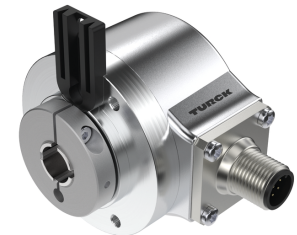
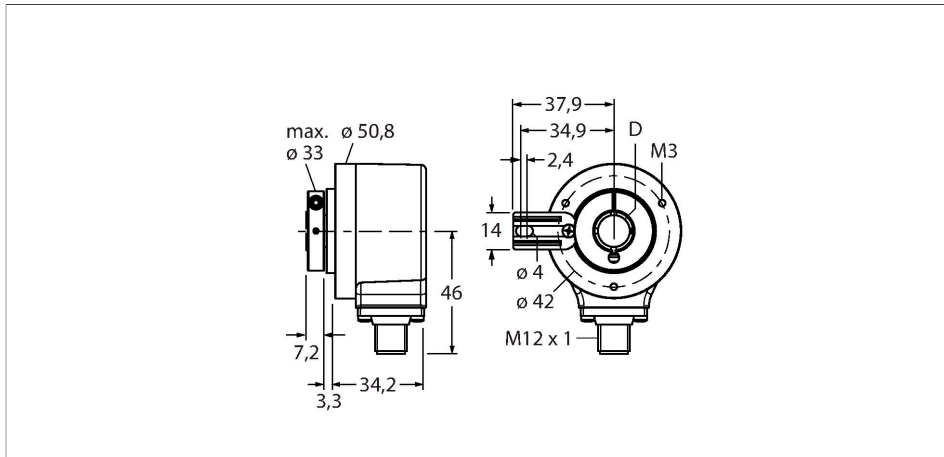


# RI-12H12T-2B1024-H1181

## Incremental Encoder

### Industrial Line



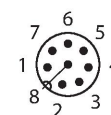
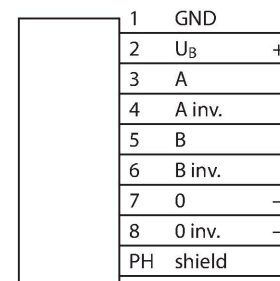
#### Technical data

Type	RI-12H12T-2B1024-H1181
ID	1544239
Measuring principle	Optical
<b>General data</b>	
Max. Rotational Speed	6000 rpm
Moment of inertia of the rotor	$6 \times 10^{-6} \text{ kgm}^2$
Starting torque	$< 0.05 \text{ Nm}$
Output type	Incremental
Resolution, incremental	1024 ppr
<b>Electrical data</b>	
Operating voltage	10...30 VDC
No-load current	100 mA
Output current	$\leq 30 \text{ mA}$
Short-circuit protection	yes
Wire breakage/Reverse polarity protection	yes
Pulse frequency max.	300 kHz
Signal level high	min. $U_b - 1 \text{ V}$
Signal level low	max. 0.5 V
Output function	Push-Pull/HTL, with inverted signals
<b>Mechanical data</b>	
Design	Hollow shaft
Flange type	Flange with mounting element
Flange diameter	$\varnothing 50.8 \text{ mm}$

#### Features

- Flange with torque stop,  $\varnothing 50.8 \text{ mm}$
- Hollow shaft,  $\varnothing 12 \text{ mm}$
- Optical measuring principle
- Shaft material: stainless steel
- Protection class IP67 on housing and shaft side
- $-40 \dots +85 \text{ }^\circ\text{C}$
- Max. 6000 rpm (continuous operation 3000 rpm)
- 10...30 VDC
- Male connector, M12 x 1, 8-pole
- Push-pull, with inverted signals
- Pulse frequency max. 300 kHz
- 1024 pulses per revolution

#### Wiring diagram



## Technical data

Shaft Type	Hollow 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
<b>Environmental conditions</b>	
Ambient temperature	-40...+85 °C
Vibration resistance (EN 60068-2-6)	300 m/s <sup>2</sup> , 10...2000 Hz
Shock resistance (EN 60068-2-27)	3000 m/s <sup>2</sup> , 6 ms
Protection class	IP67
Protection class shaft	IP67