

- b Very Low Operating Torque (<1gf)**
- b $\pm 0.5\%$ Linearity**
- b High Resolution**
- b 20 to 20K Resistance Values**
- b Dual Ball Bearings**



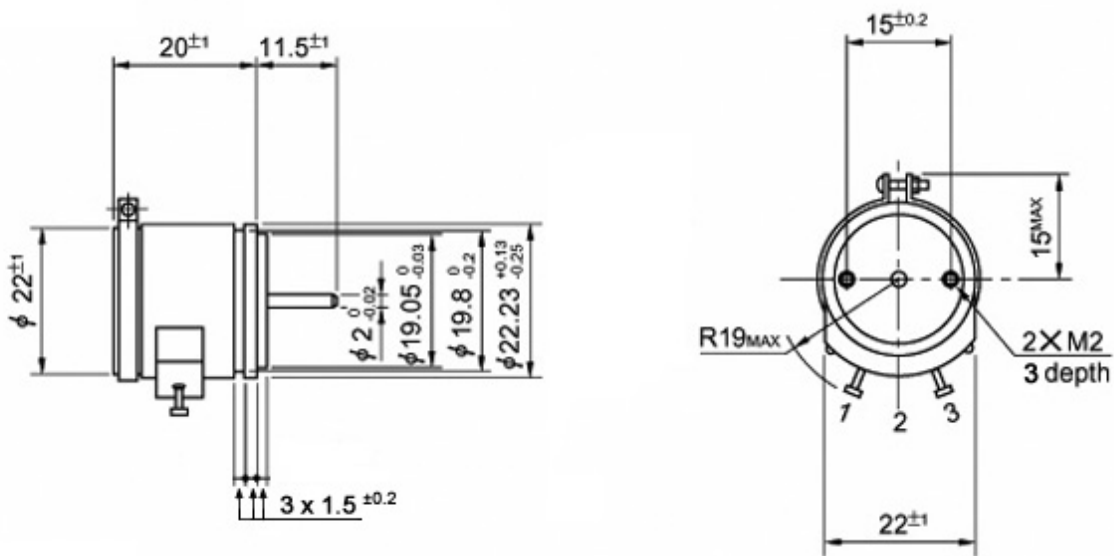
Specialized ultra low starting torque, wire-wound precision potentiometer. Position sensing of inclination, vibration, etc. is easily accomplished by installing on floats, bellows, etc. Wide electrical angle of 355°. Many options available.

Electrical Specifications	
Electrical Angle	355 $\pm 2^\circ$, -5°
Resistance Value (ohms)	20...20k
Resistance Tolerance	$\pm 3\%$ (1% optional)
Linearity Tolerance (std.)	$\pm 0.5\%$
End Resistance	1 ohm or 0.5%, whichever is less
Wiper Current	25mA max.
Power @ 40°	1W
Insulation Resistance	>1000 Mohm @ 1000 VDC
Dielectric Strength	1 minute @ 1000 VAC
Output Smoothness	< 100 ohms ENR
Mechanical Specifications	
Mechanical Angle	360° (continuous)
Maximum Operating Friction	<2K: <0.15mNm (1.5gf) / $\geq 2K$: <0.1mNm (1gf) (within electrical angle)
Life Expectancy	2 million cycles
Weight	20 grams
Max. Axial Play of Shaft	0.2 mm
Max. Radial Play of Shaft	0.1 mm
Vibration	15 g / 10Hz to 2,000 Hz
Shock	50 g / 11ms
Bearing	2 x precision ball bearing
Environmental Specifications	
Operating Temperature	-30°C to +85°C
IP Protection Grade	IP40
Standard	per MIL-R-12934
Materials	
Housing	Aluminum
Shaft	Stainless steel
Terminals	Brass, gold plated
Mounting hardware	3 servo fixing clamps provided - Type SFN2

Resolution Chart

Resistance (ohms)	Resolution (%)	Maximum Voltage Across Element (V)	Maximum Current Through Element (mA)	Temperature Co-efficient \pm ppm/ $^{\circ}$ C
20	0.27	4.4	223	700
50	0.31	7	140	80
100	0.26	10	100	
200	0.21	14	70	
500	0.21	22	45	
1k	0.17	32	32	20
2k	0.13	45	22	
5k	0.10	71	14	
10k	0.08	100	10	
20k	0.06	141	7	

Standard Dimensions (mm)



Options

- b Special operating angles
 - b Dual Ganged
- b Rear shaft (2mm x 10mm)
 - b Special shaft machining
- b Extra tap (1 only)
 - b Special Resistance Values