

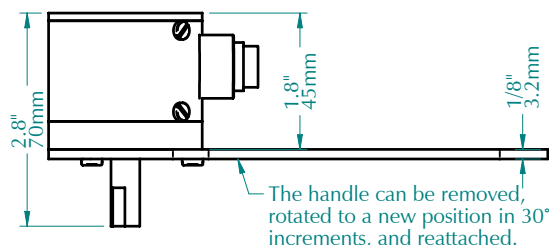
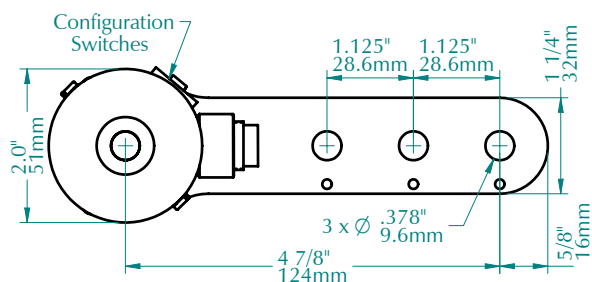
Shown with optional
MW-8 measuring wheels
and 16mm connector

FEATURES

- Generates pulses for accurate linear measurement
- Selectable pulses per revolution
- Heavy Duty construction
- Compact size
- Precision 8" or 12" circumference measuring wheel
- 16mm or M12 connector, or attached cable
- "Anti-Jitter" feature for web applications
- ESD, Short Circuit, Reverse Voltage protection
- Various mounting hardware kits are available

DIMENSIONS

(shown with optional 16mm connector)



The handle can be removed,
rotated to a new position in 30°
increments, and reattached.



PHOTOCRAFT Encoders
MATERIAL HANDLING AND
INDUSTRIAL EXPERIENCE
SINCE 1974

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SPECIFICATIONS**Mechanical****Shaft Loading:**

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

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

Materials:

- Case: Aluminum, anodized
- Shaft: 303 Stainless steel
- Switch access door: plastic

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

Protection: IP50 is standard
IP66 is available

Configuration Switches

Not Used						Pulses per Revolution						Selection					
1	2	3	4	5	6	8	2	3	4	5	6	24	2	3	4	5	6
1	1	1	1	1	1	8	1	1	1	1	1	24	1	1	1	1	1
2	1	1	1	1	1	8	1	1	1	1	1	36	1	1	1	1	1
3	1	1	1	1	1	12	1	1	1	1	1	48	1	1	1	1	1
4	1	1	1	1	1	16	1	1	1	1	1	72	1	1	1	1	1
6	1	1	1	1	1	18	1	1	1	1	1	144	1	1	1	1	1

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

Outputs

Pulses per Revolution Output: 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.

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 ConnectionsSingle 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
3, 5, 6	2	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	Optional M12 4-pin	Function	Wire Color
1	4	Output +A	White
4	1	+vdc	Red
5	3	Common	Black
6	2	Output -A	Green
2, 3, 7, 8		not used	-

8-pin connector is Amphenol T3506000 or equivalent
M12 4-pin is Turck FS4.4/18.25 or equivalent

Accessories (call or see our website)

Adapters, Cables, Flexible Couplings,
Measuring Wheels, Mounting Brackets

MODEL NUMBER

R21	—	P144AJ	/					
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-P144AJ/8-30DHS MW1-10** R21 with P144AJ program, 8-30 vdc, 7272 differential line driver outputs (+A / -A), 16mm connector (8-pin), and Accessories: MW-1 wheel, 10' cable