



Key Performance Features:

- Economical 2-Pole Design
- Skewed and Balanced Armatures
- Encoder Ready
- Round or Optional NEMA 23 Mounting
- 12-120 VDC Available

C21

BRUSHED
SERVO
MOTOR
SERIES

Motor Characteristics

| FRAME SIZE | STACK LENGTH | PEAK STALL TORQUE (T _p) OZ-IN | CONT. STALL TORQUE (T _c) OZ-IN | ROTOR INERTIA (J _m) OZ-IN-SEC ² | FRICTION TORQUE (T _f) OZ-IN | THERMAL RESISTANCE (RM) °C/WATT | MAX RECOMMEND SPEED RPM | MAX WINDING TEMP. C° | POWER RANGE W | WEIGHT LB |
|------------|--------------|---|--|--|---|---------------------------------|-------------------------|----------------------|---------------|-----------|
| C21 | -- 175 | 180 | 30 | 0.0046 | 2 | 4.9 | 4500 | 155 | 45 | 2.3 |
| C21 | -- 230 | 280 | 40 | 0.006 | 2.5 | 4.4 | 4500 | 155 | 62 | 2.7 |
| C21 | -- 300 | 350 | 50 | 0.008 | 3 | 3.8 | 4500 | 155 | 72 | 3.2 |
| C21 | -- 400 | 420 | 70 | 0.011 | 3.5 | 2.9 | 4500 | 155 | 92 | 4.8 |

SHORTER MOTOR IS AVAILABLE

Sample Windings

CONSULT MAGMOTOR APPLICATION STAFF FOR OTHER AVAILABLE WINDINGS

| | C21 -- 175 | | | | C21 -- 230 | | | | C21 -- 300 | | | | C21 -- 400 | | | |
|---|------------|-----|------|------|------------|------|------|------|------------|------|------|------|------------|------|------|------|
| | B | E | H | K | B | E | H | K | B | E | H | K | B | E | H | K |
| Torque Constant (Kt) oz-in/amp | 4.6 | 9.1 | 19.5 | 36.5 | 5.4 | 11.3 | 21.4 | 43.8 | 6.7 | 14.1 | 28.1 | 56.3 | 9.0 | 18.0 | 36.1 | 70.3 |
| Voltage Constant (Ke) Volts/Krpm | 3.4 | 6.7 | 13.7 | 27.0 | 4.0 | 8.4 | 15.8 | 32.4 | 4.9 | 10.4 | 20.8 | 41.8 | 6.7 | 13.3 | 26.7 | 52.0 |
| Term. Resistance (Rt) Ohms (cold) | 0.4 | 1.3 | 4.6 | 21.0 | 0.4 | 1.6 | 5.4 | 24.0 | 0.6 | 1.75 | 6.6 | 26.0 | 1.27 | 2.4 | 12.5 | 30.5 |
| Peak Current (A) Amps | 40 | 20 | 10 | 5 | 40 | 20 | 10 | 5 | 40 | 20 | 10 | 5 | 40 | 20 | 10 | 5 |
| Cont. Current (A) Amps | 7.1 | 3.4 | 1.8 | 1.0 | 7.1 | 3.4 | 1.8 | 1.0 | 7.1 | 3.4 | 1.8 | 1.0 | 7.1 | 3.4 | 1.8 | 1.0 |

VALUES AS LISTED ARE TEST CONDITIONS, ACTUAL RESULTS MAY VARY

▼ C21 Series Options

- Optical Encoders
- Tachometers, Brakes and Gearbox
- Application Specific Windings and Mechanical designs
- Custom Cables and Connectors
- For more options, see magmotor.com custom solutions, or call us.

▼ Typical Applications

- Semiconductor Equipment
- Medical Equipment
- Automated Assembly Machines
- Laboratory Equipment
- X-Y-Z Positioning Machines
- Pharmaceutical Equipment

Magmotor

