

## SPECIFICATIONS

### Electrical

**Power Input** (specify voltage when ordering):

Supply Voltage	R Values (see fig. 1)
5 ± 5% vdc	1K ohms
8 to 30 vdc	3.3K ohms

**Supply Current:** 50ma maximum (no load)

**Output Current (I<sub>O</sub>):** 50ma max source/sink

**Output Circuits:** (see figure 1)

- Push/Pull (Combined sourcing/sinking)
  - Current sinking NPN transistor
  - Open collector (V<sub>CC</sub>=30 vdc max)
  - Current sourcing PNP transistor
- All are switch selectable for single output model; factory configured for 2 or 3 outputs

**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<sub>in</sub>-2.5 vdc (min)
- **Voltage (low):** 1.5 vdc (max)
- **Index Pulse:** approximately the width of 1 pulse on output A

(600 rpm, V<sub>IN</sub>=24vdc, 10ma < I<sub>O</sub> < 50ma, 25°C)

**Operating temperature:** 0° to 70° C

**Pulse Rate:** 0 - 30 kHz

**Output Protection:**

- Short Circuit
- ESD to 8KV direct and 25KV air

RoHS Compliance available on most models.

### Electrical Connections

Connector Pin	Wire Color	Function
1 output		
2 or 3		
C	Black	Common
A	Red	+vdc
—	Brown*	Output C or Z
B	White	Output A
—	Green	Output B
—	—	no connection
—	Shield	Case ground

\* Green if output B is not used.

**Connector:**

- Single output (3 pin connector): 97-3102A10SL-3P
- 2 or 3 outputs (6 pin connector): 97-3102A14S-6P

### Mechanical

**Weight:** 1.4 lb. (635 grams)

**Shaft Loading:** Radial: 25 lb. (11.3 kg.) max.  
Axial: 10 lb. (6.8 kg.) max.

**Bearing Life (L<sub>10</sub>):** 70 x 10<sup>6</sup>/RPM = hours

**Materials:**

- Case: 1/4" Aluminum, anodized
- Shaft: 303 Stainless steel

### Programs

The RH-P is preconfigured with one of the following programs. Others are available.

**144AJ** - One anti-jitter pulse output on A with selectable ppr (1, 2, 3, 4, 6, 8, 9, 12, 16, 18, 24, 36, 48, 72, 144).

**240AJ** - One anti-jitter pulse output on A with selectable ppr (1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 15, 16, 18, 20, 24, 30, 36, 40, 48, 60, 80, 120, 240).

**300AJQ** - Quadrature anti-jitter pulse outputs on A and B with selectable ppr (60, 75, 100, 120, 150, 300).

### Accessories

**Measuring Wheels:** Cast aluminum with 3/8" (10mm) wide urethane tire having a high coefficient of friction.

Part number	Circumference
MW-1-B	12.00 ± .01 inch
MW-30-B	30.00 ± .025 cm.

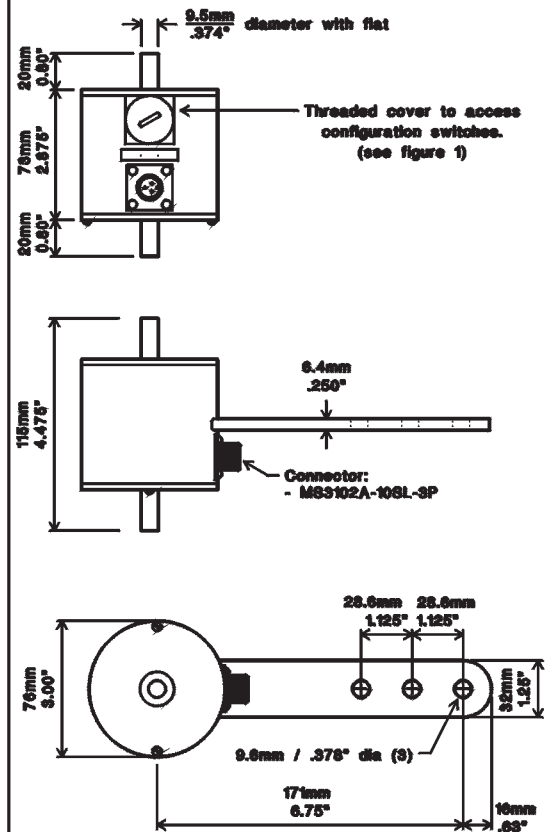
**Yoke Assembly (Y-1):** Yoke, clevis pin and 1/4"-28 mounting screw. Allows the encoder to pivot freely when fastened to a rigid cross member for mounting above the moving material

**Underbelt Mounting (MB-UB1):**  
Call for information.

**Cable Assemblies:**

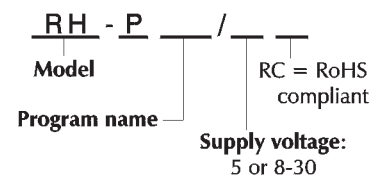
- C3-3-10: (for 1 output)  
10 ft. (3m) shielded cable with 97-3106A10SL-3S connector.
  - C6-x-10: (for 2 or 3 outputs)  
10 ft. (3m) shielded cable with 97-3106A14S-6S connector (x is number of conductors).
1. Other lengths are available.  
2. CE marking requires Photocraft cable, and surge protection option if the cable exceeds 100' (30m) or leaves the building.

## DIMENSIONS



## ORDERING INFORMATION

### Single Output



### 2 or 3 Outputs

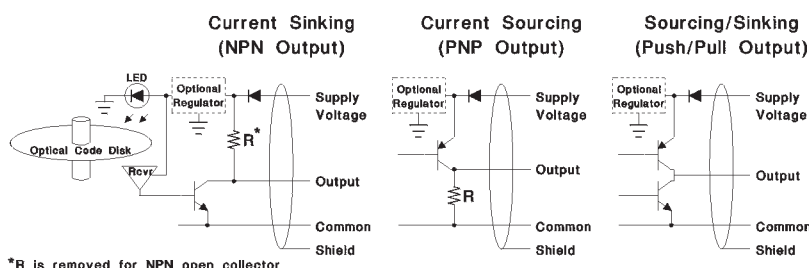
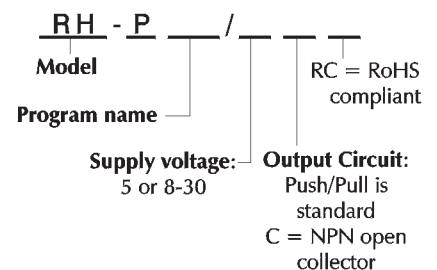


Figure 1 - Output Circuits