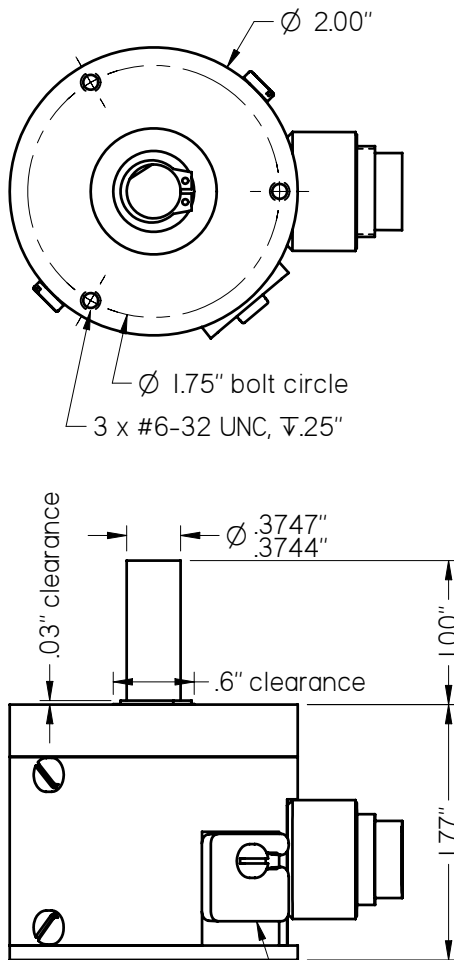


FEATURES

- DIP switch selectable features (see our website)
- Up to 3/8" shaft diameter, optional double ended
- Heavy Duty bearings
- Unbreakable code disk
- Size 20 housing
- Short circuit and ESD protected
- Hollow shaft model available - see Model HS20
- Up to 1200 pulses per revolution
- Attached cable, or 16mm or M12 connector

DIMENSIONS

(shown with 16mm connector, 3/8" diameter shaft)



Access to DIP switches



**OVER 35 YEARS OF
MATERIAL HANDLING AND
INDUSTRIAL EXPERIENCE**

602 E. North Street **630-365-7148**
Elburn, IL 60119, USA Fax: 630-365-7149
www.photocraftencoders.com

SPECIFICATIONS

Mechanical

Maximum Speed: 6,000 rpm
Shaft Loading:
 — Radial: 40 lbs. / 18.1 kg
 — Axial: 30 lbs. / 13.6 kg
A flexible coupling is recommended.
Bearing Life: 32 x 1,000,000/rpm = hours
Materials:
 — Case: Aluminum, anodized
 — Shaft: 303 Stainless steel
Weight: 10 oz. (285 grams)

Electrical Connections

Single Ended Outputs:

Optional 6-pin	Optional M12 4-pin	Function	Wire Color
1	3	Common	Black
2	1	+vdc	Red
3	-	Output Z	Brown
4	4	Output A	White
5	2	Output B	Green
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 Connector	Function	Wire Color
1	Output +A	White
2	Output +B	Green
3	Output +Z	Yellow
4	Supply voltage	Red
5	Common	Black
6	Output -A	Blue or Green
7	Output -B	Brown
8	Output -Z	Orange

8-pin connector is Amphenol T3506000 or equivalent

Standard cable length is 10 ft / 3 meters.
 Other lengths are available.

Electrical

Programmable Features: The encoder is factory configured with a program that offers one or more of the following features. DIP switches are used to set program parameters. (for more details, call or see our website)
 — Selectable Pulses per revolution
 — Quadrature (A/B) outputs
 — Direction outputs
 — Anti-jitter feature
 — Other enhanced features

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

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

Operating Temperature: 0° to 70° C

Output Circuit: (specify when ordering)
 Output voltage level is approximately the same as the input voltage level.

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 (also with optional 5vdc output level)

Output Waveshape:
 Square wave outputs A and B are 50/50 duty cycle nominal. Output Z (index output) is approximately the width of one cycle on outputs A or B.
 — Pulse symmetry: 180° ± 30%
 — Pulse interval jitter: 30% max
 — Quadrature: 90° ± 30% max
 — Phase jitter: 30% max

Accessories

Call or see our website about the following:
 Adapters, Cables, Flexible Couplings,
 Measuring Wheels, Mounting Brackets

MODEL NUMBER

R20	P	Supply Voltage: 5 or 8-30	Output Circuit: leave blank for 7272 Push/Pull, C=7273 open collector, D=7272 line driver, DL=7272 line driver with 5vdc output level	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.
Model Number	P = programmable encoder Program: name of factory configured program. See program specific datasheet for feature descriptions and DIP switch settings.		Cable/Connector: leave blank for attached cable, S = 16mm connector, S3 = M12 connector		
Shaft Diameter: leave blank for 3/8", A = 5/16", C = 1/4", M8 = 8mm					

Example: **R20-P64AJ/8-30DS** - 3/8" shaft bore, P64AJ program, 8-30 vdc, 7272 differential line driver output, 16mm connector (8-pin)