

Heavy-Duty Shaft Encoders

Product Description

Provides accurate pulse outputs for use with PLCs and counters.

Features

- 5–28 Vdc input power
- 80 mA current draw
- NPN transistor output, 250 mA sinking capacity
- Square wave output
- Single channel and quadrature models
- 3/8 in (9.5 mm) single ended shaft
- ABEC 3 double sealed ball bearings
- Tapped holes for face or base mounting
- Military style connector

Product Selection

Heavy-Duty Shaft Encoder



Heavy-Duty Encoder

Description	Normally Stocked Item	Catalog Number
Single Channel		
60 pulses per revolution	Yes	48370060
100 pulses per revolution	—	48370100
120 pulses per revolution	Yes	48370120
600 pulses per revolution	Yes	48370600
Quadrature		
60 pulses per revolution	Yes	48371060
100 pulses per revolution	Yes	48371100
100 pulses per revolution	Yes	48371120
600 pulses per revolution	Yes	48371600

Technical Data and Specifications**General Specifications**

Description	Specification
Electrical	
Input	
Voltage	5 to 28 Vdc
Current	60 mA nom., 100 mA max.
Ripple	-2%
Output	
Type	Current sinking transistor with 1.5k ohms pull-up
Sinking current	100 mA max.
Max. voltage at 100 mA	1.3 Vdc
Blocking voltage	40 Vdc max.
Polarity	Positive
Wave shape	Square wave (50-50 duty)
Pulse rate	0 to 20,000 pulse per second
Rise time	<1 μ S
Pulses per rev.	1 to 1270
Accuracy	Within $\pm 0.1^\circ$ or 6 arc minutes
Environmental	
Operating temperature	32° to 167°F (0° to 75°C)
Vibration	3 Gs at 58 to 500 cps
Shock	50 Gs, 11 ms duration
Mechanical	
Shaft speed	6000 RPM max.
Shaft rotation	CW or CCW
Bearings	Sealed ball bearings
Starting torque	1.0 oz-in
Radial loading	50 pounds operating
Axial loading	35 pounds operating
Shaft	3/8 in (9.5 mm) dia.
Housing	Aluminum with black painted finish. Sealed against dust, oil, vapor and moisture.
Mounting	Provisions for bottom or front face
Weight	3.25 lbs (1.47 kg) max.
Connector	MS-3102E-14S-6P
Mating connector	MS-3106A-14S-6S with 10 ft (3m) shielded cable and termination for electronic controls (Part No. 29665-300) Connector, clamp and bushing only (Part No. 29729-300)

Dimensions

Approximate Dimensions in Inches (mm)

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