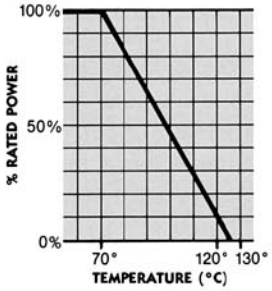
CONDUCTIVE PLASTIC SINGLE-TURN PRECISION POTENTIOMETERS

SERVO MOUNT/BALL BEARING MODEL 1621

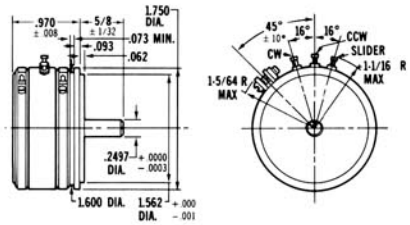
SERVO MODEL	1621
ELECTRICAL	
Theoretical Electrical Travel	340°
Normal Resistance Range	900Ω to 60K
Extended Resistance Range(1)	500Ω to 150K
Resistance Tolerance: Standard %	±10
Best Practical %	±5
Power Rating At 70°C, Derating To 0 At 125°C (Watts)	1.5
Linearity, Independent, Tolerance, Standard %	±0.25
Best Practical %	±0.075
Output Smoothness Max. (% Of Applied Voltage)	0.1
End Voltage Max. (% Of Total Applied Voltage)	0.5
Insulation Resistance At 500 VDC, Min. (Megohms)	1000
Dielectric Withstanding Voltage (Volts RMS)	1000
Max. Applied Voltage (Volts DC)(2)	400
Temperature Coefficient Of Potentiometer, Max. %/°C	−.07
MECHANICAL	
Total Mechanical Travel	360° Continuous
Mechanical Life, Shaft Revolutions	50 million
Ganged Cups, Max. (Number)	8
Taps, Max., Excluding End Terminations	24
Moment Of Inertia, Per Cup (gm-cm²)	4.5
Weight: Single Cup (oz.)	2.8
Each Additional Cup (oz.)	0.9
Torque, Max. Per Cup (oz.-in)	0.7
Pilot Diameter Runout, Max.	.0015
Lateral Runout, Max.	.002
Shaft Runout, Max.	.001
Shaft Radial Play, Max.	.002
Shaft End Play, Max.	.0015
Dimension For Each Additional Cup	.562 ± .002
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 material composition.

(2) Not to exceed specified power rating.



ALL MODELS are manufactured to meet or exceed applicable characteristics of MIL-R-39023. For MILITARY-APPROVED (QPL) Listings, see page 52.

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

1621