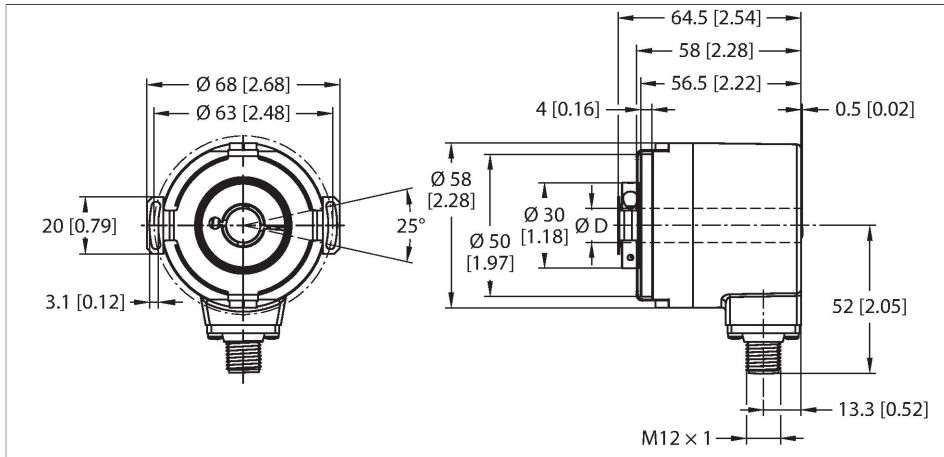


RS-31H12E-3C13B-H1181

Absolute Rotary Encoder - Singleturn

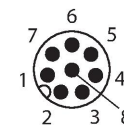
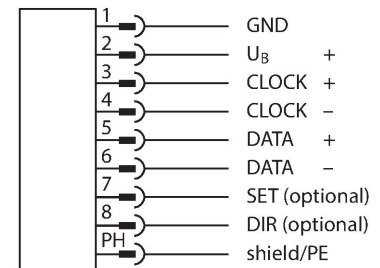
Industrial Line



Features

- Flange with torque stop, Ø 50 mm
- Hollow shaft, Ø 12mm
- Optical measuring principle
- Shaft material, stainless steel
- Protection class IP67 on shaft side
- -40...+70 °C
- Max. 4000 rpm
- 10...30 VDC
- SSI, gray
- M12 × 1 male, 8-pin
- 360° resolved in 13 bit (8192 positions)

Wiring diagram



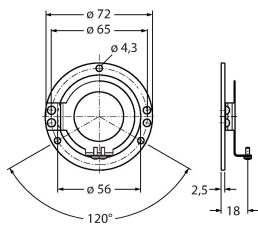
Technical data

Type	RS-31H12E-3C13B-H1181
ID	1544424
Measuring principle	Optical
General data	
Max. rotational speed	4000 rpm
Moment of inertia of the rotor	$6 \times 10^{-6} \text{ kgm}^2$
Starting torque	< 0.05 Nm
Measuring range	0...360 °
Absolute accuracy	± 0.015 ° At 25 °C
Output type	Absolute singleturn
Resolution singleturn	13 Bit
Electrical data	
Operating voltage U_B	10...30 VDC
No-load current	≤ 45 mA
Output current	≤ 20 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	Flange with stator coupling

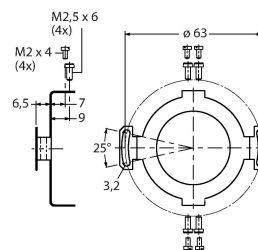
Technical data

Flange diameter	Ø 63 mm
Shaft Type	Blind hole shaft
Shaft diameter D (mm)	12
Shaft material	Stainless steel
Housing material	Die-cast zinc
Electrical connection	Connector, M12 × 1
	8-pin
Axial shaft load	40 N
Radial shaft load	80 N
Environmental conditions	
Ambient temperature	-40...+70 °C
Vibration resistance (EN 60068-2-6)	100 m/s², 55...2000 Hz
Shock resistance (EN 60068-2-27)	2500 m/s², 6 ms
Protection class	IP67
Protection class shaft	IP67

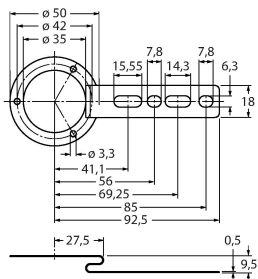
Accessories

RME-1
1544612


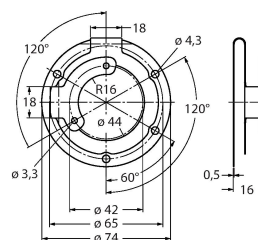
Stainless steel stator coupling for hollow shaft encoders, reference diameter, 65 mm, for highly dynamic, standard applications with axial and radial play

RME-2
1544613


Stainless steel flex mount coupling for hollow shaft encoders, reference diameter 63 mm, for applications with high demands on accuracy

RME-4
1544615


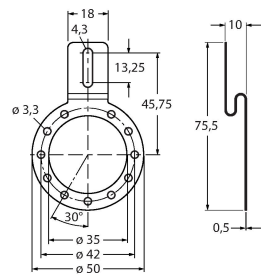
Stainless steel mounting panel for hollow shaft encoders, reference diameter 80...170 mm, for low dynamic applications with axial and radial play

RME-7
1544618


Stainless steel stator coupling for hollow shaft encoders, reference diameter 65 mm, for highly dynamic applications with axial and radial play

RME-8

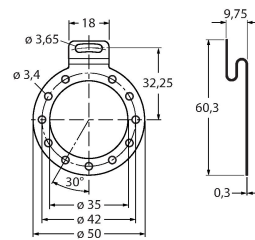
1544619



Stainless steel mounting panel for hollow shaft encoders, reference diameter 65...91.5 mm, for applications with axial and radial play at constant rotation speed

RME-9

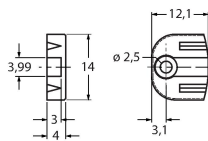
1544620



Stainless steel mounting panel for hollow shaft encoders, reference diameter 64.5 mm, for low dynamic applications with axial and radial play

RME-13

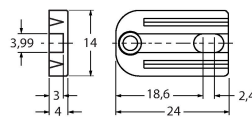
1544624



Plastic mounting element for hollow shaft encoders, pitch diameter 42 mm, for applications with limited axial play, low dynamics and limited mounting space

RME-14

1544625



Plastic mounting element for hollow shaft encoders, pitch diameters 44 mm, 60 mm, 63 mm, 65 mm, for low dynamic applications with high axial play.