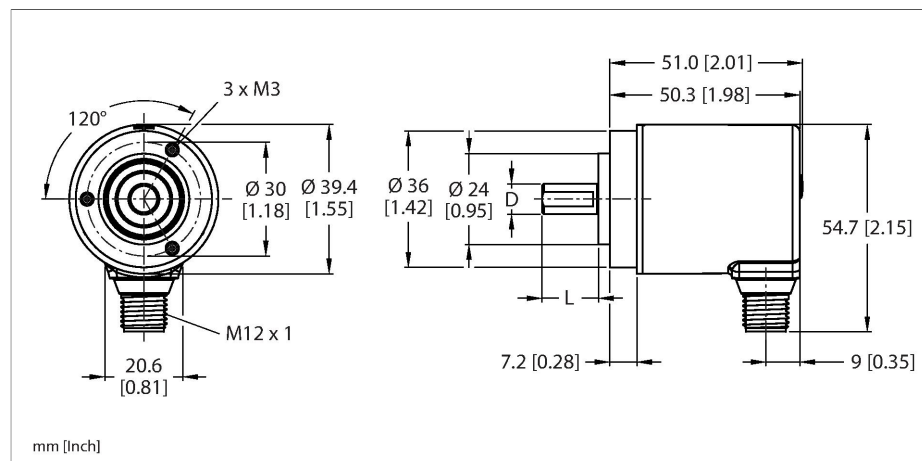


RES-182S6C-3C13B-H1181

Absolute Rotary Encoder - Singleturn

Industrial Line



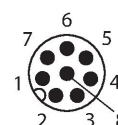
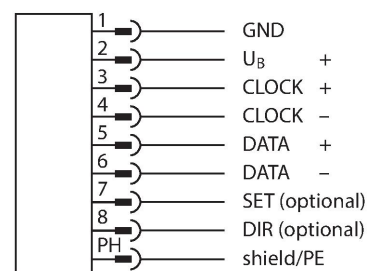
Technical data

Type	RES-182S6C-3C13B-H1181
ID	100016337
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 U _B	10...30 VDC
No-load current	≤ 30 mA
Output current	≤ 30 mA
Short-circuit protection	yes
Wire break/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	
Flange type	Clamping flange
Flange diameter	Ø 36 mm
Shaft Type	Solid shaft
Shaft diameter D (mm)	6
Shaft Length L [mm]	12.5

Features

- Clamping flange, Ø 36 mm
- Solid shaft, Ø 6 mm × 12.5 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)

Wiring diagram



Technical data

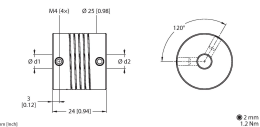
Shaft material	Stainless steel
Housing material	Die-cast zinc
Electrical connection	Connector, M12 × 1
Axial shaft load	20 N
Radial shaft load	40 N
Environmental conditions	
Ambient temperature	-40...+85 °C
Vibration resistance (EN 60068-2-6)	300 m/s ² , 10...2000 Hz
Shock resistance (EN 60068-2-27)	2500 m/s ² , 6 ms
Protection class	IP67
Protection class shaft	IP67

Accessories

RCS-15-08-06	1545361	Bellows coupling, outer diameter: 15 mm, bore diameter: 8 mm/6 mm	RCS-15-06-06	1545362	Bellows coupling, outer diameter: 15 mm, bore diameter: 6 mm/6 mm
RA-BC-20-06-06	100048777	Bellows coupling with aluminum hub Ø 20 mm; d1 = 6 mm, d2 = 6 mm	RA-BC-20-06-08	100048778	Bellows coupling with aluminum hub Ø 20 mm; d1 = 6 mm, d2 = 8 mm
RA-BC-20-06-10	100048779	Bellows coupling with aluminum hub Ø 20 mm; d1 = 6 mm, d2 = 10 mm	RA-BC-E-20-06-06	100048785	Stainless steel bellows coupling Ø 20 mm; d1 = 6 mm, d2 = 6 mm
RA-BC-E-20-06-10	100048786	Stainless steel bellows coupling Ø 20 mm; d1 = 6 mm, d2 = 10 mm	RA-SDC-30-06-10	100048791	Spring disc coupling Ø 30 mm; d1 = 6 mm, d2 = 10 mm
RA-SDC-30-06-06	100048790	Spring disc coupling Ø 30 mm; d1 = 6 mm, d2 = 6 mm	RA-HC-25-06-06	100048794	Aluminum helix coupling Ø 25 mm; d1 = 6 mm, d2 = 6 mm

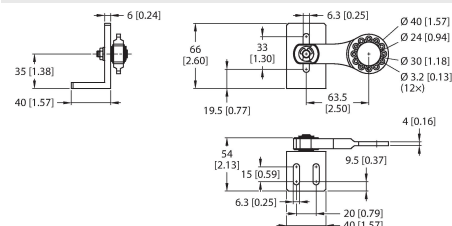
RA-HC-25-06-10 100048795

Aluminum helix coupling Ø 25 mm; d1 = 6 mm, d2 = 10 mm



Accessories

Dimension drawing	Type	ID	
	RA-MW-200-5.5-DK1-6	100038295	Aluminum measuring wheel (cross knurled) for encoders; circumference 0.2 m, width 5.5 mm, D = 6 mm
	RA-MW-200-6.5-PS1-6	100038296	Aluminum measuring wheel (smooth PU) for encoders; circumference 0.2 m, width 6.5 mm, D = 6 mm
	RA-MW-200-5.5-OR1-6	100038298	Aluminum measuring wheel (O-ring) for encoders; circumference 0.2 m, width 5.5 mm, D = 6 mm
	RA-MW-B0-5.5-DK1-6	100038299	Aluminum measuring wheel (cross knurled) for encoders; circumference 6", width 5.5 mm, D = 6 mm
	RA-MW-B0-6.5-PS1-6	100038300	Aluminum measuring wheel (smooth PU) for encoders; circumference 6", width 6.5 mm, D = 6 mm
	RA-MW-B0-5.5-OR1-6	100038301	Aluminum measuring wheel (O-ring) for encoders; circumference 6", width 5.5 mm, D = 6 mm

Dimension drawing	Type	ID	
 mm [inch]	RA-SAB-5-24	100038293	Spring arm for small absolute encoders with a 36-mm flange; recommended contact pressure 5 N; maximum contact pressure 20 N