

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.

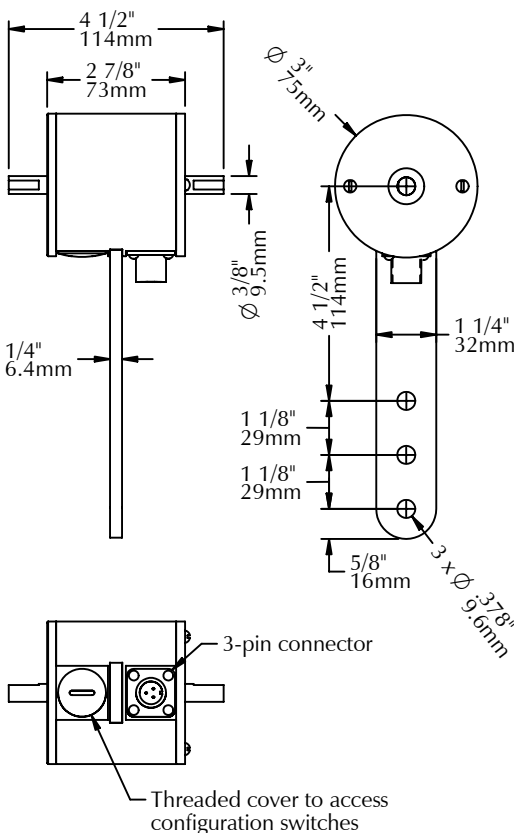
FEATURES

- 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:

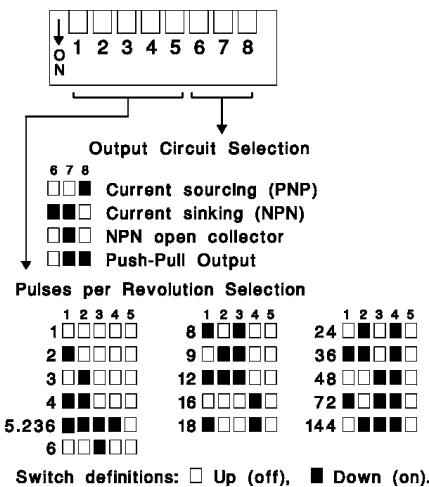
- Case: Aluminum, anodized
- Shaft: 303 Stainless steel
- Switch cover: Plastic

Maximum Operating Speed: 3,000 rpm

Electrical Connections

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

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

RH	P144AJ			
Model Number	Program Name	Supply Voltage: 5 = 5vdc, 8-30 = 8-30vdc	Modification Number:	Accessories:
	Call or see our website for information about other available programs for this encoder model.		3 pin MS style connector is standard. M131 = 4-pin 12mm connector Call or see our website for other modifications.	leave blank for no accessories. Call or see our website for more information.

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



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