

R22-P240AJB

Programmable Wheeled Encoder

DESCRIPTION

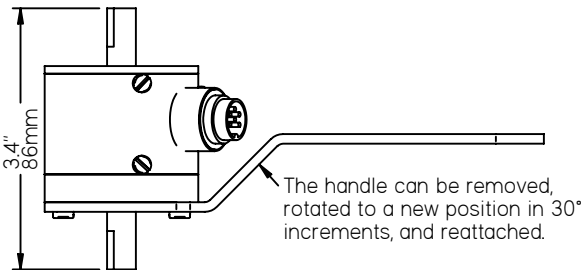
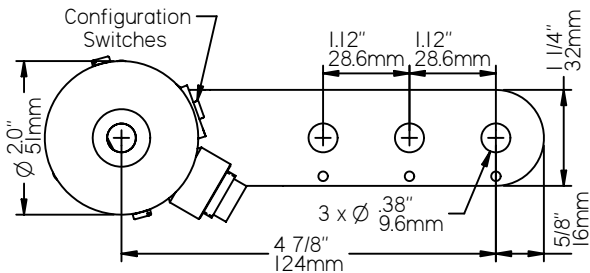
The R22-P240AJB wheeled encoder converts shaft rotation into square wave output pulses to provide an accurate and reliable means of digitizing position, rate, or length of travel. Pulses per each revolution of the shaft, determined by setting configuration switches, are on Output A. Output B is a direction output indicating the shaft rotation direction, clockwise (CW) or counter-clockwise (CCW), as viewed from the shaft end where the handle is attached. Various measuring wheels are available for converting shaft rotation into linear measurement of inches or centimeters of travel. For conveyor applications, accessories are available for mounting either above or below the conveyor belt or roller.

FEATURES

- Selectable Pulses/Revolution (up to 240 ppr)
- Programmable Direction Output
- Precision 8", 12", 20cm, or 30cm circumference measuring wheels
- 16mm or M12 connector, or attached cable
- Double ended shaft for well balanced operation
- ESD / Short Circuit / Reverse Voltage Protected
- Exclusive "Anti-Jitter" Circuit for Conveyor Applications
- CE marked and RoHS compliant

DIMENSIONS

(shown with optional 16mm connector)

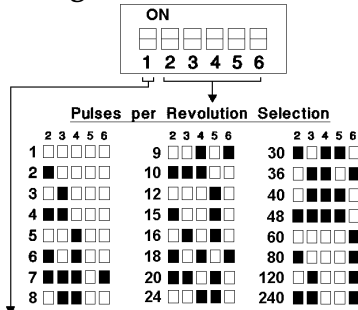


SPECIFICATIONS

Mechanical

- Shaft Loading:** — Radial: 40 lbs. / 18.1 kg
— Axial: 30 lbs. / 13.6 kg
- Bearing Life:** 44 x 1,000,000/rpm = hours
- Materials:** — Case: Aluminum, anodized
— Shaft: 303 Stainless steel
— Switch access door: plastic
- Weight:** 12 oz. (340 grams)
- Protection:** IP50 is standard, IP66 available

Configuration Switches



- Direction Output Selection**
 Output is "low" for CW rotation
 "high" for CCW rotation
 Output is "high" for CW rotation
 "low" for CCW rotation
- Switch definitions: Off (down), On (up).

Outputs

- Pulses per Revolution Output(A):** Selectable by setting configuration switches 2 to 6. Output is "low" when initially powered.
- Anti-jitter feature:** 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 output pulses.
- Direction Output(B):** Indicates direction of rotation updated each 1/240th/revolution. Switch 1 setting determines polarity.

Electrical

- Supply Voltages (+vdc):** (specify when ordering)
5 ± 5% vdc or 8 to 30 vdc
- Supply Current:** 50 ma max (no load)
100 ma max (line driver)
- Output Circuit:** (specify when ordering)
Single Ended:
 — 7273 open collector (30 VDC max, 50 mA max)
 — 7272 Push-Pull (50 mA max source or sink)
- Differential Line Driver:
 — 7272 differential line driver (output level same as supply voltage)
 — RS422 differential line driver (with regulated 5vdc output level)
- Operating Temperature:** 0° to 70° C
Maximum Operating Speed: 2,500 rpm

Electrical Connections

Single Ended Outputs:

Optional 6-Pin	Optional M12 4-pin	Function	Wire Color
1	3	Common	Black
2	1	+vdc	Red
4	4	Output A	White
5	2	Output B	Green
3, 6	-	not used	-

6-pin connector is Amphenol T3402000 or equivalent
M12 4-pin is Turck FS4.4/18.25 or equivalent

Differential Line Driver Outputs:

Optional 8-Pin*	Function	Wire Color
1	Output +A	White
2	Output +B	Green
4	+vdc	Red
5	Common	Black
6	Output -A	Blue
7	Output -B	Brown
3, 8	not used	-

* connector is Amphenol T3506000 or equivalent

MODEL NUMBER

R22	P240AJB					
<u>Model Number</u>	<u>Program Name</u> Call or see our website for information about other available programs for this encoder model.	<u>Supply Voltage:</u> 5 = 5vdc, 8-30 = 8-30vdc	<u>Output Circuit:</u> leave blank for 7272 Push/Pull, C = 7273 open collector, DH = 7272 line driver, DL = RS422 line driver	<u>Cable/Connector:</u> leave blank for attached 10' (3meter) cable, S = 6 or 8 pin connector, S3 = M12 4-pin connector	<u>Modification Number:</u> optional modification or special feature ID. Call or see our website.	<u>Accessories:</u> leave blank for no accessories. Call or see our website for more information.

Example: R22-P240AJB/8-30 - R22 encoder, P240AJB program, 8-30vdc, push/pull output, attached 10' cable



PO Box 25135 Tampa FL 33622-5135, USA
 813-886-4000 800-237-0946
 tco.com • photocraftencoders.com