

Accessories and Encoders



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Accessories and Encoders

Product Overview

Eaton offers a variety of accessories to complement our counting and control product offering.

Features

- Easy integration with Eaton counters

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Cube Style 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; (50-50 duty cycle)
- Single channel and quadrature models
- Up to 600 pulses per revolution
- 3/8 in (9.5 mm) double ended shaft
- ABEC three double sealed ball bearings
- Tapped holes for face or base mounting
- Military style connector

Product Selection**Cube Shaft Encoder****Cube Shaft Encoders**

Description	Normally Stocked Item	Catalog Number
Single Channel		
60 pulses per revolution	—	38150060
100 pulses per revolution	Yes	38150100
120 pulses per revolution	—	38150120
600 pulses per revolution	Yes	38150600
Quadrature		
60 pulses per revolution	—	38151060
100 pulses per revolution	Yes	38151100
120 pulses per revolution	—	38151120
600 pulses per revolution	Yes	38151600

Accessory**Mounting Bracket****Mounting Bracket** ^①

Description	Normally Stocked Item	Catalog Number
Mounting bracket	—	40460402

Note

^① 40460400 is shown, 40460402 has additional mounting plate for encoders.

Technical Data and Specifications**General Specifications**

Description	Specification
Electrical	
Input (38150)	
Voltage	9 to 16 Vdc
Current	60 mA max. at 16 Vdc
Ripple	2%
Input (38151)	
Voltage	5 to 28 Vdc
Current	60 mA nom., 100 mA max.
Ripple	≤2%
Output	
Type	Current sinking transistor with 1.5 Kohms 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
Pulse rate	
38150	1 to 20,000 pulse per second
38151	1 to 10,000 pulse per second
Rise time	<1 μs
Pulses per rev.	1 to 1270
Accuracy	Within ±0.1°
Environmental	
Operating temperature	32 to 167 °F (0 to 75 °C)
Vibration	3 Gs at 5 to 1000 cps
Shock	20 Gs, 10 ms
Mechanical	
Shaft speed	6000 RPM max.
Shaft rotation	CW or CCW
Bearings	Sealed ball bearings
Starting torque	0.1 oz-in
Moment of inertia	0.0025 ounce in-sec ²
Radial loading	40 pounds operating
Axial loading	30 pounds operating
Shaft	3/8 in (9.5 mm) dia.
Operating life	Up to 100,000 hours, depending on speed
Housing	Aluminum with black anodized finish. Sealed against dust, oil, vapor and moisture.
Mounting	Bottom or front face
Weight	1 lb (0.5 kg) max.
Connector	MS-3102E-14S-6P
Mating connector	MS-3106A-14S-6S with 10 ft (3 m) shielded cable and termination for electronic controls

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Counters, Panel Meters, Tachometers and Timers

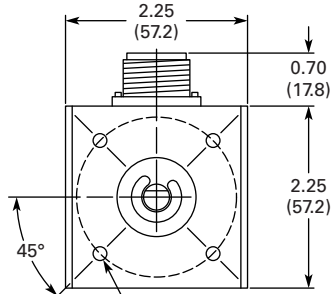
Accessories and Encoders

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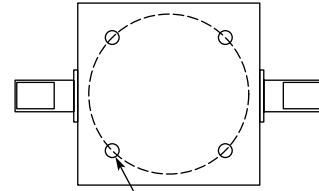
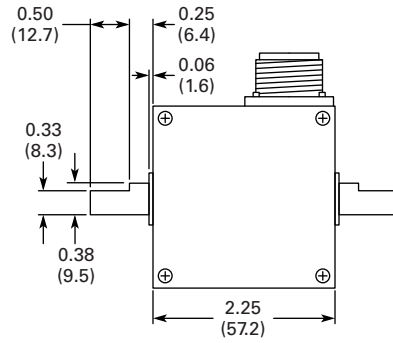
Dimensions

Approximate Dimensions in Inches (mm)

Cube Shaft Encoders



(4) 6.32 (160.5) Tapped Holes
0.25 (6.4) Deep on 2.00 (50.8) B.C.
(Same Mtg. Holes on
Opposite End and Bottom)



(4) 6.32 (160.5) Tapped Holes
0.25 (6.4) Deep on 2.00 (50.8) B.C.