

REI-12H8T-4B1000-H1181
Incremental Encoder
Industrial Line



Technical data

Type	REI-12H8T-4B1000-H1181
ID	100010413
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	1000 ppr
Electrical data	
Operating voltage	5...30 VDC
No-load current	90 mA
Output current	$\leq 20 \text{ mA}$
Short-circuit protection	yes
Wire breakage/Reverse polarity protection	yes
Pulse frequency max.	300 kHz
Signal level high	min. 2.5 V
Signal level low	max. 0.5 V
Output function	RS422/TTL, invertable
Mechanical data	
Design	Hollow shaft
Flange type	Flange with mounting element
Flange diameter	$\varnothing 50.8 \text{ mm}$
Shaft Type	Hollow shaft
Shaft diameter D [mm]	8

Features

- Flange with torque stop, $\varnothing 50.8 \text{ mm}$
- Hollow shaft, $\varnothing 8 \text{ mm}$
- 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)
- 5...30 VDC
- RS422/TTL invertible
- Pulse frequency max. 300 kHz
- M12 $\times$ 1 male connector, 8-pin
- 1000 pulses per revolution

Wiring diagram

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



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

Accessories

Dimension drawing	Type	ID	
	RKC8T-2/TXL	6625142	Connection cable, M12 female connector, straight, 8-pin, cable length: 2 m, jacket material: PUR, black; cULus approval
	WKC8T-2/TXL	6625145	Connection cable, M12 female connector, angled, 8-pin, cable length: 2 m, jacket material: PUR, black; cULus approval