

MODEL 225 – INCREMENTAL ENCODER



FEATURES

- Single Channel & Quadrature Models
- Easy to Mount Economical Thru-Bore Design
- Metal Construction
- Bore Sizes To 0.875" or 22 mm

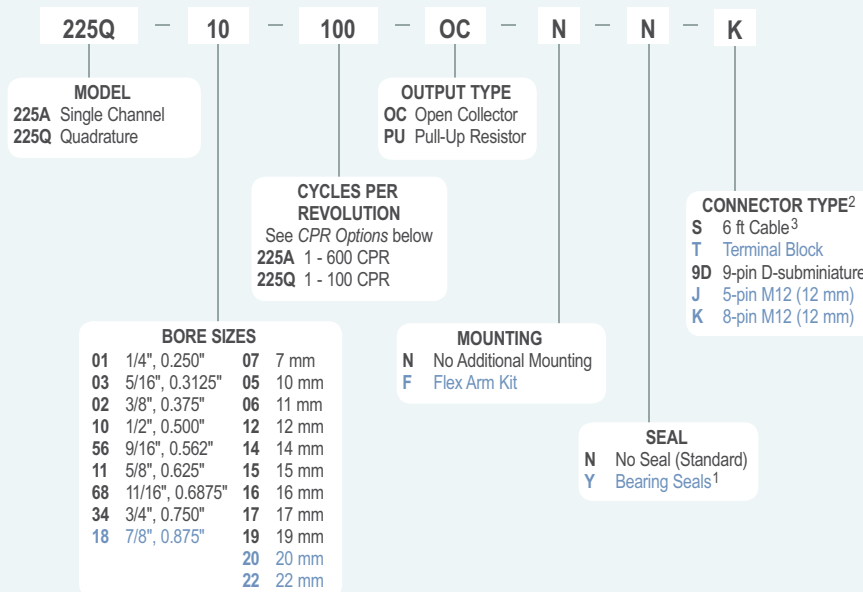
Controlling motor speed is essential for many production assembly machines or robotic equipment. For tachometer feedback, or motor speed control applications, the Model 225 Accu-Coder™ is the ideal encoder choice. The Model 225 Accu-Coder™ is a Thru-Bore encoder available in both single channel (225A) and quadrature (225Q) models. Providing a cost effective solution for simple measurement. Features including an all metal housing, a variety of connector options, and easy installation due to the Thru-Bore design, make the Model 225 Accu-Coder™ ideal for many motion control and manufacturing applications.

COMMON APPLICATIONS

- Brushless Servo Motor Commutation, Robotics, Motor-Mounted Feedback, Assembly Machines, Digital Plotters, High Power Motors

MODEL 225A/Q ORDERING GUIDE

Blue type indicates price adder options. Not all configuration combinations may be available. Contact Customer Service for details.



MODEL 225A/Q CPR OPTIONS

225A

1-600 CPR, all resolutions

225Q

001	002	003	004	005	006	010	011
015	016	020	022	025	030	032	040
048	050	060	062	080	083	090	099
100							

Contact Customer Service for other disk resolutions.

NOTES:

- 1 Shaft speed limited to 400 RPM.
- 2 For mating connectors, cables, and cordsets see Encoder Accessories on page 102 or visit www.encoder.com. For Pin Configuration Diagrams, see page 107 or visit www.encoder.com.
- 3 For Non-Standard Cable Lengths add a forward slash (/) plus cable length expressed in feet. Example: S/12 = 12 feet of cable.

MODEL 225A SPECIFICATIONS SINGLE CHANNEL

Electrical

Input Voltage.....4.75 to 24 VDC
 Input Current32 mA max with Pull-Up option
 Input Ripple.....100 mV peak-to-peak at 0 to 100 kHz
 Output FormatSquare wave 50% duty cycle
 Output Types.....Open Collector- 100 mA max
 Pull-Up- 20 mA max (1.5K)
 Max Frequency0 to 6 kHz
 Rise Time.....Less than 1 microsecond
 Cycles per Rev.....1 to 600

Mechanical

Max. Shaft Speed.....4000 RPM
 Bore ToleranceBore H7 fit for g6 shaft Class LC5
 per ANSI B-4.1 Standard
 Running Torque.....10 oz-in typical
 HousingBlack non-corrosive finish
 Bearings.....Precision ABEC ball bearings
 Weight.....8 oz typical

Environmental

Storage Temp-25° to +85° C
 Humidity.....95% RH non-condensing
 Vibration.....3 g @ 5 to 1000 Hz
 Shock.....20 g @ 10 ms duration

MODEL 225Q SPECIFICATIONS QUADRATURE

Electrical

Input Voltage.....4.75 to 24 VDC
 Input Current64 mA max with Pull-Up option
 Input Ripple.....100 mV peak-to-peak at 0 to 100 kHz
 Output FormatSquare wave 50% duty cycle in quadrature
 Output Types.....Open Collector- 100 mA max per channel
 Pull-Up- 20 mA max per channel (1.5K)
 Max Frequency0 to 6 kHz
 Rise Time.....Less than 1 microsecond
 Cycles Per Rev1 to 100

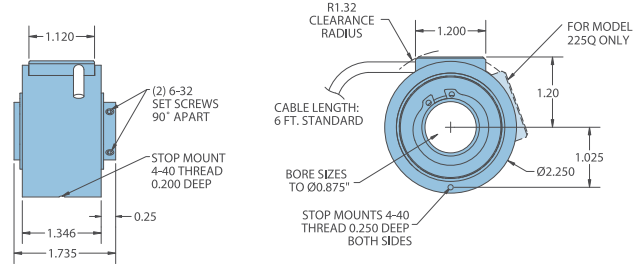
Mechanical

Max. Shaft Speed.....4000 RPM
 Bore ToleranceBore H7 fit for g6 shaft Class LCS per
 ANSI B-4.1 Standard
 Running Torque.....10 oz-in typical
 HousingBlack non-corrosive finish
 Bearings.....Precision ABEC ball bearings
 Weight.....10 oz typical

Environmental

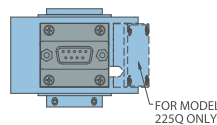
Storage Temp-25° to +85° C
 Humidity.....95% RH non-condensing
 Vibration.....3 g @ 5 to 1000 Hz
 Shock.....20 g @ 10 ms duration

MODEL 225

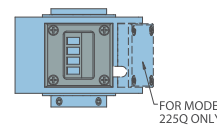


MODEL 225 CONNECTOR OPTIONS

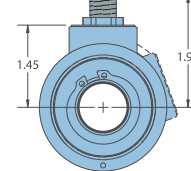
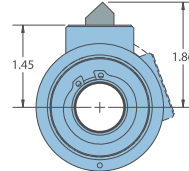
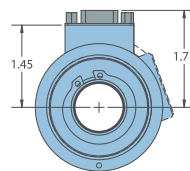
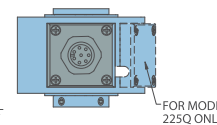
9D 9-pin D-Subminiature



T Terminal Block

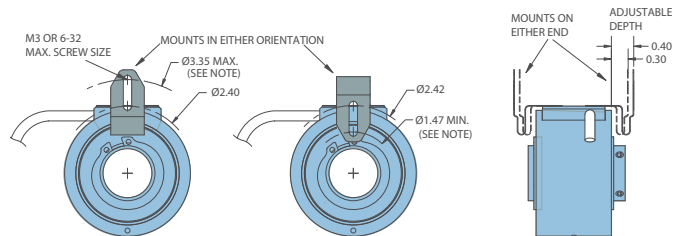


J 5-pin M12 (12 mm) K 8-pin M12 (12 mm)



MODEL 225 MOUNTING OPTION (F) FLEX ARM KIT

To order Model 225 Flexible Mounting Arm Kit as an accessory, order part #140106-01.
 Kit may be mounted in either an up or down orientation.



NOTE: FOR ANY CONNECTOR OPTION, THE BOLT CIRCLE RANGE IS FROM Ø1.72" TO Ø3.60" DUE TO THE INCREASED CAP HEIGHT

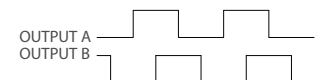
All dimensions are in inches with a tolerance of ±0.005" or ±0.01" unless otherwise specified.

WIRING TABLE

Function	Cable† Wire Color	5-pin M12	8-pin M12	Term Block	9-pin D-Sub
Com	Black	3	7	1	9
+VDC	Red	1	2	2	1
A	White	4	1	3	2
B	Green	2	4	4	4
Shield	Bare	--	--	--	--

†Standard cable is 24 AWG conductors with foil and braid shield.

WAVEFORM DIAGRAM MODELS 225A/Q



NOTE: MODEL 225A INCLUDES OUTPUT A ONLY