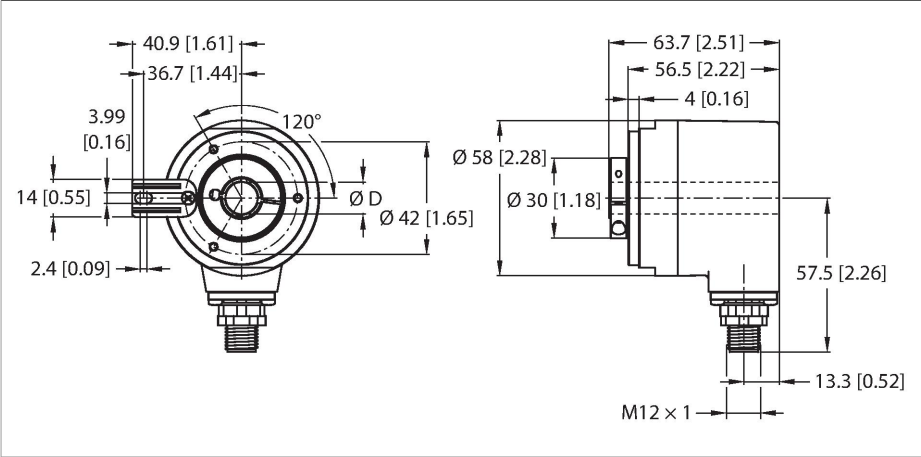


RES-187HA1T-3C13B-H1181

Absolute Rotary Encoder - Singleturn

Industrial Line



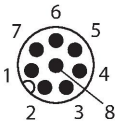
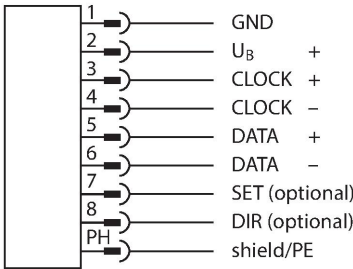
Technical data

Type	RES-187HA1T-3C13B-H1181
ID	100016325
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	$< 0.05 \text{ Nm}$
Measuring range	$0 \dots 360^\circ$
Absolute accuracy	$\pm 0.015^\circ$ At 25°C
Output type	Absolute singleturn
Resolution singleturn	13 Bit
Electrical data	
Operating voltage U_B	10...30 VDC
No-load current	$\leq 45 \text{ mA}$
Output current	$\leq 20 \text{ mA}$
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 mounting element
Flange diameter	$\varnothing 58 \text{ mm}$
Shaft Type	Blind hole shaft
Shaft diameter D (mm)	9.525

Features

- Flange with mounting element
- Hollow shaft, $\varnothing 9.525 \text{ mm}$
- Optical measuring principle
- Shaft material: stainless steel
- Protection class IP67 on housing and shaft side
- $-40 \dots +80^\circ\text{C}$
- Max. 4000 rpm (continuous operation 2000 rpm)
- 10...30 VDC
- SSI, gray
- $M12 \times 1$ male, 8-pin
- 360° resolved in 13 bit (8192 positions)

Wiring diagram



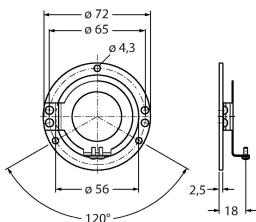
Technical data

Shaft Length L [mm]	15.875
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...+80 °C
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	IP67
Protection class shaft	IP67

Accessories

RME-1

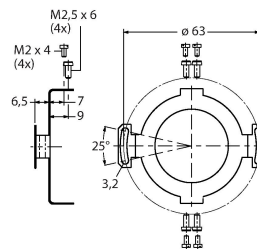
1544612



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

RME-2

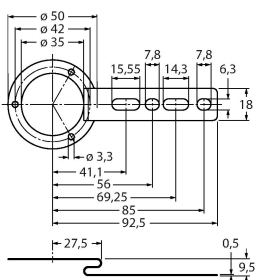
1544613



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

RME-4

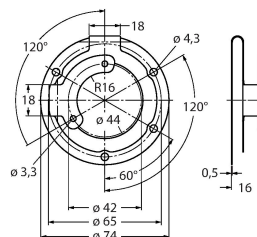
1544615



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

RME-7

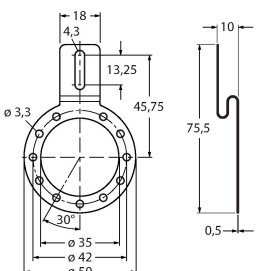
1544618



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

RME-8

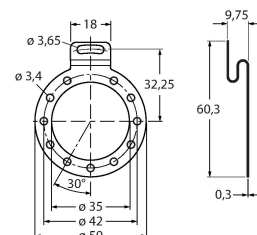
1544619



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

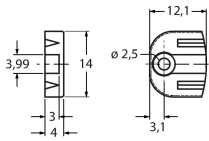


Stainless steel mounting panel for hollow shaft encoders, reference diameter 64.5 mm, for low dynamic applications with axial and radial play

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.

