

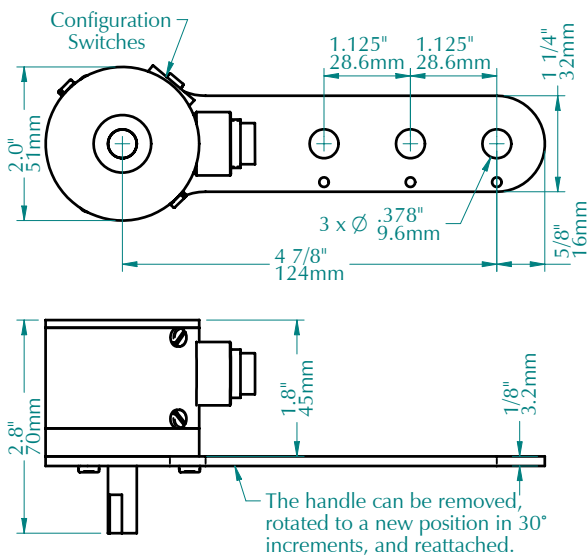
Shown with optional
8" circumference measuring wheels
and 16mm connector

FEATURES

- Generates pulses for accurate linear measurement
- Selectable resolution: Pulses/Foot and Pulses/Inch
- Heavy Duty construction
- Compact size
- Precision 8" circumference measuring wheel
- 16mm or M12 connector, or attached cable
- Enhanced "Anti-jitter" feature for web applications
- ESD, Short Circuit, Reverse Voltage protection
- Various mounting hardware kits are available
- Metric version available

DIMENSIONS

(shown with optional 16mm connector)



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SPECIFICATIONS**Mechanical**

Maximum Speed: 3,000 rpm

Shaft Loading:

- Radial: 40 lbs. / 18.1 kg
- Axial: 30 lbs. / 13.6 kg

Bearing Life: 32 x 1,000,000/rpm = hours

Materials: Switch cover: ABS

- Case: Aluminum, anodized
- Shaft: 303 Stainless steel

Weight: 12 oz. / 340 grams (without accessories)

Protection: IP50 is standard, IP66 available

Electrical Connections

Function	Connectors			Wire Color
	16mm 6-Pin	16mm 8-Pin	M12 4-Pin	
Common +vdc	1	5	3	Black
Output A	2	4	1	Red
Output -A	4	1	4	White
	-	6	2	Green

Unlisted pins are not used.

16mm 6-pin is Amphenol T3402000 or equivalent, for Single Ended outputs.

16mm 8-pin is Amphenol T3506000 or equivalent, for Differential Line Driver.

M12 4-pin is Turck FS4.4/- or equivalent for either Single or Differential Outputs.

Attached cable is 10-ft / 3-meters. Other lengths are available.

Configuration Switches

Selects the pulses per linear movement of the 8" circumference measuring wheel (MW-8).

Pulse Selection						Not Used					
1	2	3	4	5	6	ON					
Pulses/Foot						Pulses/Inch					
1	2	3	4	5	6	1	2	3	4	5	6
1	2	3	4	5	6	1	2	3	4	5	6
2	3	4	5	6	1	2	3	4	5	6	1
3	4	5	6	1	2	3	4	5	6	1	2
4	5	6	1	2	3	4	5	6	1	2	3
6	1	2	3	4	5	6	1	2	3	4	5

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

Electrical

Supply Voltages: (specify when ordering)
5 VDC or 8-30 VDC

Current: 50 mA max (no load)
100 mA max (line driver)

Pulse Rate: 0 - 30 kHz

Pulses per Revolution: 2/3, 1-1/3, 2, 2-2/3,
4, 8, 16, 24, 32, 40, 80, 128, 160

Operating Temperature: -25° to +85° C

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)

Output Waveshape:

Square wave output A is 50/50 duty cycle nominal. Output -A is the complement of A.

- Pulse symmetry: 180° ± 30%
- Pulse interval jitter: 30% max

Enhanced Anti-jitter: Developed for conveyor applications that typically operate in one direction, and do not want pulses generated if the conveyor stops or reverses for a short distance. Pulses are generated as long as rotation continues in one direction. If the direction reverses then pulse output ceases until it returns to its original direction and position it was at before reversing. If the reverse rotation exceeds 10 rotations then the encoder resets assuming the current direction is forward and begins pulsing.

Accessories

See our website or contact us for more information about cables, measuring wheels, and mounting hardware.

MODEL NUMBER

R21	P8EAJ						
Model Number	Program Name: Call or see our website for information about other programs.	Supply Voltage: 5 or 8-30	Output Circuit: leave blank for 7272 Push/Pull, C=7273 open collector, DH=line driver, DL=RS422 line driver	Cable/Connector: leave blank for attached cable, S=16mm connector, S3=M12 connector	Modification Number: optional modification or special feature ID. Call or see our website.	Accessories: leave blank for no accessories. Call or see our website for more information.	

Example: **R21-P8EAJ/8-30DHS MW8-10** R21 with P8EAJ program, 8-30 vdc, 7272 differential line driver outputs (+A / -A), 16mm connector (8-pin), and Accessories: MW-8 wheel, 10' cable