

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_O): 50ma max source/sink

Output Circuits: (see figure 1)

- Push/Pull (Combined sourcing/sinking)
 - Current sinking NPN transistor
 - Open collector (V_{CC}=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_{in}-2.5 vdc (min)
- **Voltage (low):** 1.5 vdc (max)
- **Index Pulse:** approximately the width of 1 pulse on output A
(600 rpm, V_{IN}=24vdc, 10ma < I_O < 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

Electrical Connections

Pin No.	Function	Wire Color
A	Supply Voltage	Red
B	Common	Black
C	Output A	White
D	Output B	Green
E	Output C or Z	Brown
—	Case Ground	Shield

Connector: 97-3102A-14S-5P (5-pin)

Mechanical

Weight: 16.8 oz. (477 grams)

Shaft Loading: Radial: 25 lb. (11.3 kg.) max.
Axial: 15 lb. (6.8 kg.) max.

Bearing Life (L₁₀): 36 x 10⁶/RPM = hours

Materials:

- Case: 1/4" Aluminum, anodized
- Shaft: Aluminum
- Window: Plastic

Programs

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

- 144AJ** - Single pulse output on A with selectable ppr (1, 2, 3, 4, 6, 8, 9, 12, 16, 18, 24, 36, 48, 72, 144) and the anti-jitter feature.
- 240AJ** - Single 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) and the anti-jitter feature.
- 270AJ** - Single pulse output on A with selectable ppr (2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 15, 16, 18, 20, 24, 30, 54, 60) and the anti-jitter feature.
- 270AJB** - Single pulse output on A with selectable ppr (2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 15, 16, 18, 20, 24, 30, 54, 60) and the anti-jitter feature. Direction output on B with selectable direction.

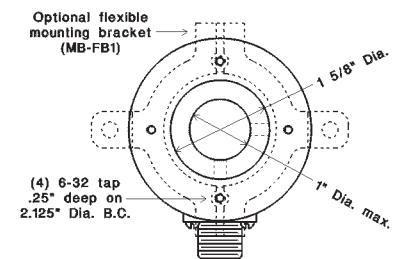
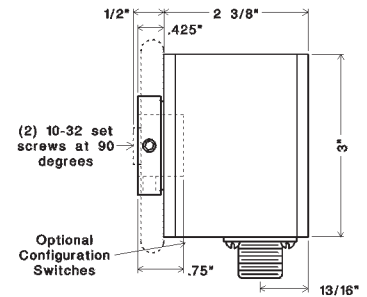
Accessories

Flexible Mounting Bracket (MB-FB1): allows for axial and angular shaft misalignment.

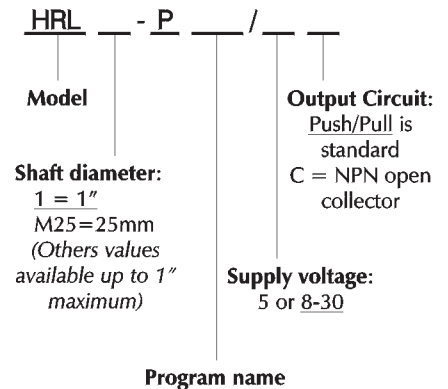
Cable Assembly (C5-x-10): 10 ft. (3m) shielded cable with 97-3106A14S-5S mating connector is included at no extra cost (x is number of conductors) Other lengths are available.

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

DIMENSIONS



ORDERING INFORMATION



Short lead time options are underlined

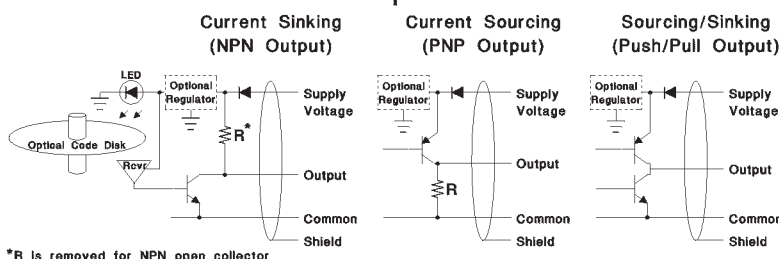


Figure 1 - Output Circuits