

- 50 mm ball
- IP68 sealing
- Selection of backlit color and intensity

## 50 MM TRACKBALL WITH BACKLIT HALO RING

The TCX50F8 is equipped with the latest generation of laser optical trackballs and is highly suited for harsh industrial environments thanks to its' IP68 grade, robustness and ease of maintenance. It features a removable top ring facilitating the cleaning of ball and ball compartment for use in even the most dusty environments. Dimming and color control can be achieved by using the internal dip switch which will fix one color and one intensity. More dynamic control can be achieved by using a PWM signal.

The use of stainless steel for the various parts ensures the best resistance in salty or greasy environments. Due to its outstanding sealing, its professional style and its industrial robustness, this trackball unit is the best suited pointing device for all harsh or hostile environments.

The TCX50F8 is supplied with a silicone sponge seal ring for adequate sealing into the customers' panel or console. A cover plate on the rear side protects the components.

### GENERAL TECHNICAL SPECIFICATIONS

Sealing	: IP68 waterproof trackball module
Carrier plate	: stainless steel
Ball diameter	: 50,8 mm (2")
Ball material	: polyester
Dimensions	: 100 x 116 x 40 mm
Weight	: 0,6 kg
Resolution	: 155 pulses per ball revolution
Lifetime	: >= 2 million ball revolutions
Tracking force	: nom. 50 grams
Output	: PS/2 & USB Combo
Cable	: 1 shielded, straight 1,6 m long
Operating temperature range	: -10°C to +60°C
Storage temperature range	: -25°C to +80°C

### Short travel button switches

Sealing	: IP68
Material	: stainless steel, brushed
Mechanical life	: 3 mil. cycles min
Contacts	: stainless steel dome on gold
Travel	: 0,5mm
Operating force	: 4N typ
Operating temperature	: -20°C to +60°C

### CE

Compliant to EMC Directive 89/336/EEC for Electromagnetic Compatibility.  
Low Voltage Directive 73/23/EEC not applicable for our trackballs.

### CONNECTIVITY

These combo PS/2 & USB trackball units have a 1,6 meter long shielded straight cable ended by a USB type A plug. An adaptor to PS/2 is added. No special device driver is needed, use standard available drivers of your operating system.

\* Due to the increasing differences of the PS/2 mouse port specifications of the various PC manufacturers, we do recommend that this unit should be tested on the final PC configuration and operating system prior to installing it in series.

### ORDER INFO

standard version - halo ring	TCX50F8
with extra output cable for PWM	TCX50F8PWM

Output : PS/2 & USB Combo

## DIP SWITCH FUNCTIONS SW2

DIP Switch	Function	OFF	ON
1	Intensity LOW (1)	-	Low LED intensity
2	Intensity MEDIUM (1)	-	Medium LED intensity
3	Intensity HIGH (1)	-	High LED intensity
4	Red Control	See colour control table	
5	Green Control		
6	Blue Control		
7	External Intensity selection	LED intensity selected from switches 1,2 & 3	-
8	Demo feature	Disabled	Enabled

DIP switch functions on SW2

Notes :

(1) Only one intensity switch ( 1-3) should be enabled at a time. If several switches are ON, the highest intensity will take effect.

Factory default setting: All DIP switches OFF

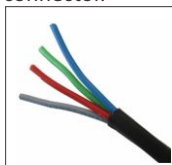
Colour control			Colour
Red	Green	Blue	
OFF	OFF	OFF	OFF
ON	OFF	OFF	Red
OFF	ON	OFF	Green
ON	ON	OFF	Yellow
OFF	OFF	ON	Blue
ON	OFF	ON	Magenta
OFF	ON	ON	Cyan
ON	ON	ON	White

## CONNECTION DETAILS FOR PWM VERSION - TSX50F8PWM

CN4 – output connector for color control with an external PWM signal\*

Pin Number	Function
1	-
2	0V
3	RED LED CONTROL
4	GREEN LED CONTROL
5	BLUE LED CONTROL
6	-
7	-
8	-

extra output cable of 50 cm with „open ends“  
connected with pins 2 - 3 - 4- 5 via 8 way JST  
connector.



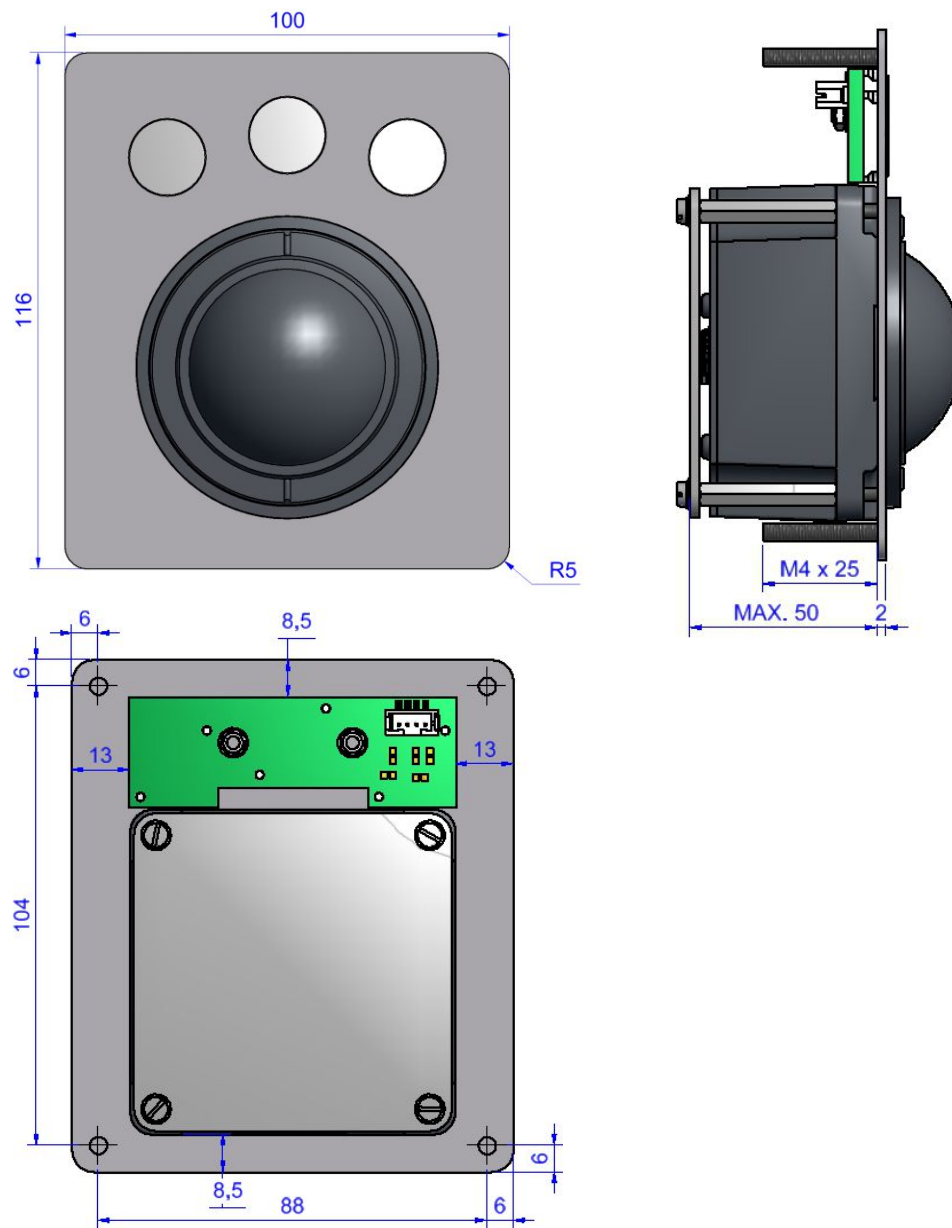
0V	grey wire
RED LED CONTROL	red wire
GREEN LED CONTROL	green wire
BLUE LED CONTROL	blue wire

\* Please note that for this option DIP switch 3 of Sw2 must be set in the ON position while all other dipswitches of Sw2 must be set in the OFF position.

The ball color can be selected by applying either an open collector / open drain or TTL compatible active low signal to the led on pin 3,4,5 with respect to 0V on pin 2.

Connector CN3: Not applicable on this product.

## DIMENSIONAL DRAWING



Dim. in mm