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: .437 inch diameter, .022 inch 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

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