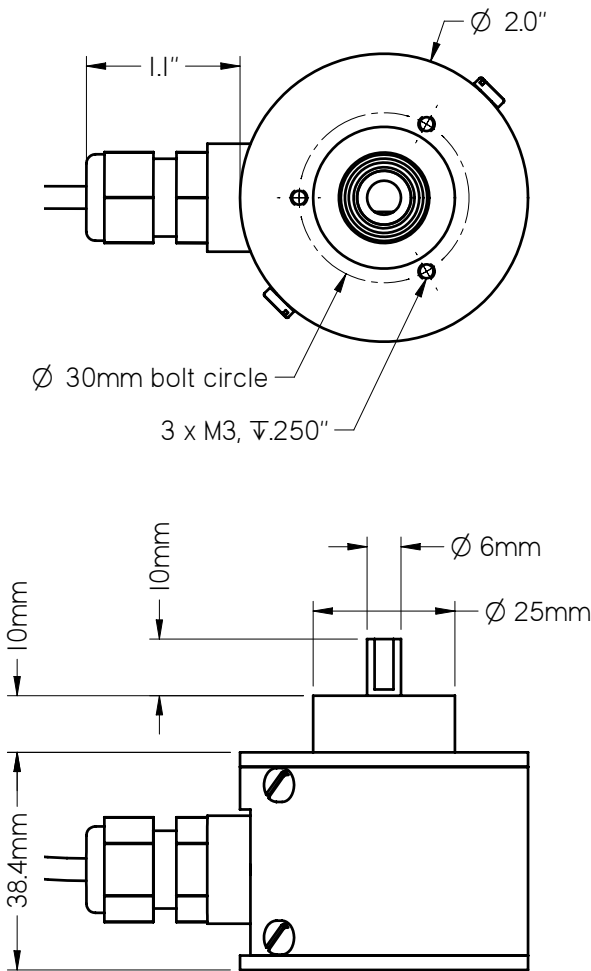


FEATURES

- Heavy Duty bearings
- Unbreakable code disk
- Size 20 housing
- Short circuit and ESD protected
- Hollow shaft model available - see Model HS20
- Double ended shaft available
- Up to 1200 pulses per revolution
- Attached cable or optional connector
- M212 option: special mounting and shaft configuration

DIMENSIONS

(shown with attached cable)



SPECIFICATIONS

Mechanical

Maximum Speed: 6,000 rpm
Shaft Loading:
 — Radial: 40 lbs. / 18.1 kg
 — Axial: 30 lbs. / 13.6 kg
Note: a flexible shaft 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 Connector*	Function	Wire Color
1	Common	Black
2	+vdc	Red
3	Output C	Brown
4	Output A	Blue
5	Output B	Yellow or Orange
6	not used	-

* connector is Amphenol T3402000 or equivalent

Differential Line Driver Outputs:

Optional 8-Pin Connector*	Function	Wire Color
1	Output +A	White
2	Output +B	Green
3	Output +C	Yellow
4	Supply voltage	Red
5	Common	Black
6	Output -A	Blue
7	Output -B	Brown
8	Output -C	Orange

* connector is Amphenol T3506000 or equivalent

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

Electrical

Supply Voltages: (specify when ordering)
 — 5 VDC ± 10%, or
 — 8-30 VDC
Current: 50 mA max (no load)
 100 mA max (line driver)
Pulse Rate: 0 - 30 kHz
Pulses per Revolution: 1 to 1200
 (specify when ordering)
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 Waveshape:

Square wave outputs A and B are 50/50 duty cycle nominal. Output A leads B by 90° for clockwise rotation when viewed from shaft end. Output C (direction output) is Low for clockwise rotation and High for counterclockwise rotation.
 — Pulse symmetry: 180° ± 30%
 — Pulse interval jitter: 30% max
 — Quadrature: 90° ± 30% max
 — Phase jitter: 30% max
 — Direction update rate: 4 times ppr

Accessories

See our website or contact us for more information about cables, flexible couplings, and cables.

MODEL NUMBER

R20	P	Q	B	/		M212	
Model Number	P = special programmed features included with this model	Pulses Per Revolution: a number from 1 to 1200	Output Type: Leave blank for single output on A, Q = Quadrature outputs on A and B Direction: leave blank for no direction output, B = direction signal on output C		Supply Voltage: 5 or 8-30	Output Circuit: leave blank for 7272 Push/Pull, C=7273 open collector, D=7272 line driver Cable/Connector: leave blank for attached 10' (3 meter) cable, S=connector on side of body	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-P160QB/8-30 M212 - 160 ppr, quadrature outputs, direction output, 8-30vdc, push/pull output, attached cable, M212 modification (special shaft and mounting)



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