

R50 Series DESKTOP TRACKERBALL

Specifications

Mechanical

Weight	1Kg
Ball	Thermoset Phenolic, 50mm, 2"
Tracking Force	10gms Nominal continuous – no seal (IP40) 50gms Nominal continuous - PTFE seal (IP65)
Ball Load	200N Maximum downward pressure (20Kg) @ 20°C
Ball Rotation	Continuous and reversible – any direction
Ball Speed	200 RPM maximum
Housing Material	Case - coated steel (pearl white) Finger plate - polyester membrane on aluminium
Transducers	Photo-optical encoders with LED's
Mounting Position	Horizontal to 30° (non-sealed versions) Horizontal to 90° rear elevation (sealed)
Optional Sealing	PTFE composite IP65
Sealing Qualified @	25°C static

Electrical

Standard Output Connector	2m screened lead to PS/2 6 way or USB
Converter	PS/2 to converter block to RS232
Resolution (Quadrature)	155 pulses per ball revolution
Resolution (Protocol)	310/155 ppr - switch selectable (other options available upon request)
External Switch Inputs	3 switch support - Left, Middle, Right
Supply Voltage	PS/2 - 5 V DC +/- 5% RS232 - +/- 12 V DC
Supply Current	Protocol format 10ma typical
Optional Backlight	+5 V DC, 100ma

Environmental

Operating Temperature	0°C to +70°C
Storage Temperature	-25°C to +85 °C
Humidity	30% min, 95% max, non-condensing
Vibration	5 G, 2-5Khz any plane
Shock	100Gs - duration 11ms
Lifetime	>10 million ball revolutions - non-sealed >2 million ball revolutions - seal life

Configuration Options

RS232 & PS/2 DIP SWITCH SETTINGS			
Switch	Function	Off	On
1	Protocol Mode	Microsoft RS232/PS2	Mouse Systems/SUN
2	N/A	-	-
3	N/A	-	-
4	Double Tracking Rate	2:1	1:1
5	VX3 - Virtual 3 Axis Function (Sun mode: Baud rate selection)	Feature enabled 1200	Featured disabled 9600
6	Smart Button - button lock	Feature enabled	Feature disabled
7	N/A	-	-
8	TTL Output Levels	Standard output	TTL level / Sun

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USB & PS/2 DIP SWITCH SETTINGS			
Switch	Function	Off	On
1	N/A	-	-
2	N/A	-	-
3	VX3 – Virtual 3 Axis Function	Feature enabled	Feature disabled
4	Double Tracking Rate	Feature enabled	Feature disabled