

when reliability is critical ™

Document # 811543 TRACKBALL CURSORS SPECIFICATIONS

Resolution is determined by the following:

- 1. Diameter of shaft
- 2. Number of slots on wheel.
- Shaft: Precision ground and hardened stainless steel.
- Encoder Wheel: Micro etched metal encoder wheel allows for greater resolution than possible with plastic.

Ball Diameter (Trackball Size)	Resolution (Counts per Revolution)	Diameter of Shaft	Encoder Wheel Slots	Encoder Wheel Diameter Size
1.3 inch	416 cts/rev	1/8 inch	40 Slots	.730 inch
1.5 inch	480 cts/rev	1/8 inch	40 Slots	.730 inch
2.0 inch	640 cts/rev	1/8 inch	40 Slots	.730 inch
3.0 inch	640 cts/rev	3/16 inch	40 Slots	.730 inch

Bearings:

- Aerospace grade shielded bearings. (ABEC 7)
- Calculated rolling life of bearings is 20 years.

Ball:

- Precision ground ball to +/- .002" tolerance.
- Formed Teflon sealing ring in an aluminum housing.

Operating Shock:

Ball Diameter	Operating	
(Trackball Size)	Shock	
1.3 inch	100g	
1.5 inch	30g	
2.0 inch	10g	
3.0 inch	6g	

Photo Detectors:

- Quadrature output
- Redundant photo detectors for each axes. Not sensitive to LED fading.
- Guarantees longest reliability beyond 10 years.

Temperature Rating:

• Standard: 0 - 70 degrees C.

• Optional: -25 –80 degrees C.

• Optional: -40 –80 degrees C.

Other Points:

• MTBF (Mean Time Between Failures): 100,000 hours.