

RH-P144AJ

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.

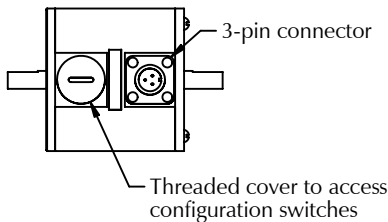
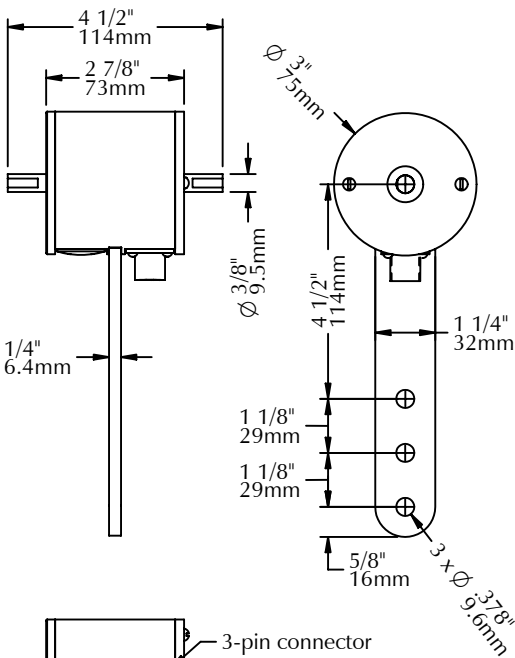
FEATURES



- 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



SPECIFICATIONS

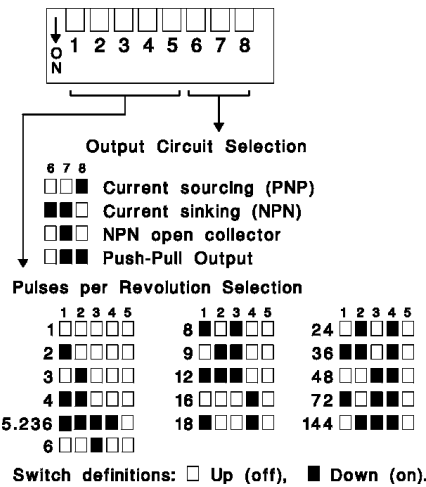
Mechanical

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

Configuration Switches



Electrical

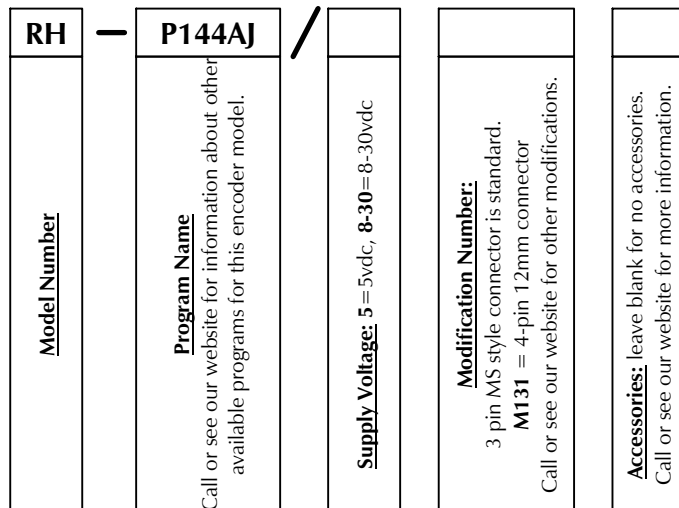
- Supply Voltages (Vin):** (specify when ordering)
5 ± 5% vdc or 8 to 30 vdc
- Supply Current:** 50 ma max (no load)
- Output Current:** 50 ma max source/sink
- Operating Temperature:** -25° to +85° C
- Output Protection:**
 - Short Circuit
 - ESD to 8KV direct and 25KV air
- Output Circuit:** Selectable 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 1/2 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



Example: **RH-P144AJ/8-30** - model RH, P144AJ program, 8-30vdc 3-pin MS style connector



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