



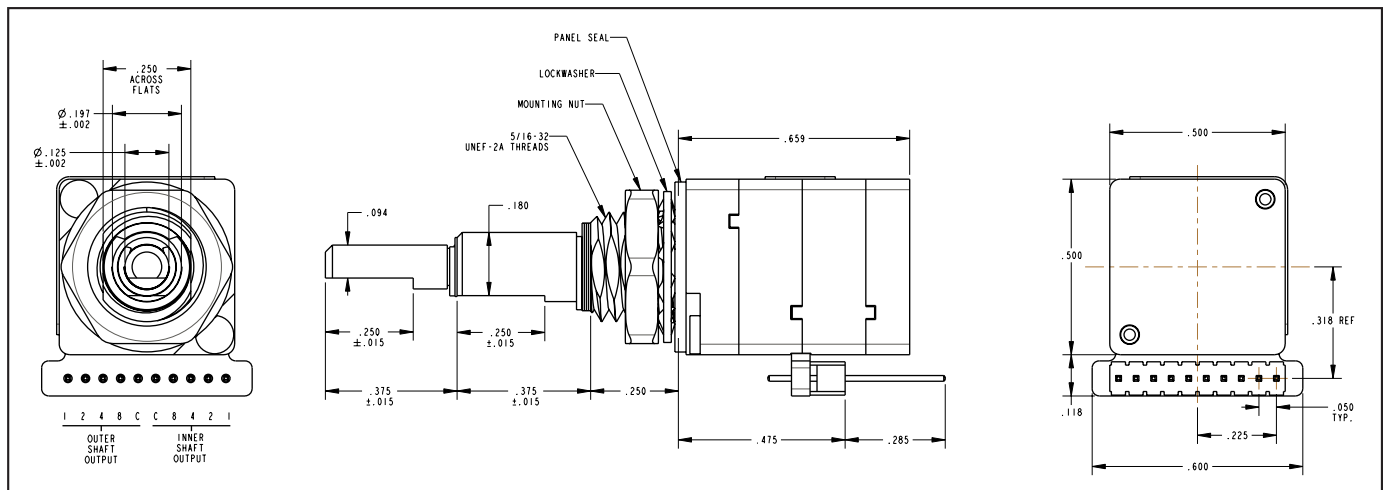
Mechanical Encoders

SERIES 20 Concentric Shafts

FEATURES

- Compact mechanical encoder with concentric shafts
- Output Code Choices
- Panel and Shaft Seal Option
- Manufactured to ISO 9001 and Military Standards
- Available with a fixed stop or continuous rotation
- Custom Configurations Available

DIMENSIONS in inches



Optical and Mechanical Encoders

SPECIFICATIONS

Electrical Ratings

Switching Loads:

150 mA, 115 Vac
200 mA, 28 Vdc

Life Expectancy:

25,000 cycles at rated loads

Contact Resistance: 300 mohms max.

(less than 100 mohms initially)

Insulation Resistance: 1000 Mohms min.

(10,000 Mohms initially)

Dielectric Strength: 500 Vac min.

Mechanical Ratings

Stop Strength: 5 in-lbs.

Rotational Torque:

5 in-oz outer shaft

3.5 in-oz inner shaft

Mounting Torque: 12 in-lbs. recommended

Operating Temperature Range:

-40°C to +85°C

Storage Temperature Range:

-55°C to +100°C

Immersion: 15 psi (33ft) for 30 minutes

Pin Dimensions: .018 inch square

Hardware Dimensions:

Lockwasher: .437inch diameter, .022inch thick

Hex Nut: 5/16-32 UNEF-2B Thread,

.437 inch across flats, .094 inch thick

Materials and Finishes

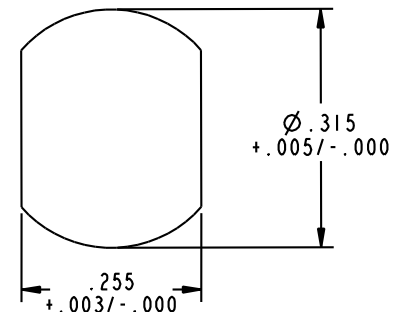
Terminal Pins: Phosphor bronze with tin over nickel plating

Panel Seal: Buna-N rubber, adhesive coated

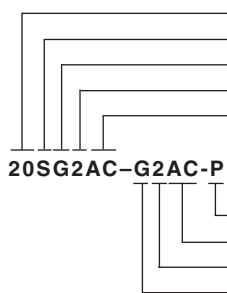
Lockwasher: Spring steel with zinc plating

Hex Nut: Brass with tin/zinc plating

RECOMMENDED PANEL CUT-OUT



ORDERING INFORMATION (potential combinations)



Series 20: Mechanical Encoder, concentric shafts

Seal: S = Sealed; A = Not Sealed

Output code

Angle of throw (outer shaft)

Stop arrangement: AC = all positions continuous rotation;

AF = all positions with fixed stop between first and last;

02 to 15: number of positions, if less than maximum

Termination: P = Pins; 02 to 25 = Cable Length

Stop arrangement (see above)

Angle of throw (inner shaft)

Output code

Output Code:

G = Gray

B = Binary

Q = Quadrature

Angle of throw / max positions:

2 = 22.5° / 16 positions

0 = 30° / 12 positions

6 = 36° / 10 positions

5 = 45° / 8 positions