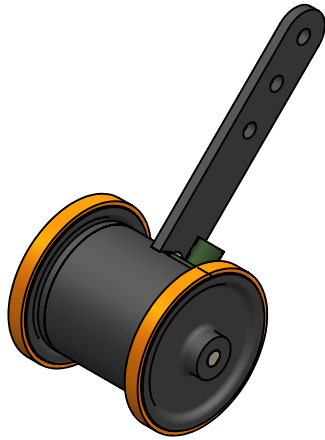




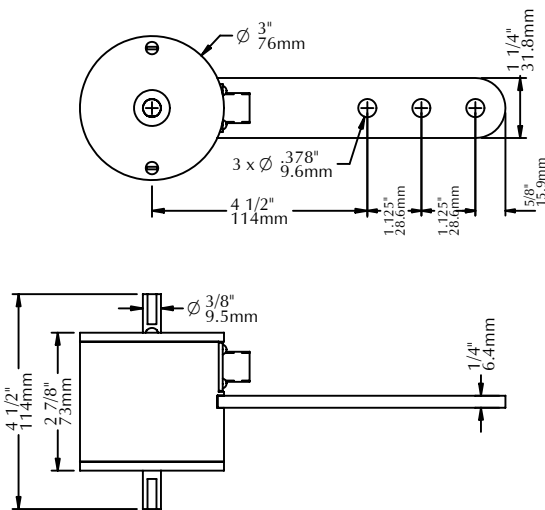
Shown with
optional MW-1
measuring wheels

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

FEATURES

- Generates pulses for accurate linear measurement
- Tracks conveyor movement independent of conveyor roller diameters
- Heavy duty construction
- Precision 12" or 30cm circumference measuring wheels
- Programmable model available - see Model RH-P
- Exclusive "Anti-jitter" circuit for conveyor applications
- Single (A), quadrature (A, B), and index (Z) outputs
- Short circuit, ESD, reverse voltage protection
- Various mounting hardware kits are available
- See the model R22 for a smaller wheeled encoder

DIMENSIONS



**MATERIAL HANDLING AND
INDUSTRIAL EXPERIENCE
SINCE 1974**

HOTOCRAFT INC

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

SPECIFICATIONS

Mechanical

Maximum speed: 6,000 rpm

Shaft Loading:

- Radial: 25 lbs. / 11.3 kg
- Axial: 10 lbs. / 4.5 kg

Bearing Life: 70 x 1,000,000/rpm = hours

Materials:

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

Weight: 1.34 lbs. / .6 kg

Electrical Connections

Single Ended Outputs:

--- Connectors ---

3-pin	6-pin	4-pin	Function	Wire Color
C	A/1	3	Common	Black
A	B/2	1	+vdc	Red
--	C/3	--	Output Z	Brown or Green
B	D/4	4	Output A	White
--	E/5	2	Output B	Green
--	F/6	--	no connection	

3-pin is C-5015 style 97-3102A-10SL-3P or equivalent

6-pin is C-5015 style 97-3102A-14S-6P or equivalent; or

16mm Amphenol T3402000 or equivalent

4-pin is 12mm Turck FS4.4/14.5 or equivalent

Differential Line Driver Outputs:

--- Connectors ---

6-pin	8-pin	10-pin	Function	Wire Color
A	5	F	Common	Black
B	4	D	+vdc	Red
C	1	A	Output +A	White
D	6	H	Output -A	Blue or Green
E	2	B	Output +B	Green
F	7	I	Output -B	Brown
--	3	C	Output +Z	Yellow or Green
--	8	J	Output -Z	Orange or Brown
--	--	G	Case Gnd	Purple

6-pin is C-5015 style 97-3102A-14S-6P or equivalent

8-pin is 16mm Amphenol T3506000 or equivalent

10-pin is C-5015 style 97-3102E-18-1P or equivalent
see M226 modification drawing for additional details.

Standard cable length is 10 ft / 3 meters.

Other lengths are available.

Electrical

DC Supply Voltages: (specify when ordering)

— 5 ± 5%, 5-26 vdc, or 8-30 vdc

Other supported voltages:

— 12, 15, or 24 ± 10% vdc

— 5R to indicate 7 to 12 vdc

— 12R to indicate 12 to 27 vdc

Current: 50 ma max (no load)

100 ma max (differential line driver)

Pulse Rate: 0 - 30 kHz

Pulses per Revolution: (specify when ordering)

— 1 to 1200

— 1 to 2400 (single output only)

Operating Temperature: 0° to 70° C

Output Circuit: (specify when ordering)

Output voltage level is approximately the

same as the input voltage (unless specified)

Single Ended: 50ma max current

— Current sinking NPN with pull-up

— NPN open collector (30 vdc max)

— Current sourcing PNP with pull-down

— Push/pull

Differential Line Driver:

— 7272 line driver

— RS422 - 5vdc output voltage level

(requires 5, 5-26, or 8-30 supply voltage)

Output WaveShape: Square wave; outputs A

and B are 50/50 duty cycle nominal;

output Z (index output) is approximately

the width of one cycle on output A or B.

Output A leads B by 90° for clockwise

rotation viewed from shaft end farthest

from the connector.

— Pulse symmetry: 180° ± 30%

— Pulse interval jitter: 30% max

— Quadrature: 90° ± 30% max

— Phase 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. Call for details.

MODEL NUMBER

RH	Model Number	Supply Voltage: 5, 5-26, or 8-30 also available: 12, 15, 24, 5R, 12R	Output Circuit: leave blank for NPN, P = PNP, NP = Push/Pull, C = NPN open collector, D = RS422 line driver, DH = 7272 line driver	Surge Protection: leave blank for standard protection, G = enhanced protection*	Modification Number: 3 or 6 pin C-5015 style connector is standard (3-pin for A-only output). M131 = 4-pin 12mm connector M198 = 6 or 8 pin 16mm connector M226 = 10-pin C-5015 connector Call or see our website for other modifications.	Accessories: leave blank for no accessories. Call or see our website for more information.
	Output Type: leave blank for single output on A, Q = quadrature outputs on A and B					
	Index Output: leave blank for no index, Z = index output					
	Pulses Per Revolution: a number from 1 to 2400, enter dual and triple output values separated by "m"					
	Anti-jitter option: leave blank for no anti-jitter, AJ = anti-jitter option (A-only output models)					

Example: **RHQ-300/8-30 M198** - quadrature outputs (A and B), 300 ppr, 8-30vdc,
NPN output, 6-pin 16mm connector