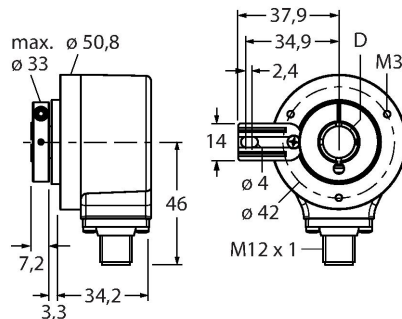


RI-12HA1T-CA4096-H1181

Incremental Hollow Shaft Rotary Encoder

Industrial Line



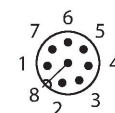
Technical data

Type	RI-12HA1T-CA4096-H1181
ID	100010750
Measuring principle	Optical
General data	
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	4096 ppr
Electrical data	
Operating voltage U_B	5...30 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	8-wire, RS422, with inverted signals
Mechanical data	
Flange type	Flange with mounting element
Flange diameter	$\varnothing 50.8 \text{ mm}$
Shaft Type	Hollow shaft

Features

- Flange with torque stop, $\varnothing 50.8 \text{ mm}$
- Hollow shaft, $\varnothing 3/8''$
- Optical measuring principle
- Shaft material, stainless steel
- Protection class IP67 on housing and shaft side
- $-40...+85 \text{ }^\circ\text{C}$
- Max. 6000 rpm (continuous operation 3000 rpm)
- 5...30 VDC
- Male connector, M12 x 1, 8-pole
- Open Collector with inverted signals
- Pulse frequency max. 300 kHz
- 4096 pulses per revolution

1	GND	
2	U_B	+
3	A	
4	A inv.	
5	B	
6	B inv.	
7	0	
8	0 inv.	
PH	shield	



Technical data

Shaft diameter D (mm)	9.525
Shaft diameter D	0.375 in
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...+85 °C
Vibration resistance (EN 60068-2-6)	300 m/s ² , 10...2000 Hz
Shock resistance (EN 60068-2-27)	3000 m/s ² , 6 ms
Protection class	IP67
Protection class shaft	IP67