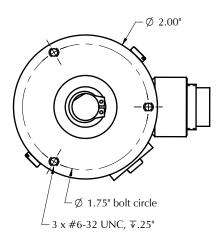
Series 20 Programmable Shaft Encoder

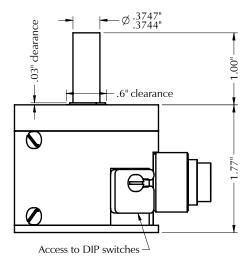
FEATURES

- DIP switch selectable features (see our website)
- Up to 1200 pulses per revolution
- Heavy Duty bearings
- Size 20 housing
- Attached cable, or 16mm or M12 connector
- Short circuit and ESD protected
- Hollow shaft model available see Model HS20
- Wheeled version available see Models R21 and R22

DIMENSIONS

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







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www.photocraftencoders.com

SPECIFICATIONS

Mechanical

Maximum Speed: 6,000 rpm **Shaft Loading:**

Radial: 40 lbs. / 18.1 kgAxial: 30 lbs. / 13.6 kgA flexible coupling is recommended.

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

Case: Aluminum, anodizedShaft: 303 Stainless steelWeight: 10 oz. (285 grams)

Electrical Connections

Single Ended Outputs:

Optional	Optional		Wire
6-pin	M12 4-pin	Function	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		Wire
Connector	Function	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)

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 outputs are 50/50 duty cycle nominal. Type and number of outputs depends on the programmable features provided with the encoder. Call or see the model specific datasheet for more information.

Accessories

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

MODEL NUMBER

R20		_	P]/					
Model Number	Shaft Diameter: leave blank for $3/8"$, $A = 5/16"$, $C = 1/4"$, $M4 = 4$ mm, $m6 = 6$ mm, $M8 = 8$ mm		${f P}={\sf programmable}$ encoder	Program: name of factory configured program. See program specific datasheet for feature descriptions and DIP switch settings.		Supply Voltage: 5 or 8-30	Output Circuit: leave blank for 7272 Push/Pull, C=7273 open collector, DH=7272 line driver, DL=RS422 line driver with 5vdc output level	Cable/Connector: leave blank for attached cable, $S = 16 \text{mm}$ 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: R20-P64AJ/8-30DHS - 3/8" shaft bore, P64AJ program, 8-30 vdc, 7272 differential line driver output, 16mm connector (8-pin)