RH-P240AJ   Programmable Wheeled Encoder

DESCRIPTION

The RH-P encoder, also known as a Pulse Position Indicator (PPI) or Tach, is typically used to measure linear movement on a conveyor system. The number of pulses per revolution is determined by setting configuration switches. It is typically fitted with a pair of 12" circumference measuring wheels, model MW-1-B, or 30cm circumference wheels, model MW-30-B, that allow it to ride directly on the conveyor belt, tracking the conveyor independent of conveyor roller diameters. The RH-P also includes the Anti-Jitter feature that eliminates extraneous pulses generated if the conveyor stops on a pulse edge.
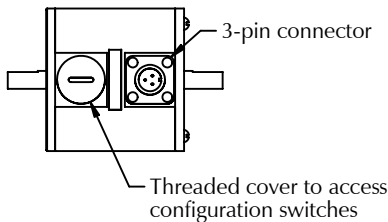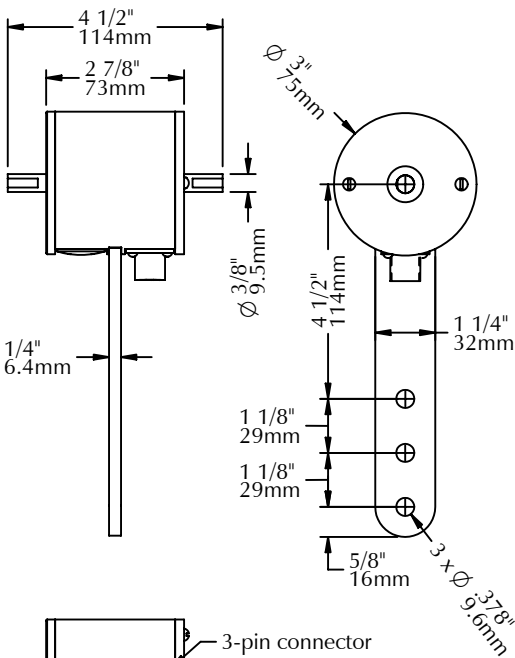
FEATURES   CE *

• **Programmable Pulses/Revolution**
• **ESD / Short Circuit / Reverse Voltage Protected**
• **Exclusive "Anti-Jitter" Circuit for Conveyor Applications**
• **See the model R22 for a smaller wheeled encoder**

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

DIMENSIONS

— 3-pin connector

— Threaded cover to access configuration switches

TRI-TRONICS®

MATERIAL HANDLING AND
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SINCE 1974

PHOTOCRAFT Encoders

SPECIFICATIONS

Mechanical

Weight: 1.3 lbs (600 gm)
Shaft Loading: Radial: 25 lb. (11.3 kg.) max
                 Axial: 10 lbs. (6.8 kg.) max
Bearing Life: 70 x 1,000,000/rpm = hours
Materials:
— Case: Aluminum, anodized
— Shaft: 303 Stainless steel
— Switch cover: Plastic
Maximum Operating Speed: 3,000 rpm

Electrical Connections

MS 3-pin	4-pin M12		Wire
Pin No.	Pin No.	Function	Color
A	1	Supply Voltage	Red
B	4	Output A	White
C	3	Common	Black
-	2	not used	-

Configuration Switches

Output Circuit Selection

6 7 8	
☐☐■	Current sourcing (PNP)
■■☐	Current sinking (NPN)
☐☐■	NPN open collector
☐■■	Combined sourcing/sinking (push/pull)

Pulses per Revolution Selection

Switch definitions: ☐ Up (off), ■ Down (on).

Electrical

Supply Voltages (Vin): (specify when ordering)
      5 ± 5% vdc   or   8 to 30 vdc
Supply Current: 50 ma max (no load)
Output Current: 50 ma max source/sink
Operating Temperature: -25° to +85° C
Output Protection:
— Short Circuit
— ESD to 8KV direct and 25KV air
Output Circuit: Selectable by setting switches 6 to 8 (see configuration switches).
— Current sinking NPN transistor with internal 3.3K pull-up resistor
— Current sourcing PNP transistor with internal 3.3K pull-down resistor
— NPN open collector (30vdc max)
— Push/Pull (combined sourcing/sinking)

Outputs

Pulses per Revolution: Selectable by setting switches 1 to 5 (see configuration switches). Output is "low" when initially powered.
Anti-Jitter: Increases pulse output hysteresis to ½ of a pulse width eliminating the effects of mechanical vibration and the possible dither that results in false pulses.
Output Waveform:
— Pulse On-Off Ratio: 50% ± 10%
— Pulse Interval Jitter: ±10%
— Pulse rise time: 2 msec (max)
— Pulse fall time: 5 msec (max)
— Voltage (high): Vin-2.5 vdc (min)
— Voltage (low): 1.5 vdc (max)

Accessories:
See our website for cables, measuring wheels, and mounting brackets for above and under a conveyor.

MODEL NUMBER

| RH | — | P240AJ | / | | | |

Model Number

Program Name
Call or see our website for information about other available programs for this encoder model.

Supply Voltage: 5=5vdc, **8-30**=8-30vdc

Modification Number:
3 pin MS style connector is standard.
M131 = 4-pin 12mm connector
Call or see our website for other modifications.

Accessories: leave blank for no accessories.
Call or see our website for more information.

Example: **RH-P240AJ/8-30** - model RH, P240AJ program, 8-30vdc
3-pin MS style connector

1606