



- Sealed to IP65
- PS/2 or USB output
- Integrated left, middle and right switch functionality
- Smooth operation in rugged environments
- Stainless steel shaft and bearings
- Custom connector options available
- Sealing gasket supplied

## 38 MM OEM TRACKBALLMODULE 3-BUTTON

This compact series are high specification, professional trackballs for use in demanding environments. High-grade stainless steel shafts and bearings ensure a solid and precise pointer control while the patented floating seal technology limits ingress of aqueous solutions and particulates. The trackball module includes left, middle, and right switch functionality as found in all conventional desktop trackballs/mice making this Series a complete human interface solution for control of a cursor. The unit has been designed to be front of panel mounted as part of OEM keyboards and consoles.

### GENERAL TECHNICAL SPECIFICATIONS

#### Mechanical

Weight	~125 grams
Ball size	Ø38.10 mm (1.5")
Ball colour/material	Phenolic
Tracking force	30-80 grams
Top plate material/colour	PC/ABS - Black RAL9005
Housing material	ABS/Black
Mounting position	Horizontal to 60°
Sealing material	PTFE composite (qualified @ 25°C static)
Tracking engine	Dual channel photo-interrupters

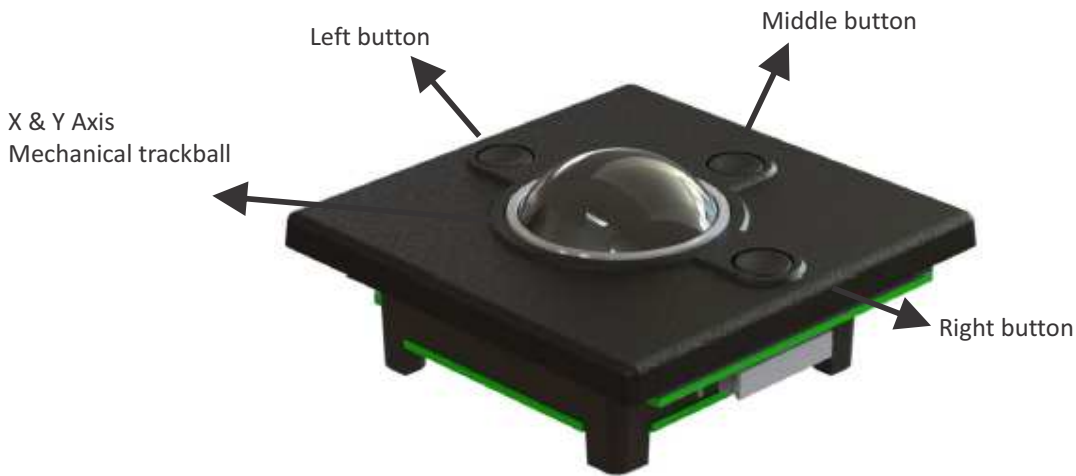
#### Electrical

Output	USB or PS2
Supply voltage	4.75V to 5.25V D.C.
Supply current	23mA Maximum
Resolution	965 counts per ball revolution
Output connector	8 Way Spox™, Vertical Header, 5267 series, Molex part: 0022035085
Mating output connector	8 Way Spox™, Wire-to-Board, Friction Lock, Molex part: 0050375083

#### Environmental

Operating temperature	0 C to +65 C (IEC 60068-2-1, IEC60068-2-2)
Storage temperature	-40 C to + 85 C (IEC 60068-2-1, IEC60068-2-2)
Operating humidity	93% RH @ 40°C, non-condensing (IEC 60068-2-78)
Storage humidity	10%-95% RH, non-condensing (IEC 60068-2-78)
Vibration	2g, 10-500Hz, 1 octave/min, 10 sweep cycles (IEC 60068-2-6)
Operating Shock	15g/11ms, ½ sine, 3 shocks in +ve and -ve direction, all 3 axes (IEC 60068-2-27)
Mechanical lifetime	1 million ball revolutions (sealed)
ESD	15kV air-discharge and 6kV contact discharge (IEC 61000-4-2)
EMC	Radiated immunity - limits according to level 3 of IEC 61000-4-3
	Radiated emissions to EN55022 class B
Sealing rating	IP65 (BS EN 60529)

## TRACKBALL FEATURES



## CONNECTION DETAILS

Connection is made to the trackball by means of a single latching Molex Spox™ connector (or equivalent).

**Output connector : CON 1**

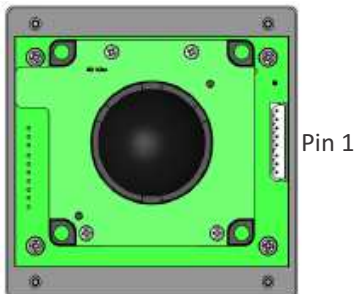
Description : 8 Way Molex, vertical header, 5267 series

Manufacturer : Molex

Part No : 0022035085

Mating connector: 8 Way Spox™, Wire-to-Board, Friction Lock,  
Molex part: 0050375083

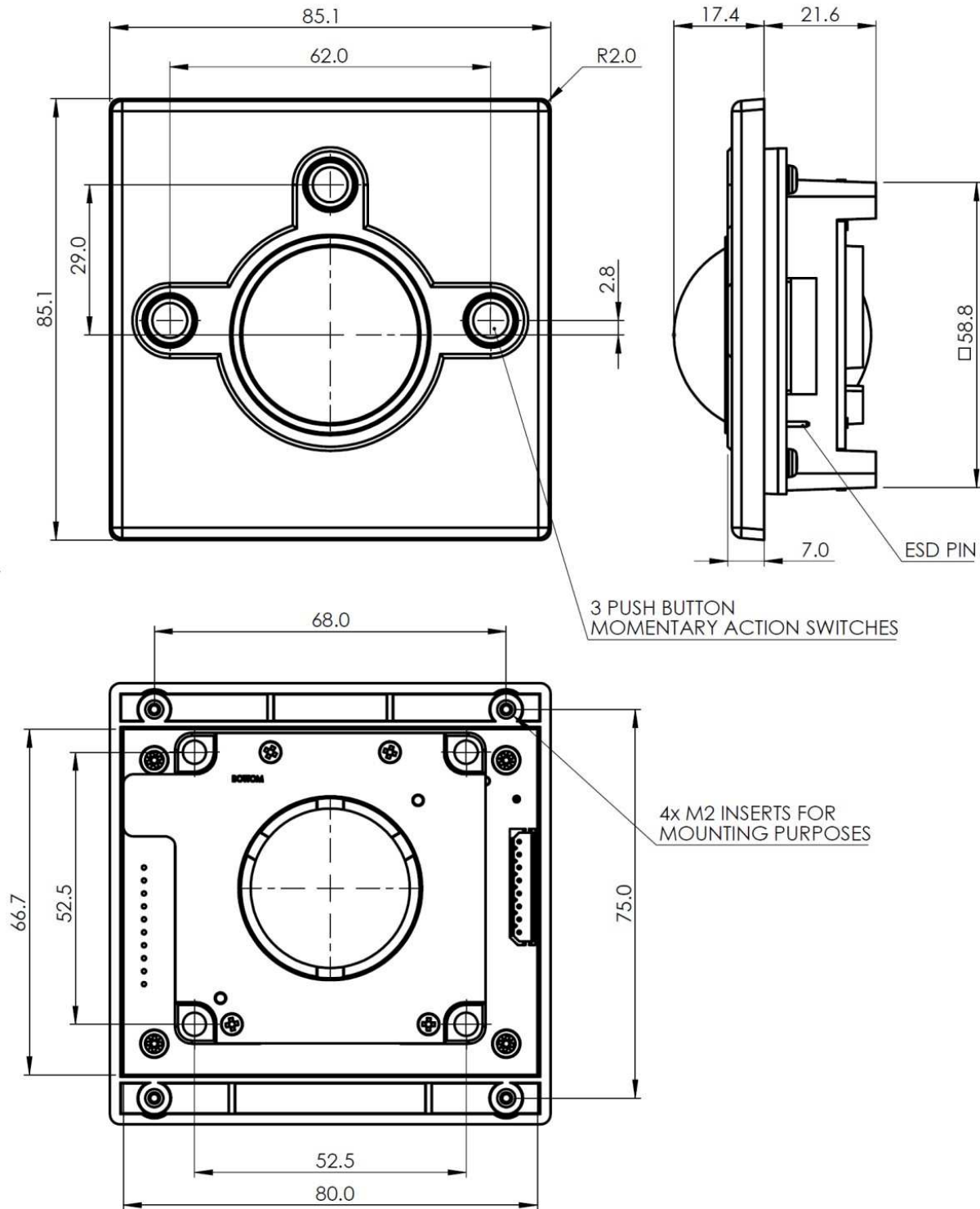
Pin Number	USB & PS/2
1	N/C
2	N/C
3	N/C
4	N/C
5	+ DATA/ PS/2 CLOCK
6	- DATA/PS/2 DATA
7	+5V
8	0V GND



## TRACKBALL CONFIGURATION

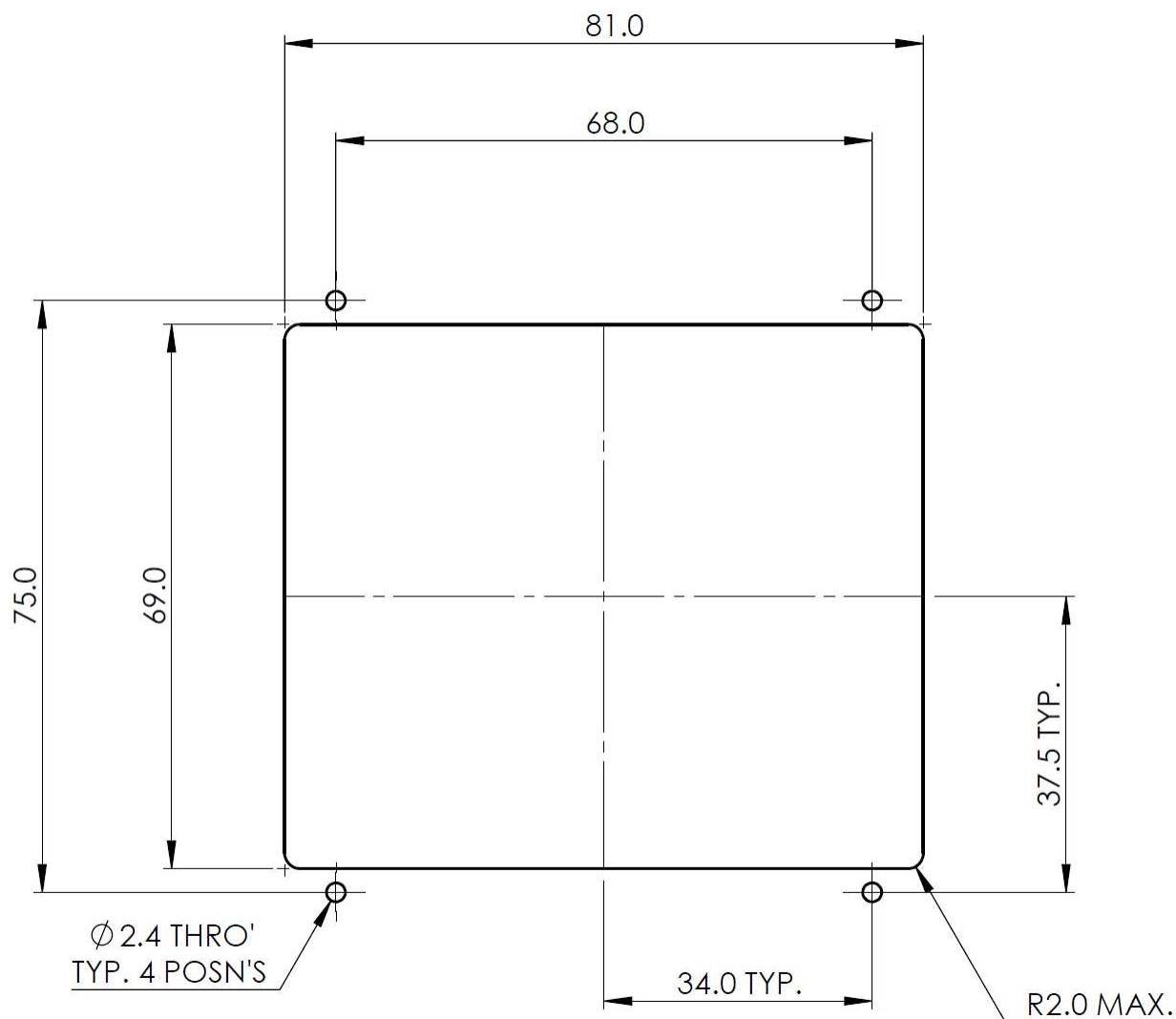
Ballistic Tracking Mode : The trackball firmware incorporates an Intuitive tracking algorithm to provide increased cursor resolution when tracking fast whilst retaining the original resolution for tracking accurately at slow speeds.

DIMENSIONAL DRAWING



The company reserves the right to alter without prior knowledge the specification or design of any standard product or service.

## OUTLINE DRAWING



## ORDER INFO

**GK38-5531R0**

Consisting of :

- P38-5631R0 : Trackball module only
- OC6108160: PS2 output cable to Molex 8 way connector, 1.6m

**GK38-5631R0**

Consisting of :

- P38-5631R0 : Trackball module only
- OC5108160: USB output cable to Molex 8 way connector, 1.6m

MANUFACTURER

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