



BEI's TBS225 trackball is one of the industry's most popular man-machine interfaces.

For critical applications that require a precise cursor control solution, the TBS225 trackball system has no match to its simple, intuitive, robust design. The trackball has found wide use in medical

scanning systems, machine tool equipment, graphic displays, robotics, even military applications. The TBS225 provides accurate, comfortable and reliable motion input to your system with a 2.25 inch ball and superior feel. The trackball's sealed ball prevents contaminants like dust, chips, ultrasound gels or industrial oils from entering the system. And because of its smooth, precise and responsive feedback, the unit offers a true sense of control, even when wearing gloves. This trackball is versatile, easy to use and easy to design into your system. Custom options like integrated switches, various serial interfaces and special enclosures/mounting features can easily be incorporated into an OEM design. Give one of our applications engineers a call and give your next product the proven control solution.

SPECIFICATIONS

Mechanical

Weight: 11 oz MAX

Ball Diameter: 2.25"

Housing Size: 3.00" SQ. X 2.25" MAX

Tracking Force: 1.0 to 2.2 oz

Mounting Surface: 45° MAX from horizontal

Electrical

Resolution: Up to 500 cycles per one full revolution of ball

Supply Voltage: +5 VDC @ 180mA, +12 VDC optional

Output : 2 channels in quadrature (TTL/CMOS)

Interface Connector: 15-Pin (DA-15P with female screw locks, mates with DA15S)

Environmental

Temperature: 0° to +50°

Vibration: 5 to 60 Hz @ 5 G's

Shock: 15 G's @ 11 msec duration

TBS225 Compact Ordering Options

FOR ASSISTANCE CALL 800-350-2727

Use this diagram, working from left to right to construct your model number (example: TBS225-250-ABC-D15). All notes and tables referred to can be found on the back of this page.

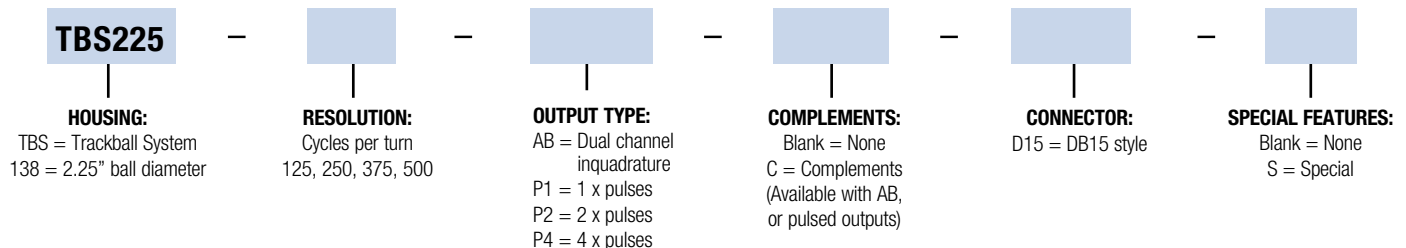


Table 1 TBS225 Connector Pinout Functions

PIN #	AB FUNCTION	ABC FUNCTION	P1, P2, OR P4 FUNCTION	P1C, P2C, OR P4C FUNCTION
1	AY	AY	+Y	+Y
2	BY	$\overline{\text{AY}}$	-Y	$\overline{\text{+Y}}$
3	AX	BY	+X	-Y
4	BX	$\overline{\text{BY}}$	-X	$\overline{\text{-Y}}$
5	SPARE	AX	SPARE	+X
6	SPARE	$\overline{\text{AX}}$	SPARE	$\overline{\text{+X}}$
7	SPARE	BX	SPARE	-X
8	SPARE	$\overline{\text{BX}}$	SPARE	$\overline{\text{-X}}$
9	SPARE	SPARE	SPARE	SPARE
10	SPARE	SPARE	SPARE	SPARE
11	SPARE	SPARE	SPARE	SPARE
12	SPARE	SPARE	SPARE	SPARE
13	+ VDC RETURN	+ VDC RETURN	+ VDC RETURN	+ VDC RETURN
14	SPARE	SPARE	SPARE	SPARE
15	+ VDC	+ VDC	+ VDC	+ VDC

TBS225 Low-Profile Dimensions

