



7/8" Ø 10-TURN SERVO MOUNT POTENTIOMETERS HYBRITRON® ELEMENT

- Shaft supported front and rear by precision ball bearings
- SILVERWELD® termination eliminates vulnerable single-wire termination
- Exceeds humidity cycling requirements of MIL-R-39023
- Performance is guaranteed by the Bourns Reliability Program
- Rotational life 4,000,000 shaft revolutions
- Hybritron® element provides essentially infinite resolution
- Housing: high temperature, moisture resistant, thermosetting plastic

STANDARD SPECIFICATIONS	MODEL 3551
Electrical Characteristics	
Resistance Range	1 K Ω – 100 K Ω
Resistance Tolerance	$\pm 10\%$
Linearity (Independent)	$\pm 0.2\%$
Resolution	essentially infinite
Effective Electrical Angle	3600° + 10° – 0°
End Voltage	0.1% max.
Output Smoothness	0.05%
Power Rating	2.5 W
	0 W
Dielectric Strength MIL-R-39023	0.05% max.
Sea Level	1000 V ~ min.
80,000 feet	300 V ~ min.
Insulation Resistance 500 V =	1000 Meg Ω min.
Environmental Characteristics	
Operating Temperature Range	-65 °C to +125 °C
Temperature Coefficient	100 ppm/°C max.
Humidity	MIL-R-39023 Humidity Cycling
Vibration	MIL-R-39023, 20 G
Wiper Bounce	0.1 millisecond max.
Wiper Shift	0.1% max.
Shock	MIL-R-39023, 100 G
Wiper Bounce and Wiper Shift	Same as Vibration
Load Life MIL-R-39023	1000 hours
Resistance Shift	5% max.
Sand, Dust, Fungus	MIL-E-5272
Salt Spray	MIL-R-39023
Mechanical and Physical Characteristics	
Mechanical Angle	3600° + 10° – 0°
Shaft Runout	0.001 in. T.I.R.
Lateral Runout	0.003 in. T.I.R.
Pilot Diameter Runout	0.0015 in. T.I.R.
Shaft End Play	0.003 in. T.I.R.
Shaft Radial Play	0.002 in. T.I.R.
Rotational Life, shaft revolutions	4,000,000
Stop Strength	96 oz.-in. min.
Torque, Starting/Running	0.4 oz.-in. max.
Moment of Inertia	0.37 g cm ²
Ganging	3 cups max.

Specifications are subject to change without notice.

Weight	approx. 31 g
Terminals	Gold plated turret type
Markings	Manufacturer's name and part number, resistance value and tolerance, linearity tolerance, wiring diagram and date code.

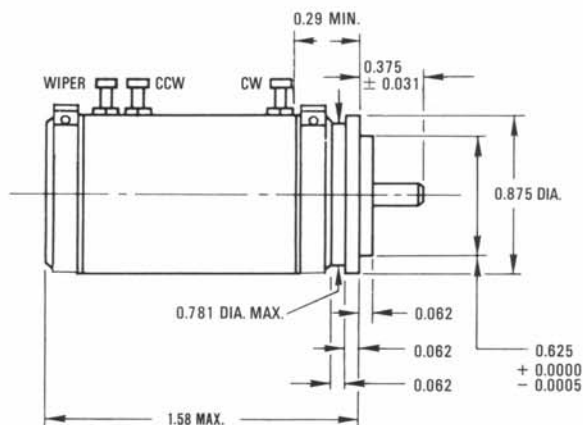
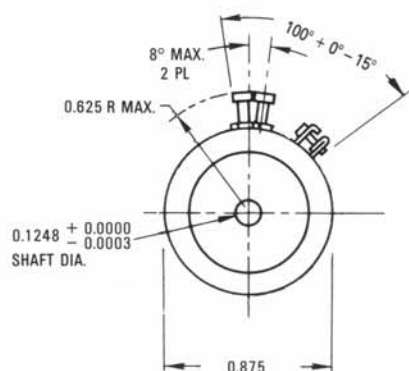
ORDERING INFORMATION

Resistance Ω	Part Number*
1,000	● 3551H-1-102
2,000	3551H-1-202
5,000	● 3551H-1-502
10,000	● 3551H-1-103
20,000	3551H-1-203
50,000	3551H-1-503
100,000	3551H-1-104

● Preferred resistance values

*The last three digits of the part number represent the resistance in standard code.

DIMENSIONS (INCH)



NOTE:
ADD FOR EACH ADDITIONAL CUP
1.230 MAX.

TOLERANCES:
EXCEPT WHERE NOTED
DECIMALS: .XX ± 0.010 , .XXX ± 0.005

