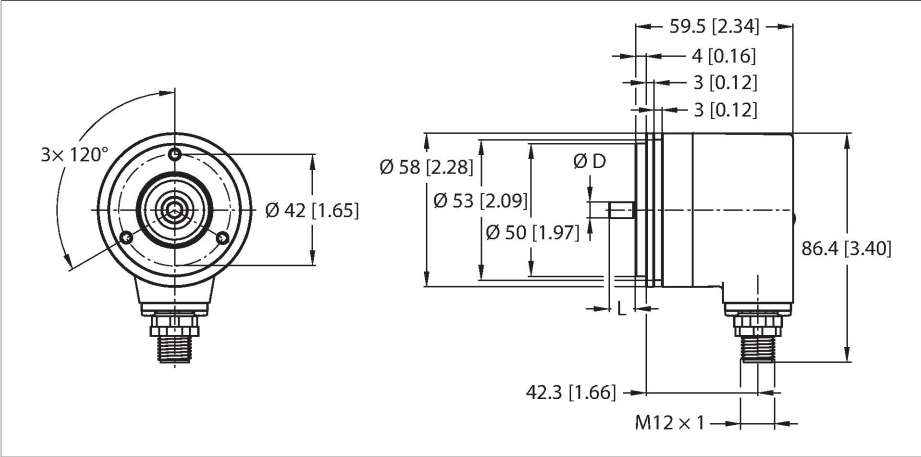


REM-103SA1S-3C13S12M-H1181

Absolute Rotary Encoder - Multiturn Industrial Line



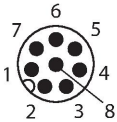
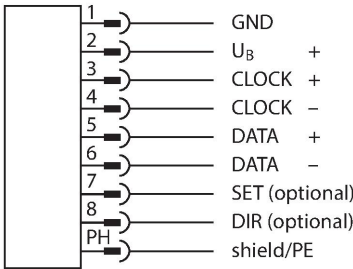
Technical data

Type	REM-103SA1S-3C13S12M-H1181
ID	100011382
Measuring principle	Optical
General data	
Max. Rotational Speed	8000 rpm
Moment of inertia of the rotor	$3 \times 10^{-6} \text{ kgm}^2$
Starting torque	$< 0.05 \text{ Nm}$
Absolute accuracy	$\pm 0.015^\circ \text{ At } 25^\circ \text{C}$
Output type	Absolute multiturn
Resolution singleturn	13 Bit
Resolution multiturn	12 Bit
Electrical data	
Operating voltage U_B	10...30 VDC
No-load current	$\leq 30 \text{ mA}$
Short-circuit protection	yes
Wire break/reverse polarity protection	yes
Communication protocol	SSi
Output function	Gray coded
Mechanical data	
Flange type	Synchro flange
Flange diameter	$\varnothing 58 \text{ mm}$
Shaft Type	Solid shaft
Shaft diameter D (mm)	9.525
Shaft Length L [mm]	22.225
Shaft material	Stainless steel
Housing material	Die-cast zinc

Features

- Synchro flange, $\varnothing 58 \text{ mm}$
- Solid shaft, $\varnothing 9.525 \text{ mm} \times 22.225 \text{ mm}$
- Optical measuring principle
- Shaft material: stainless steel
- Protection class IP67 on housing and shaft side
- $-40 \dots +85^\circ \text{C}$
- Max. 8000 rpm (continuous operation 5000 rpm)
- 10...30 VDC
- SSI, gray
- M12 $\times$ 1 male, 8-pin
- Singleturn, 13-bit resolution
- Multiturn, 12-bit resolution

Wiring diagram



Technical data

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)	100 m/s², 10...2000 Hz
Shock resistance (EN 60068-2-27)	2500 m/s², 6 ms
Protection class	IP67
Protection class shaft	IP67

Accessories

Dimension drawing	Type	ID	
	E-RKC 8T-264-2	U-04781	



Connection cable, female M12, straight, 8-pin (twisted pairs), shielded, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see www.turck.com