

MODEL

HRL

INCREMENTAL ENCODER



Fits shafts up to 1 (25.4mm) diameter

1 to 1200 pulses per revolution

Exclusive Anti-Jitter circuit option

Single, quadrature, and index outputs

Output Circuits:

Current sinking (NPN)

Current sourcing (PNP)

NPN open collector

Differential line driver

Triac

DC Supply Voltages:

5, 12, 15, 24, 8 to 30, and others

120 VAC Supply Voltage Option

Short circuit / ESD protection available

Custom models available

1 Diameter Hollow Shaft

The Photocraft Model HRL is an optical hollow shaft encoder that mounts directly on an existing shaft assembly. A flexible mounting bracket allows the encoder to float on the shaft without rotating. It converts shaft rotation into square wave outputs with the specified number of pulses per revolution providing an accurate means of digitizing position, rate or direction of rotation.

Output pulses are generated when a shatter-proof optical disk internally mounted on the encoder shaft and having the specified output pattern is read by 1, 2, or 3 opto-sensors depending on the number of outputs required. The matched LED and opto-sensor pairs, compensation circuitry and rugged aluminum housing assure continuous, reliable operation in industrial environments over a 0° to 70° C temperature range.

Resolutions from 1 to 1200 pulses per revolution are available in single output, quadrature output, and with optional zero reference (index output). Photocraft also

produces many customized models having 1, 2 or 3 independent outputs with any combination of pulses per revolution (up to 360) on each output (call for information).

The Anti-Jitter option was designed for conveyor and web applications that require continuous and accurate measurement of the web's movement even if the system must be stopped and restarted without reset. Anti-Jitter eliminates the effects of mechanical vibration and the possible dither that results in false output pulses and subsequent erroneous counts when the system is actually stopped. It also eliminates the need for more expensive quadrature encoders and up-down counters. Anti-jitter is available on single output models with up to 60 pulses per revolution.

Accessories and customized configurations are available including speed and direction of rotation indication, special shafts, and a flexible mounting bracket.