

RES-183BA0E-3C13B-H1181

Absolute Rotary Encoder - Single-Turn Industrial Line



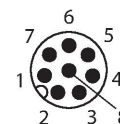
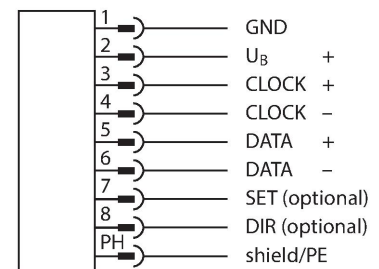
Features

- Flange with stator coupling, Ø 46 mm
- Blind hole hollow shaft, Ø 6.35 mm (plug-in depth max. 18.5 mm)
- Magnetic measuring principle
- Shaft material: stainless steel
- Protection class IP67 on housing and shaft side
- -40...+85 °C
- Max. 4000 rpm (continuous operation 2000 rpm)
- 10...30 VDC
- SSI, gray
- M12 × 1 male connector, 8-pin
- 360° resolved in 13 bit (8192 positions)

Technical data

Type	RES-183BA0E-3C13B-H1181
ID	100016350
Measuring principle	Magnetic
General data	
Max. Rotational Speed	4000 rpm
Starting torque	< 0.01 Nm
Measuring range	0...360 °
Absolute accuracy	± 1 ° At 25 °C
Output type	Absolute singleturn
Resolution singleturn	13 Bit
Electrical data	
Operating voltage	10...30 VDC
No-load current	30 mA
Output current	≤ 30 mA
Short-circuit protection	yes
Wire breakage/Reverse polarity protection	yes
Signal level high	typ. 3.8 V
Signal level low	typ. 1.3 V (20 mA load)
Communication protocol	SSi
Output function	Gray coded
Mechanical data	
Design	Hollow shaft
Flange type	Flange with stator coupling
Flange diameter	Ø 46 mm
Shaft Type	Blind hole shaft

Wiring diagram



Technical data

Shaft diameter D [mm]	6.35
Shaft Length L [mm]	18.5
Outer diameter of compression fitting D1	24 mm
Shaft material	Stainless steel
Housing material	Die-cast zinc
Electrical connection	Connector, M12 × 1
Axial shaft load	20 N
Radial shaft load	40 N
Environmental conditions	
Ambient temperature	-40...+85 °C
Vibration resistance (EN 60068-2-6)	300 m/s ² , 10...2000 Hz
Shock resistance (EN 60068-2-27)	300 m/s ² , 10...2000 Hz
Protection class	IP67
Protection class shaft	IP67