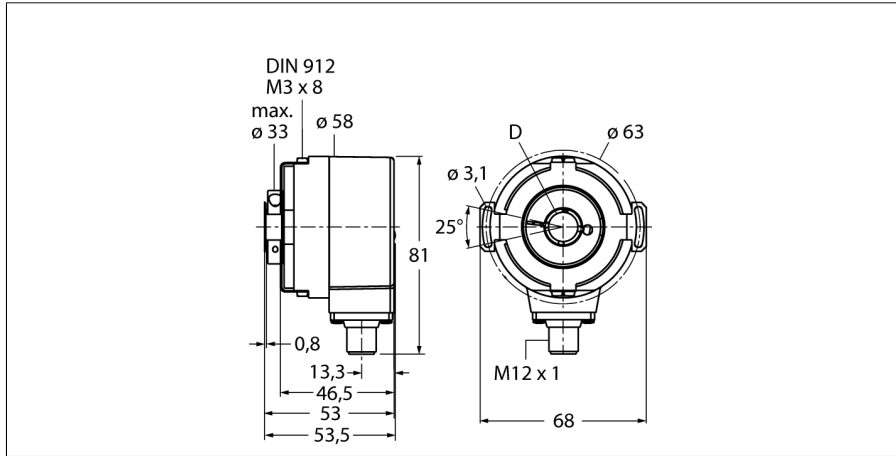


Rotative measurement
Absolute rotary encoder / single-turn
RS-31H12E-3C13B-H1181



- Flange with stator coupling, Ø 58mm
- Hollow shaft, Ø 12mm
- Optical measuring principle
- Shaft material, stainless steel
- Protection class IP67 on the shaft side
- -40...+70°C
- max. 4000 rev/min
- 10...30 VDC
- SSI, gray
- Male connector, M12 x 1, 8-pole
- 360° transferred into 13 bit (8192 positions)

Type code	RS-31H12E-3C13B-H1181
Ident no.	1544424
Measuring principle	Photoelectric
max. Drehzahl	4.000 U/min
Moment of inertia of the rotor	6 x10 ⁻⁶ kgm ²
Starting torque	0.05 Nm
Measuring range	0...360°
Ambient temperature	-40...+70 °C
Operating voltage	10...30VDC
No-load current I ₀	≤ 45 mA
Output current	≤ 20 mA
Short-circuit protection	yes
Output function	8-wire, SSI, Gray coded
Output type	absolute singleturn
Resolution single-turn	13 Bit
Signal level high	typ. 3.8 V
Signal level low	typ. 1.3 V (20 mA load)
Design	Hollow shaft
Flange type	Flange with stator coupling
Flange diameter	58 mm
Shaft type	Hollow shaft
Shaft diameter D	12 mm
Shaft material	Stainless steel
Housing material	zinc, die-casting
Connection	male, M12 x 1 M12, 8-pole
Axial shaft load	40 N
Radial shaft load	80 N
Vibration resistance (EN 60068-2-6)	100 m/s ² , 55 ... 2000 Hz
Shock resistance (EN 60068-2-27)	2500 m/s ² , 6 ms
Protection class housing	IP67
Protection class shaft	IP67

1	GND	
2	U _B	+
3	C	+
4	C	-
5	D	+
6	D	-
7	SET	
8	DIR	
PH	shield/PE	

**Rotative measurement
Absolute rotary encoder / single-turn
RS-31H12E-3C13B-H1181****Pin configuration**

Signal	Gnd	+U _e	C+	C-	D+	D-	SET	DIR	Shield / PE
Pin configuration	1	2	3	4	5	6	7	8	PH

Rotative measurement
Absolute rotary encoder / single-turn
RS-31H12E-3C13B-H1181

Accessories

Type code	Ident no.	Description	Dimension drawing
RME-9	1544620	Stainless steel mounting plate for hollow shaft encoders, reference diameter 64.5 mm, for low dynamic applications with axial and radial play	
RME-13	1544624	Plastic spring element for hollow shaft encoders, reference diameter 42 mm, for low dynamic applications with restricted axial play and limited mounting space.	
RME-14	1544625	Plastic spring element for hollow shaft encoders, reference diameters 44 mm, 60 mm, 63 mm, 65 mm, for low dynamic applications with high axial play.	