

REI-12H12E-4B2048-H1181
Incremental Encoder
Industrial Line



Technical data

Type	REI-12H12E-4B2048-H1181
ID	100010523
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	2048 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	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	
Flange type	Flange with stator coupling
Flange diameter	$\varnothing 63 \text{ mm}$
Shaft Type	Blind hole shaft
Shaft diameter D (mm)	12
Shaft material	Stainless steel
Housing material	Die-cast zinc

Features

- Flange with stator coupling, $\varnothing 63 \text{ mm}$
- 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)
- 5...30 VDC
- RS422/TTL invertible
- Pulse frequency max. 300 kHz
- M12 $\times$ 1 male connector, 8-pin
- 2048 pulses per revolution

Wiring diagram



Technical data

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 housing	IP65
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