



BUSHING MOUNT/SLEEVE BEARING MODEL 3702

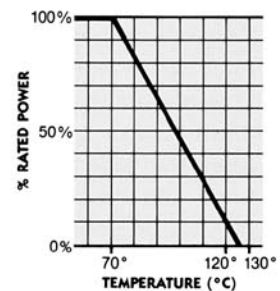
7/8" TO 1-3/4" DIAMETER BUSHING MOUNT

WIREWOUND 3, 5 AND 10-TURN PRECISION POTENTIOMETERS

| BUSHING MODEL | 3702 |
|--|----------------------------|
| ELECTRICAL | |
| Actual Electrical Travel | 3600° + 1° - 0° |
| Normal Resistance Range | 100 Ω to 300K |
| Extended Resistance Range ⁽¹⁾ | 10 Ω to 830K |
| Resistance Tolerance: Standard % | ± 3 |
| Best Practical % | ± 1 |
| Power Rating At 70°C, Derating To 0 at 125°C (Watts) | 7.0 |
| Linearity, Independent, Tolerance, Standard % | ± 0.1 |
| Best Practical % | ± 0.02 |
| Equivalent Noise Resistance (ENR) Max. (Ohms) | 100 |
| End Voltage Max. (% Of Total Applied Voltage) | Within linearity tolerance |
| Insulation Resistance At 500 VDC, Min. (Megohms) | 1000 |
| Dielectric Withstanding Voltage (Volts RMS) | 1000 |
| Max. Applied Voltage (Volts DC) ⁽²⁾ | 1000 |
| Temperature Coefficient Of Potentiometer, Max. %/°C | ± .007 |
| Tap Spacing Minimum | 13° |
| MECHANICAL | |
| Total Mechanical Travel | 3600° + 4° - 0° |
| Mechanical Life, Shaft Revolutions | 2 million |
| Ganged Cups, Max. (Number) | 2 |
| Taps, Max., Excluding End Terminations | 135 |
| Moment Of Inertia, Per Cup (gm-cm ²) | 12 |
| Weight: Single Cup (oz.) | 4.5 |
| Each Additional Cup (oz.) | 2.7 |
| Torque, Max. Per Cup (oz.-in) | 1.5 |
| Pilot Diameter Runout, Max. | .0015 |
| Lateral Runout, Max. | .0025 |
| Shaft Runout, Max. | .001 |
| Shaft Radial Play, Max. | .002 |
| Shaft End Play, Max. | .005 |
| Dimension For Each Additional Cup | 1.720 ± .005 |
| Stop Strength Static (oz.-in) | 1000 |
| ENVIRONMENTAL | |
| Temperature Range (°C) Standard | -55 to +125 |

(1) All specifications listed apply to units with a total resistance within the normal resistance range. Higher or lower resistances may require some degradation of listed specifications because of resistance wire composition or size.

(2) Not to exceed specified power rating.



THEORETICAL RESOLUTION—For typical coil characteristics by model number and resistance value, see Resolution Tables, page 52.
ALL MODELS are manufactured to meet or exceed applicable characteristics of MIL-R-12934. For MILITARY-APPROVED (QPL) Listings, see page 52.

TOLERANCES UNLESS OTHERWISE SPECIFIED:
FRACTIONAL: ± 1/64" DECIMAL: ± .005" ANGULAR: ± 1°

| LENGTHS | | |
|---------|-----------------|--------------------|
| MODEL | NUMBER OF TURNS | LENGTH DIMENSION L |
| 3205 | 3 | .960 ± .006 |
| 3206 | | .960 ± .006 |
| 3605 | | 1.148 ± .007 |
| 3705 | | 1.148 ± .007 |
| 3208 | 5 | 1.103 ± .006 |
| 3209 | | 1.103 ± .006 |
| 3202 | 10 | 1.460 ± .006 |
| 3203 | | 1.460 ± .006 |
| 3232 | | 1.460 ± .006 |
| 3233 | | 1.460 ± .006 |
| 3602 | | 1.925 ± .007 |
| 3702 | | 1.925 ± .007 |

3702

