

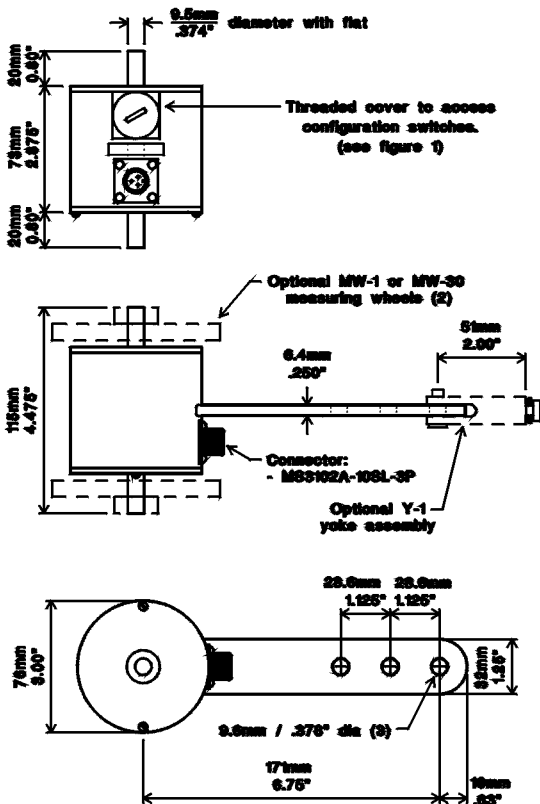
DESCRIPTION

The RH-P encoder, also known as a Pulse Position Indicator (PPI), is ideally suited for material handling sortation applications. It converts shaft rotation into quadrature square wave output pulses to provide an accurate and reliable means of digitizing position, rate, or length of travel. The number of pulses per each revolution of the shaft are selectable by setting configuration switches. When used with measuring wheels, it generates a fixed number of pulses per inch, foot, yard, centimeter, or meter. For conveyor applications, accessories are available for mounting either above or below the conveyor belt/roller.

FEATURES

- Generates pulses per inch / foot / yard / meter
- Programmable Pulses per Revolution
- A and B Outputs (quadrature)
- ESD Protection
- Short Circuit / Reverse Voltage Protected

DIMENSIONS



HOTOCRAFT INC

OVER 25 YEARS OF MATERIAL HANDLING AND INDUSTRIAL EXPERIENCE

602 E. North Street Elburn, IL 60119, USA
 630-365-7148 Fax: 630-365-7149
 www.photocraftencoders.com

SPECIFICATIONS

Electrical

Configuration:

Model	Supply/V _{IN} (vdc)	Output Circuit
RH-P240Q/5	5±5%	push/pull
RH-P240Q/8-30	8-30	push/pull
RH-P240Q/5C	5±5%	open collector
RH-P240Q/8-30C	8-30	open collector

Output Circuit: (See figure 2)

- Push/Pull Combined sourcing/sinking output
- Open collector NPN Open collector sinking output (V_{CC}=30 vdc maximum)

Supply Current: 50ma maximum (no load)

Output Current (I_O): 50ma max source/sink

Operating temperature: -25° to +85° C

Maximum operating speed: 3,000 rpm

Outputs

Quadrature Outputs: Two outputs, A and B, have the selected number of pulses per revolution by setting switches 1 to 6 (see figure 1). A leads B by 90° for clockwise rotation when viewed from shaft end farthest from connector.

Output Waveform: 50/50 squarewave

- Pulse On-Off Ratio: 50% ± 10%
- Pulse Interval Jitter: ±10%
- Quadrature Deviation: 30° (max)
- Pulse rise time: 2 µsec (max)
- Pulse fall time: 5 µsec (max)
- Voltage (high): V_{in}-2.5 vdc (min)
- Voltage (low): 1.5 vdc (max)

(600 rpm, V_{IN}=24vdc, 10ma<I_O<50ma, 25°C)

Electrical Connections

Pin No.	Function	Wire Color
A	Common	Black
B	Supply voltage	Red
C	not used	—
D	Output A	White
E	Output B	Green
F	not used	—
—	Case Ground	Plain/Shield

Connector: MS3102A-14S-6P (6-pin)

Mating Connector: MS3106A-14S-6S

Mechanical

Weight: 1.3 lb (600 gm) without accessories

Bearing Loading: 30 lb. Radial/axial (max)

Materials:

- Case: 1/4" Aluminum, anodized
- Shaft: 303 Stainless steel
- Switch access port: plastic

Accessories

Measuring Wheels: Cast aluminum and .38" (9.6mm) wide urethane tire with high coefficient of friction. Circumferences:

- MW-1-B: 12.00 ± .01 inch
- MW-30-B: 30.00 ± .025 cm

Yoke Assembly (Y-1 or Y-3): Allows the encoder to pivot freely when fastened to a rigid beam.

Under-belt Mounting Assembly (MB-UB1): a counter-weight assembly that facilitates mounting the RH encoder under the conveyor belt (or roller).

Offset Mounting Assembly (MB-UB2): mounts to the side of a moving web and provides a pivot point so the encoder measuring wheels can ride on the moving web.

Cable Assembly (C6-4-10 cf): 10 ft. (3m) of 4 conductor, shielded cable with mating connector. Other lengths are available.

CE mark requires Photocraft cable, and surge protection if the cable exceeds 100' (30m) or leaves the building.

Configuration Switches

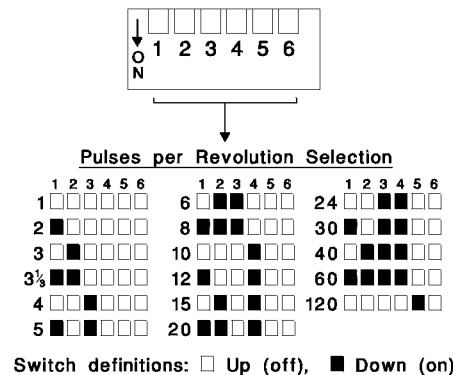


Figure 1 - Configuration Switches

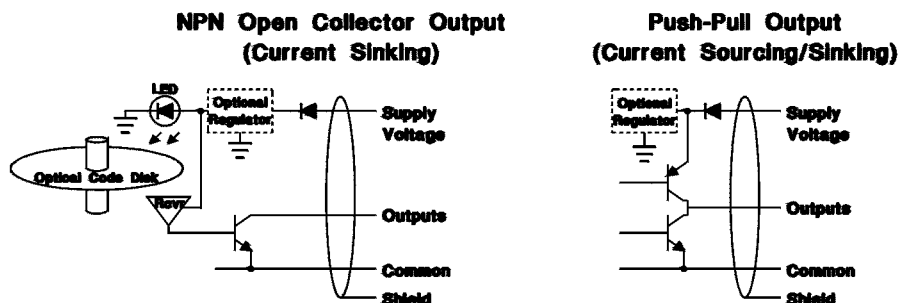


Figure 2 - Output Circuits