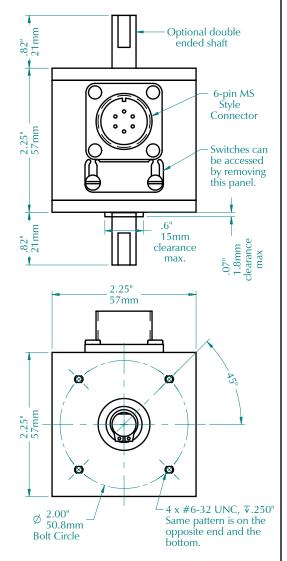
# **Programmable Cube Style Encoder**

## **FEATURES**

- DIP switch selectable counts per revolution
- 1/4", 5/16" or 3/8" shaft diameter
- Single or double ended shaft
- Anti-Jitter feature
- CE and RoHS compliant available
- ESD and short circuit protection
- 5 vdc and 8 to 30 vdc supply voltages
- Non-programmable models available

## **DIMENSIONS**

(shown with 3/8" diameter, double ended shaft)





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# **SPECIFICATIONS**

## **Electrical**

Supply Voltages: (specify when ordering)  $5 \pm 5\%$  VDC or 8-30 VDC

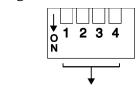
Supply Current: 50 mA max (no load) **Operating Temperature:**  $0^{\circ}$  to  $+70^{\circ}$  C

Output Circuit: (specify when ordering) Output voltage level is approximately the same as the input voltage level. Single Ended:

- NPN open collector (30vdc/50ma max)
- Push/Pull (50ma max source/sink) Differential Line Driver:
- 7272 line driver (output same as supply volts)
- RS422 line driver (regulated 5vdc output)

Maximum operating speed: 2,500 rpm

# **Configuration Switches**



**Counts per Revolution Selection** 

1 2 3 4 5 🗆 🗆 🗆 240 ■□□□ 480 **8** 

Switch Definitions: ☐ Up (off) ■ Down (on)

#### Accessories

See our website for cables, measuring wheels, flexible shaft couplings, mounting brackets, and conveyor adapters.

### Mechanical

Shaft Diameters: (specify when ordering)

1/4", 5/16", 3/8"

Shaft Style: (specify when ordering) single ended or double ended

Shaft Loading: Radial: 25 lbs. / 11.3 kg max.

Axial: 15 lbs. / 6.8 kg max.

A flexible shaft coupling is recommended. **Bearing Life:**  $36 \times 1,000,000/\text{rpm} = \text{hours}$ 

Materials: Case: Aluminum, anodized Shaft: 303 Stainless steel Switch cover: ABS plastic

Weight: 11 oz. (312 grams)

# **Outputs**

Counts per Revolution: Selectable by setting the configuration switches. Output A is "low" when power is initially applied.

Output Waveform: 50/50 squarewave

— Pulse symmetry: 180°±30% - Pulse interval jitter: 30% max

Anti-jitter: Increases pulse hysteresis to 1/2 of a pulse width eliminating the dither caused by excess mechanical vibration and the resulting false output pulses.

## **Electrical Connections**

**Single Ended Outputs:** 

6-pin	4-pin	Function	Wire Color
Α	3	Common	Black
В	1	Supply Voltage	Red
D	4	Output A	White
C,E,F	2	no connectio	n

#### **Differential Line Driver Outputs:**

6-pin	4-pin	Function	Wire Color				
Α	3	Common	Black				
В	1	Supply Voltage	Red				
C	4	Output +A	White				
D	2	Output -A	Green				
E.F		no connectio	n				

4-pin 12mm is Turck FS4.4/14.5 or equivalent 6-pin MS is C-5015 style 97-3102A-14S-6P or similar

# **MODEL NUMBER**

RS			<b> </b>	Р	480AJ				
Model Number	Shaft Diameter: $A=5/16''$ , $B=3/8''$ , $C=1/4''$	Shaft Style: leave blank for single ended D=double ended		P=Programmable model	Program: name of factory configured program.	<b>Supply Voltage:</b> 5=5vdc, <b>8-30</b> =8 to 30 vdc	Output Circuit: leave blank for push/pull C=NPN open collector, DL=R5422 line driver, DH=7272 line driver	Modification Number: 6-pin MS is standard M131=4-pin 12mm connector Call or see our website for other modifications.	Accessories: leave blank for no accessories. Call or see our website for more information.

Example: RSB-P480AJ/8-30 - 3/8" single ended shaft, programmable model factory configured with the 480AJ program, 8-30 vdc, push/pull output, no modification or accessories