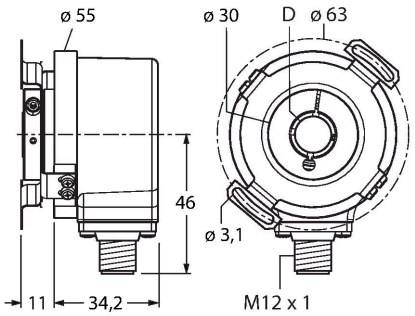
REI-12H12E-4B2048-H1181
Incremental Encoder
Industrial Line



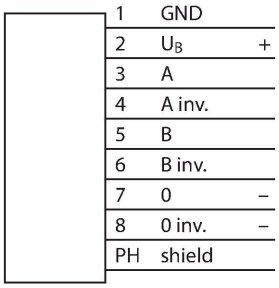
Technical data

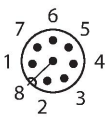
Type	REI-12H12E-4B2048-H1181
Ident. no.	100010523
Measuring principle	Optical
Max. Rotational Speed	6000 rpm
Moment of inertia of the rotor	6 x10^{-6} kgm^2
Starting torque	< 0.05 Nm
Ambient temperature	-40…+85 °C
Operating voltage	5…30 VDC
No-load current	≤ 90 mA
Output current	≤ 20 mA
Short-circuit protection	yes
Wire breakage/Reverse polarity protection	yes
Output type	Incremental
Resolution, incremental	2048 ppr
Pulse frequency max.	300 kHz
Signal level high	min. 2.5 V
Signal level low	max. 0.5 V
Output function	RS422/TTL, with inverted signals
Design	Hollow shaft
Flange type	Flange with stator coupling
Flange diameter	Ø 63 mm
Shaft Type	Hollow shaft
Shaft diameter D [mm]	12

Features

- Flange with slotted flex mount, Ø 63 mm
- Hollow shaft, Ø 12mm
- Optical measuring principle
- Shaft material, stainless steel
- Protection class IP67 on housing and shaft side
- -40…+85 °C
- Max. 6000 rpm (continuous operation 3000 rpm)
- 5…30 VDC
- Male connector, M12 x 1 , 8-pole
- RS422 with inverted signals
- Pulse frequency max. 300 kHz
- 2048 pulses per revolution

Wiring diagram





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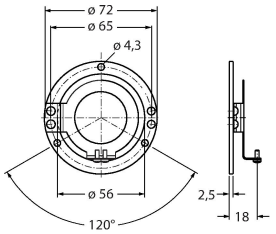
Technical data

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
Vibration resistance (EN 60068-2-6)	300 m/s², 10…2000 Hz
Shock resistance (EN 60068-2-27)	3000 m/s² 6 ms
Protection class	IP67
Protection class shaft	IP67

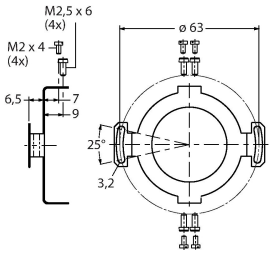
Accessories

RME-1 1544612



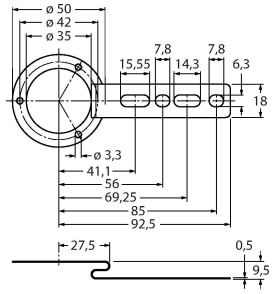
Stainless steel stator coupling for hollow shaft encoders, reference diameter, 65 mm, for highly dynamic, standard applications with axial and radial play

RME-2 1544613



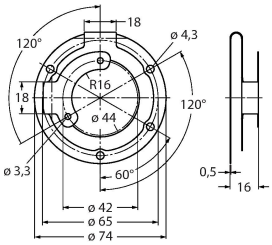
Stainless steel stator coupling for hollow shaft encoders, reference diameter 63 mm, for applications with hight demands on accuracy

RME-4 1544615



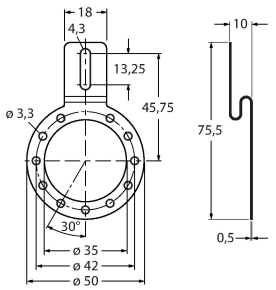
Stainless steel mounting panel for hollow shaft encoders, reference diameter 80…170 mm, for low dynamic applications with axial and radial play

RME-7 1544618



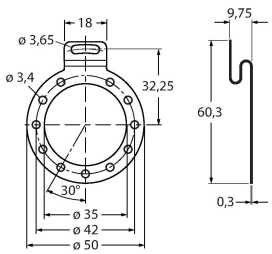
Stainless steel stator coupling for hollow shaft encoders, reference diameter 65 mm, for highly dynamic applications with axial and radial play

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

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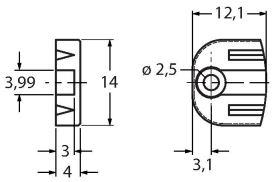
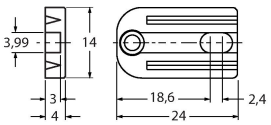
RME-13	1544624



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.

Wiring accessories

Dimension drawing	Type	Ident. no.	
	RKC8T-2/TXL	6625142	Connection cable, female M12, straight, 8-pin, cable length: 2 m, sheath material: PUR, black; cULus approval; other cable lengths and qualities available, see www.turck.com



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