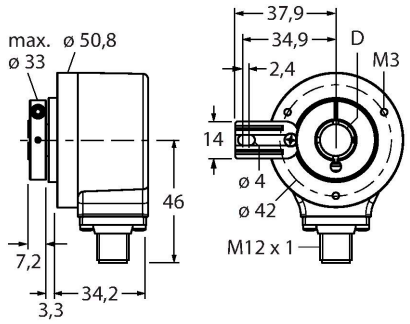
REI-12H12T-4B2048-H1181
Incremental Encoder
Industrial Line



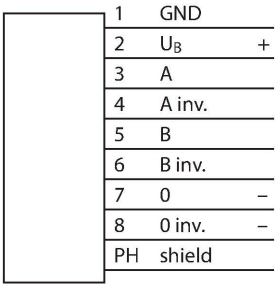
Technical data

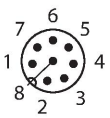
Type	REI-12H12T-4B2048-H1181
Ident. no.	100010433
Measuring principle	Optical
Max. Rotational Speed	6000 rpm
Moment of inertia of the rotor	6 x10^{-6} kgm^2
Starting torque	< 0.05 Nm
Ambient temperature	-40…+85 °C
Operating voltage	5…30 VDC
No-load current	≤ 90 mA
Output current	≤ 20 mA
Short-circuit 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 torque stop
Flange diameter	Ø 50.8 mm
Shaft Type	Hollow shaft
Shaft diameter D [mm]	12

Features

- Flange with torque stop, Ø 50.8 mm
- Hollow shaft, Ø 12 mm
- 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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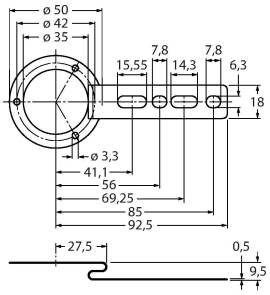
Technical data

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

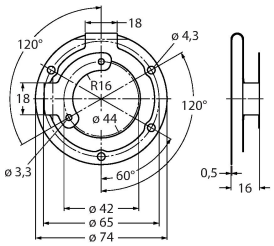
Accessories

RME-4 1544615



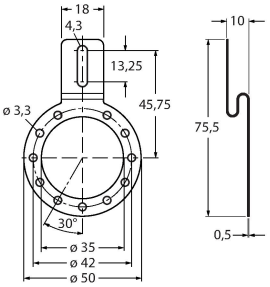
Stainless steel mounting panel for hollow shaft encoders, reference diameter 80…170 mm, for low dynamic applications with axial and radial play

RME-7 1544618



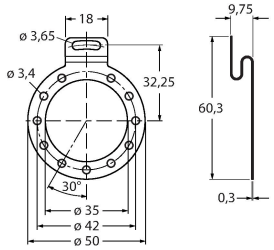
Stainless steel stator coupling for hollow shaft encoders, reference diameter 65 mm, for highly dynamic applications with axial and radial play

RME-8 1544619



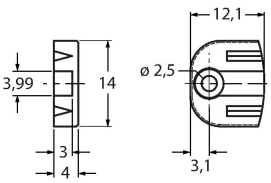
Stainless steel mounting panel for hollow shaft encoders, reference diameter 65…91.5 mm, for applications with axial and radial play at constant rotation speed

RME-9 1544620



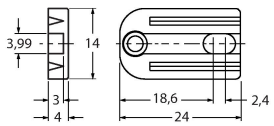
Stainless steel mounting panel for hollow shaft encoders, reference diameter 64.5 mm, for low dynamic applications with axial and radial play

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.

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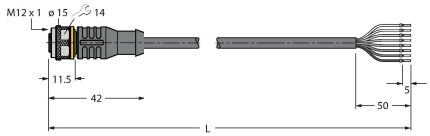
Wiring accessories

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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