### **SERIES 20**

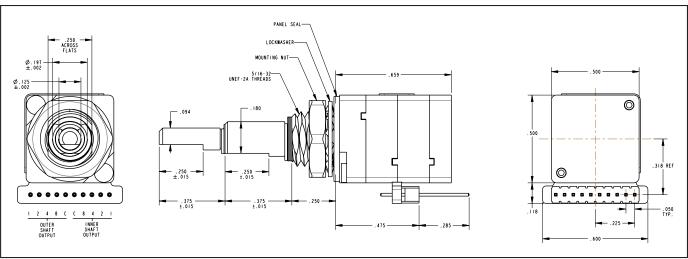
## **Concentric Shafts**

#### **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



# **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

#### **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:

 $2 = 22.5^{\circ}$  / 16 positions  $0 = 30^{\circ}$  / 12 positions  $6 = 36^{\circ}$  / 10 positions  $5 = 45^{\circ}$  / 8 positions