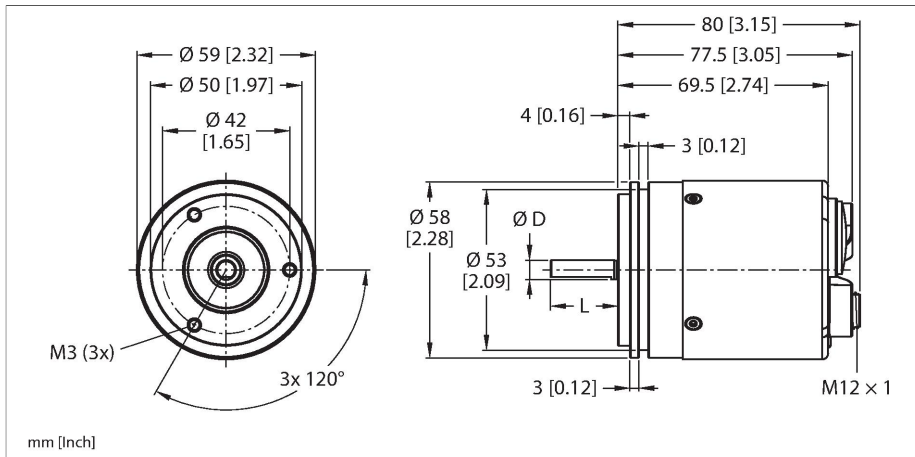


RES-107S10S-9E19B-B3M12

Absolute Rotary Encoder - Singleturn

Industrial Line



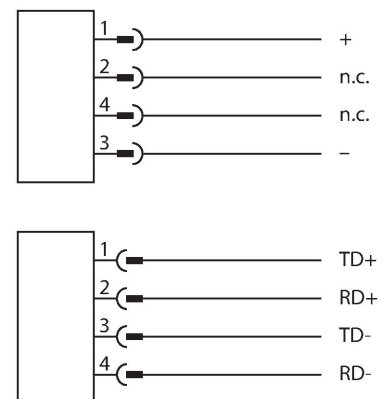
Technical data

Type	RES-107S10S-9E19B-B3M12
ID	100046566
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...360 °
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	Synchro flange
Flange diameter	Ø 58 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, Ø 58 mm
- Solid shaft, Ø 10 mm × 20 mm
- Optical measuring principle
- Shaft material: stainless steel
- Protection class IP67 on housing side
- -40...+80 °C
- Max. 6000 rpm
- 10...30 VDC
- Profinet IO, RT and IRT up to 250 µs
- Encoder profile version 4.2
- Media Redundancy Protocol (MRP)
- Link Layer Discovery Protocol (LLDP)
- Simple Network Management Protocol (SNMP)
- Fast Startup (FSU)
- M12 × 3 connector, 4-pin
- Singleturn resolution scalable up to 19 bit, default 13 bit

Wiring diagram



Technical data

Environmental conditions

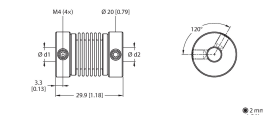
Ambient temperature	-40...+80 °C
Vibration resistance (EN 60068-2-6)	10 g (100 m/s ²), 55...2000 Hz
Shock resistance (EN 60068-2-27)	250 g (2500 m/s ²), 6 ms
Protection class	IP67
Protection class shaft	IP67
MTTF	19 years

Accessories

RA-BC-20-06-10

100048779

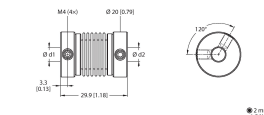
Bellows coupling with aluminum hub
Ø 20 mm; d1 = 6 mm, d2 = 10 mm



RA-BC-20-08-10

100048781

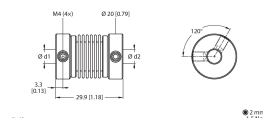
Bellows coupling with aluminum hub
Ø 20 mm; d1 = 8 mm, d2 = 10 mm



RA-BC-20-10-10

100048782

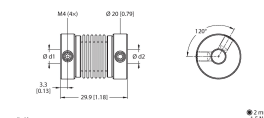
Bellows coupling with aluminum hub
Ø 20 mm; d1 = 10 mm, d2 = 10 mm



RA-BC-20-10-12

100048783

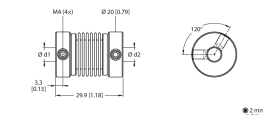
Bellows coupling with aluminum hub
Ø 20 mm; d1 = 10 mm, d2 = 12 mm



RA-BC-E-20-06-10

100048786

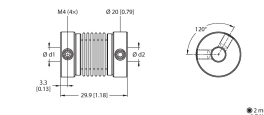
Stainless steel bellows coupling Ø
20 mm; d1 = 6 mm, d2 = 10 mm



RA-BC-E-20-10-10

100048787

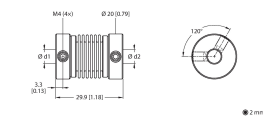
Stainless steel bellows coupling Ø
20 mm; d1 = 10 mm, d2 = 10 mm



RA-BC-E-20-10-12

100048788

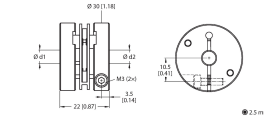
Stainless steel bellows coupling Ø
20 mm; d1 = 10 mm, d2 = 12 mm



RA-SDC-30-10-10

100048792

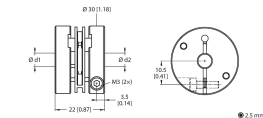
Spring disc coupling Ø 30 mm; d1 =
10 mm, d2 = 10 mm



RA-SDC-30-10-12

100048793

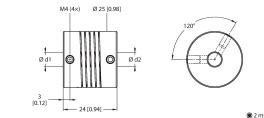
Spring disc coupling Ø 30 mm; d1 =
10 mm, d2 = 12 mm



RA-HC-25-10-10

100048796

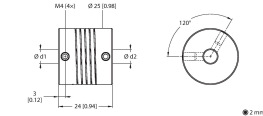
Aluminum helix coupling Ø 25 mm; d1
= 10 mm, d2 = 10 mm



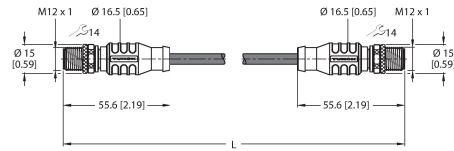
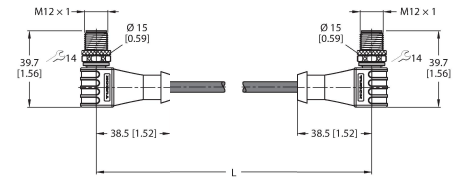
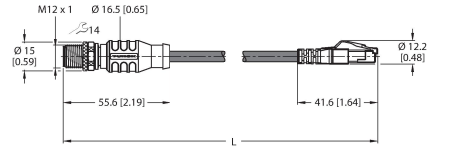
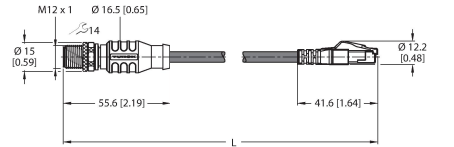
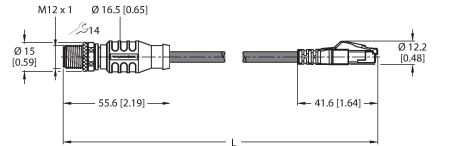
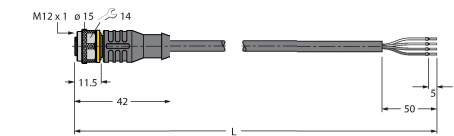
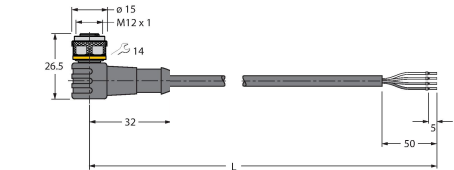
RA-HC-25-10-12

100048797

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



Accessories

Dimension drawing	Type	ID	
	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