

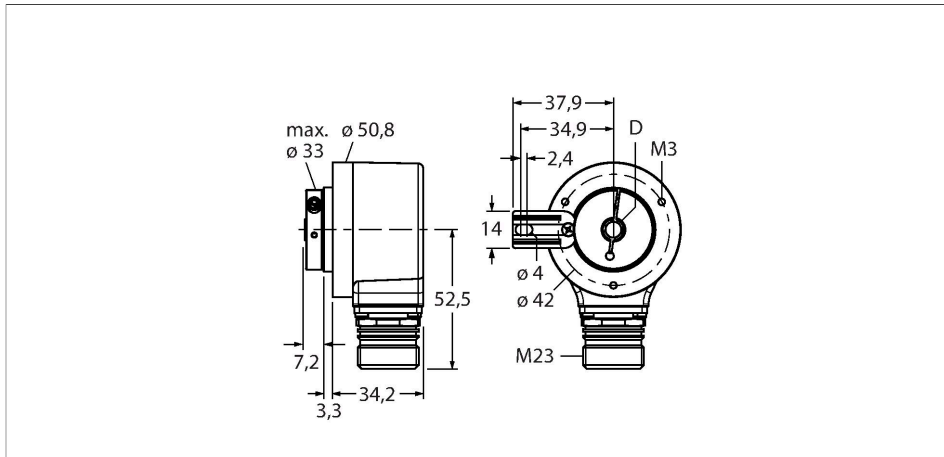
# RI-12HA4T-4A1000-12M23

## Incremental Encoder

### Industrial Line

### Features

- Flange with torque stop, Ø 50.8 mm
- Hollow shaft, Ø 5/8"
- 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 VDC
- Male connector, M23, 12-pole
- RS422 with inverted signals
- Pulse frequency max. 300 kHz
- 1000 pulses per revolution



### Technical data

Type	RI-12HA4T-4A1000-12M23
ID	1545514
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 Nm
Output type	Incremental
Resolution incremental	1000 ppr
<b>Electrical data</b>	
Operating voltage $U_B$	5 VDC
No-load current	$\leq 90 \text{ mA}$
Output current	$\leq 20 \text{ mA}$
Short-circuit protection	yes
Wire break/reverse polarity protection	no
Pulse frequency max.	300 kHz
Signal level high	min. 2.5 V
Signal level low	max. 0.5 V
Output function	12-wire, RS422, with inverted signals
<b>Mechanical data</b>	
Flange type	Flange with mounting element
Flange diameter	Ø 50.8 mm
Shaft Type	Hollow shaft

### Wiring diagram

1	B inv.
2	$U_B$ sens +
3	0 -
4	0 inv. -
5	A
6	A inv.
7	n.c.
8	B
9	n.c.
10	GND
11	0V sens
12	$U_B$ +
PH	shield

1	B inv.
2	$U_B$ sens +
3	0 -
4	0 inv. -
5	A
6	A inv.
7	n.c.
8	B
9	n.c.
10	GND
11	0V sens
12	$U_B$ +
PH	shield

## Technical data

Shaft diameter D	0.625 in
Shaft material	Stainless steel
Housing material	Die-cast zinc
Electrical connection	Connector
	M23, 12-pole
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