

## TW-38-IP65 Optical Trackball with Epoxy Resin Ball

Optical Trackball 38 mm diameter, IP65 protection (static)



### Description

#### Features:

- 38 mm optical epoxy resin [Trackball](#) module in a tough ABS/polycarbonate top plate.
- The patented scraper ring enables the ball to be [IP 54 \(NEMA 2\)](#) or [IP65 \(NEMA 4\)](#)
- For industrial, medical or common data input as well as for kiosk infoterminals or aerospace industry.
- Besides the epoxy resin ball (optical technology) we offer a robust high-grade stainless steel trackball as well as a plastic trackball (mechanical technology)

Please click for further information on the below mentioned links.

#### Output Connector (J1):

Pin	Quadrature Output	<a href="#">PS/2</a>	<a href="#">USB</a>
1	X1	-	-
2	X2	-	-
3	Y1	-	-
4	Y2	-	-
5	-	-	-
6	-	-	-
7	VCC +5VDC	VCC +5VDC	VCC +5VDC
8	-	DATA	D-
9	-	CLOCK	D+
10	GND	GND	GND

#### Input Connector (J2) for Switches :

Pin	Function
1	Left Switch
2	Middle Switch
3	Right Switch
4	GND

---

### Power Supply for optional Backlight Power

Pin	Function
1	+5VDC
2	0V

---

### Configuration USB Version:

DIP-Switches	Function	Off	On
1	Orientation Setting 1	-> Diagramm	-> Diagramm
2	Orientation Setting 2	-> Diagramm	-> Diagramm
3	VX3 - virtual 3rd Axis	enabled	disabled
4	Smart Button - Button Lock	enabled	disabled

---

### Configuration PS/2-Version (J1):

DIP-Switches	Function	Off	On
1	Orientation Setting 1	-> diagram	-> diagram
2	N/A	-	-
3	virtual 3rd Axis	disabled	enabled
4	Doppelte Tracking Rate	disabled	enabled

---

### Explanation for VX3:

The 3rd Axis (VX3) can be of practical use for example in CAD Applications. In combination with the middle button the CAD-Program switches into PAN and ZOOM Mode, so that in a direction of rotation of the Trackball according to 3rd Axis is headed for. Repeated pressing of the middle key toggles between PAN and ZOOM Mode. Pressing either the left or right buttons to return to normal mode.

---

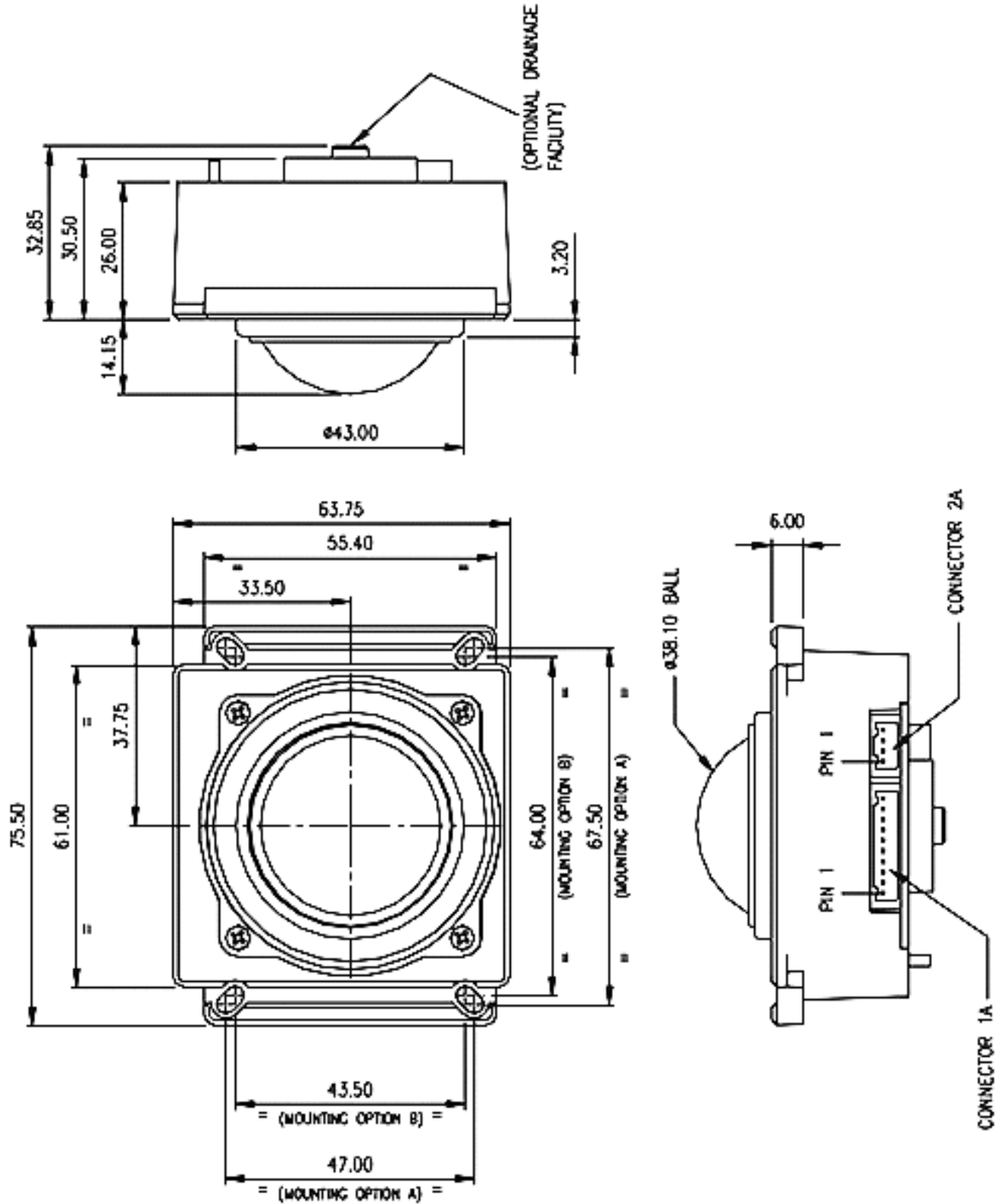
### Orientation:

USB-Version	12 o'clock	3 o'clock	6 o'clock	9 o'clock
Orientation Setting 1	ON	On	Off	Off
Orientation Setting 2	On	Off	On	Off
PS/2-Version	-	3 o'clock	6 o'clock	-
Orientation Setting 1	-	On	Off	-

---

### Explanation for orientation settings:

View from top of Trackball: Is the 10-pole. Female connector above (12 o'clock), then the Dip-switches are to be adjusted according to above table. In the example: USB-Version: Dip-1 and -2 On. The TRACK ball is to be inserted in such a way that those 10-pol. female connector left is situated (9 o'clock), then is orientation 1+2 - to place respectively Dip 1+2 on Off. Trans



**Specification****Mechanical data**

Housing:	Built-in
Housing:	Polycarbonat
Degree of Protection:	<a href="#">IP68</a>
Dimensions:	63,75 x 75,50 x 30,50 mm
Weight:	0,12 kg
Ball Diameter:	38,10 mm
Ball Material:	Epoxy Resin

**Electric Data**

Interface:	Combo <a href="#">PS/2</a> and <a href="#">USB</a> or Quadratur
Operating Voltage:	3,6 - 5,5 V
Operating Current:	110 (150 max.) mA

**Environment**

Operating Temperature:	from 0 °C to 55 °C
Storage Temperature:	from -25 °C to 85 °C

**Quality**


Live time:	> 1 mio. ball revolutions
------------	---------------------------

**Additional Information**





motion force:	5-200 g
---------------	---------

Order No.	Article	
TW1104	TW-38-Optisch-PS/2 USB	Combo PS/2 and USB
TW1109	TW-38-Optisch-Quadratur	Quadratur

**Accessories**

Order No.	Article	
ZK1220	Kabel-PS2	cable PS/2
ZK1316	Kabel-Seriell	cable Seriell
ZK1290	USB Anschlusskabel, ca. 2,5m Länge	cable for USB
ZK1245	Kabel zum Anschluss von 2 Tasten (L+R) an Trackball mit integriertem Controller	Cable Left+Right Mouseswitch - > Controller
ZK1342	Kabel zum Anschluss von 3 Tasten (L+R) an Trackball mit integriertem Controller	Cable Left+Right Mouseswitch - > Controller
ZT1043	ZTS- M19 Metalltaste 	M19 Zink-Druckguss Taster
ZT1091	M19-Edelstahl	M19 Edelstahl Taster

## Links

Click!	Titel
	<b>TVG-Series Stainless Steel Frontplates with integrated Mouse Modules</b> Vandalproof Series with Trackball or Touchpad and customized Frontplate.
	<b>TW-Series Trackball Modules</b> Optical or Mechanical Trackballs in different sizes
	<b>TW-38-IP65 Trackball in high grade steel module</b> Trackball for built-in in industrial applications, ball diameter 38 mm, degree of protection IP65 (statisch), IP54 (dynamisch)
	<b>TW-38-IP65 Plastic Trackball Module</b> Trackball for multiple applications, ball diameter 38 mm (1 1/2"), degree of protection IP65 (static)

[sales@www.tastaturen.com](mailto:sales@www.tastaturen.com) Anrufen: (0 89) 89 43 99-0 Faxen: (0 89) 89 43 99-11